

# IT BENEFITS REPORT FOR YEAR ENDING 2014

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# IT Benefits Report for year ending 2014

Office of Performance, Strategy and Budget

Prepared: April 2015

# Executive Summary

Reporting on the benefits of Information Technology (IT) projects continues to evolve and new ground is being broken with each cycle. The most recent update to this cycle was the release of a new version of the Benefits Achievement Plan (BAP) document in the middle of the Council phase of the 2014 budget. This updated document was then completed by more than 70 active and proposed IT projects over the course of 5 months for this inaugural annual report on IT benefits.

In calendar year 2014, the formatting and versioning of the BAP has remained stable, and agencies, departments, and projects are growing more comfortable with using the document. This has translated directly to higher quality documents used in the governance process, including the 2015/2016 budget request process.

Some lessons learned during the preparation and writing of this report and its components include:

- **Determining what the benefits of a project are and communicating that to an audience without a shared background was significantly more difficult than first imagined.** Departments and agencies continue to struggle with the different viewpoint of the project from the business-centric view to a wider audience. Additional training and examples should help to mitigate this in the future.
- **Evaluation difficulties.** Even with the vastly improved efforts during 2014, a number of projects continue to report that even with the various examples from the budget and those examples included in the instructions of the document itself, that determining the “right answer” was very difficult. In many cases a number of meetings and draft revisions were required in order to get to a document that was considered final. Many projects were unable to create documents that didn’t require extensive modifications. As above, additional training and examples should help to mitigate this in the future.
- **Formatting versus content.** A number of projects reported that completing the benefits achievement plan was hindered by formatting, either in the document itself or from evaluator requests, where content was unchanged. In the future, additional training and examples should help, as well as keeping the document version fixed.

- **Time commitments required for the benefits process are significant.** The time spent by Performance, Strategy and Budget (PSB) staff, Council staff, and department/agency/project staff to complete the governance surrounding benefits reporting has been greater than anticipated. An initial estimate of two hours for project staff to complete an initial BAP was likely off by an order of magnitude. Additionally, review time from both PSB and Council staff was significant. This commitment improved in most cases during 2014, but significant amounts of time were still spent in review and refinement by some agencies and departments.
- **A wide range of benefits are being realized.** Beyond simple cost savings (which in past years were the only benefit recognized in many cases) IT projects are documenting a vast array of benefits for agencies, staff, and the public as benefits from the various IT projects. Efficiencies, expanded service capacity, higher morale, more timely delivery, higher quality service as well as cost reductions are being delivered to the public, KC agencies and departments, and internal staff. The documentation of these benefits will be a valuable outcome as the process matures and agencies report on the benefits of completed projects.
- **Agencies are interested in the benefits process.** Agencies, departments, and project staff do see the potential benefits in the benefits reporting process and are eager to do what they can to better explain the value proposition that they are bringing to the table with their projects.
- **Reporting of actual results from the project is still a new task.** Agencies, departments, and project staff have not consistently reported on completed projects in the past. This process will be a learning process for the county as a whole, as agencies and departments are accountable for reporting on the benefits they actually achieved from the various IT projects undertaken. Additional work on defining common metrics would likely be helpful in attempting to compare benefits across projects, but there would be substantial difficulty in attempting a “one size fits all” approach.

We look forward to continuing to improve and streamline the IT benefits reporting process where appropriate, and appreciate the efforts of all involved in this process.

Below are the Benefit Achievement Plans (BAPs) for all active IT projects, roughly in order of submitting agency or department.



**King County**

Pretrial Risk Assessment  
Implementation Planning  
Project #

Benefit Realization Report

Prepared By: Steve Larsen, Chief of Administration DAJD

Date:  
2/10/15

## Revision History

<b>Version #</b>	<b>Revision Date</b>	<b>Revised by</b>	<b>Description</b>
	2/10/15	Steve Larsen	Final BAP update – project cancelled

## 1.0 Value Received

While some value of this project will result from implementation of immediate process improvements identified during the 2012 lean management event, the majority of the value produced will be realized after completion. The 2013 implementation planning effort will result in a plan for improvements to the pretrial release process and implementation of risk assessment technology, and many criminal justice agencies (including DAJD, PAO, OPD and the Courts) will be the beneficiaries of the project. Expected benefits include:

- a less labor-intensive process that is better streamlined between agencies;
- greater detail and clarity of defendant data in pretrial release reports that are produced for the Courts;
- better integration of defendant data in criminal justice data systems (both within DAJD and between criminal justice system agencies);
- greater ability to conduct quality control checks of defendant data accuracy and consistency; and
- successful implementation of an integrated risk assessment technology process that will be feasible for criminal justice system staff and will support judicial decision making.

While these are intangible benefits that cannot be easily quantified, the value of these system improvements is expected to greatly impact the efficiency of the pretrial release process and allow for implementation of a new risk assessment technology resource that will support judicial efforts to make consistent release decisions and may potentially improve public safety.

**UPDATE as of 2/10/15: Project has achieved no benefits because it was cancelled in 2014 due to budget constraints. This will be the final BAP as no further benefits will accumulate because of the project's cancelled status.**

### 1.1 Metric description and collection method:

Metrics for this project will be measured by the content of the project deliverables. Project success will be decided by the ability of the business plan for the 2014 budget and final implementation plan produced during the 2013 effort to provide a clear, detailed process by which to achieve the benefits listed above. The project manager will also keep a regular monthly record of progress in achieving the objectives of the implementation planning effort to ensure that the project schedule is met.

### 1.2 Transition plan:

If the metric definition, collection method, and reporting are not determined by the business owner and recipient of the benefits above, please detail how the ongoing business owner will take ownership of the metrics, collection, tracking, and reporting of these benefits.

N/A

Department Director Signature: \_\_\_\_\_

**1.3 Operational Efficiencies Benefit Measurements (as applicable)**

Description	Metric	Baseline	Target	Actual	% Accomplished
<i>No further benefits will be achieved because the project was cancelled</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>n/a</i>	<i>none</i>

**1.4 Annual Cost Savings Measurements (as applicable)**

Description	Initial Projected Cost Savings/avoidance/revenue (from business case)	Updated Savings/avoidance/revenue	Actual Savings/avoidance/revenue	Explanation of Variance
<b>Project cancelled</b>				

## **1.5 Other Benefits:**

Please detail any significant benefits of the project that departments, customers, or others will receive beyond any cost savings or efficiencies (which should be detailed above). This could include benefits of risk reduction (please note how, why, and by how much), cost avoidance, or other areas of benefit not easily distilled to a single monetary value.

N/A

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Adult and Juvenile Detention
<b>Project Title</b>	Distributed Antenna network (DAN) Phase II
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~William Hayes~~ Claudia Balducci, Director, Department of Adult & Juvenile Detention

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
<del>Gordon Karlsson</del> <u>Eric Urie</u>	<del>Commander</del> <u>Captain</u> , KCCF, DAJD	Business <del>Representative</del> <u>SME</u>
Mike Holland	IT SDM, KCIT-DAJD	KCIT Coordination
Tony Minor	Radio Manager, KCIT	800 MHz Radio Manager
John Slomnicki	IT Sr. LAN Admin, KCIT-DAJD	800 MHz Radio Consultant
Scott <del>Peterson</del> <u>Lackey</u>	IT PM	IT Supporting PM

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Budget Process	7/9/13	Mike Holland	New, initial draft	2 hours
Budget Process	8/15/2013	Mike Holland	Per evaluation feedback from Council Analysis, moved benefits from Category #2 or Category #3. Also provided additional information about the current “dead spot” in KCCF and how many of them will be addressed by this project.	3 hours
Budget Process	10/25/2013	Scott Lackey, John Slomnicki	Reformatted to the new v.2 BAP doc format	2 hours
Change of IT PM	6/1/2014	Scott Peterson	New KCIT PM Assignment	30 min

	BAP Review	2/12/2015	Mike Holland, Scott Peterson	2015 BAP Review – NO CHANGES	30 min

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

**UPDATE as of 2/10/15: Project is proceeding as per the established project plan. No major changes to report for the project at this time.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

This project is simply the continuation of an already-successful pilot from Phase I.

In Phase I, 800 MHz radio coverage was deployed to floors 1-3. Phase 1 went very well and we are already enjoying the benefits of seamless service and improved safety on these floors.

The goal of the DAJD KCCF Distributed Antenna Network (DAN) *Phase II* project is to provide 800 MHz staff radio coverage throughout the remaining floors (floors 4-12) of the King County

## Correctional Facility.

Once completed, the entire facility would have seamless radio coverage throughout all floors, including the elevators and emergency stairwells. Also, depending on the extent of the implementation, additional customer groups will be served as well. Potentially the Seattle Police Department, King County Sheriff's office staff, Seattle Firefighters, and other King County law enforcement agencies could also leverage the enhanced coverage due to the Phase II head end changes.

**End Result:** This project will significantly improve the safety of our operations. Minor emergencies occur daily in a correctional setting within DAJD facilities. The Phase I has already improved safety and shortened response times in the courtrooms and booking areas of the building. Still, the system is not ready for a major emergency. Today, many areas in our facility have no coverage whatsoever, and for areas that do, there is currently no capacity to support our broader set of customers including Seattle Police or King County Sheriff / SWAT, Seattle Firefighters, or other broader emergency services. Phase II would remedy both of these issues.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

We will know if these benefits have been achieved if radio coverage is available in all locations on floors 4 through 12 and if we have the capacity to support the additional user groups mentioned above.

3. *What is the current baseline for this measure?*

There is currently no reliable radio coverage throughout floors 4 through 12 and the user groups mentioned above cannot be supported due to capacity issues.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The benefit will be achieved when radio coverage is available on floors 4 through 12 as well as the related stairwells and elevators.

5. *When is the benefit likely to be achieved?*

Full radio coverage on floors 4 through 12 is anticipated by Q4 / 2016.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County*

to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.
2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example: Reduced cost to produce service.** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?

4. What is the target for this measure? (How much savings will this project achieve)

5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

**UPDATE as of 2/10/15: Project is proceeding as per the established project plan. No major changes to report for the project at this time.**

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Adult and Juvenile Detention
<b>Project Title</b>	RMS Employee Interface
<b>EBS Project Number</b>	1116898

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. **Business Owners are required to be at the deputy department director or higher.**

Business Owner Name and Title:  
Hikari Tamura, DAJD Deputy Director

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Steve Larsen	DAJD Chief Admin Officer	Provide supervision of the DAJD IT project manager assigned to this project. Ensure overall business objectives of project are achieved.
Pat Presson	DAJD Finance Manager	Ensure changes in payroll and financial reporting processes are consistent and support objectives of efficient and effective process flow.
<del>Ramona Flores</del> Cynthia McNabb	DAJD DSM-H/R	Ensure changes in leave management processes and reporting are consistent with management objectives. As a key business representative for DAJD FMLA/Light Duty/Leave Management LEAN event, incorporate LEAN outcomes where appropriate in application process design.
David Weirich	DAJD-ITR/Admin Captain	Evaluate workload impacts on leave, annual

		processing of staff assignments. Provide feedback during development and rollout of project products
Roderick Dreyer	DAJD-MRJC Administrative Sergeant	Evaluate workload impacts on his ability to manage officer leave, FMLA/KCFL and assignment reporting and record keeping. Provide feedback during development and rollout of project products
Cathy Bossett	DAJD-KCCF Administrative Specialist	Evaluate workload impacts on her ability to manage daily leave, overtime and time reporting and updates for 435 employees. Provide feedback during development and rollout of project products.

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or</i>	<i>Date this document was</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has</i>	<i>How long did it take to complete or revise the</i>

<i>project completion.</i>	<i>updated</i>		<i>changed, indicate "review only".</i>	<i>form at this stage?</i>
2014 Budget process	10/25/13	Don DiJulio	Required replacement of 2013 Benefit Realization Report with a new form	10 hours
2014 1 <sup>st</sup> Qtr Budget Suppl	12/04/13	Don DiJulio	Reviewed only	.25 hours
2014 Annual BAP Reporting	3/9/2014	Don DiJulio	Updated to reflect change in project scope – no IVR phone option; Re-categorized to internal service benefit.	.75 hours
2015 Annual BAP Reporting	2/5/2014	Don DiJulio	Reviewed – Sec#3, New DSM-H/R and updated planned implementation date, from Oct 2014 to 2 <sup>nd</sup> Qtr. 2015	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
 The most significant benefit of the project is the efficiencies gained through employee self-entry of requests and the self-management of these requests to keep the information current. Employee self-entry will replace data entry and updates made by supervisor, timekeepers and payroll staff. The change is expected to increase data accuracy and to allow DAJD supervisors, timekeepers and payroll clerks to perform higher valued tasks. The higher value tasks being their primary essential duties of their classifications, supervision, records and payroll reporting and accuracy.

The empowered employee must address the constraints associated with their leave balance; enter leave types appropriate for leave status; schedule leave within contractual leave limits; and manage their current overtime availability status and preferences for assignment during annual assignment and open transfer periods.

Operational business needs of DAJD cannot be met by leave entry directly into to PeopleSoft timesheets for a number of reasons. The leave information impacts assignment schedules and assignment backfill needs of operational sections. Most effective and efficient information flow is derived from leave entered directly into a scheduling system that interfaces with the central payroll system. DAJD has implemented and maintained this efficient information flow since the late 1980's. In addition, most of DAJD payroll information is derived from its scheduling system, the Roster Management System (RMS), to include work hours and schedules, overtime rate determinations for excess hours worked, assignment premiums and holiday accruals among others.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*  
RMS reporting features will be used to generate a report to count records entered by or modified by employee verses records entered or modified by another user. In simple terms, the higher the involvement of DAJD employees in self-management of these data entry tasks, the greater the benefit. These entries can be counted since RMS tracks all users and their data entry activity.
3. *What is the current baseline for this measure?*

<b>Description</b>	<b>Baseline</b>
Leave Records Entered by Employee	0%
Leave Modifications by Payroll Clerks	1,100 records/month
Dream Sheet Preferences Entered by Employee	0%
Tracking of Overtime Availability Notice	0%
FMLA Tracking	0%

4. *What is the target for this measure? (How much improvement will this project achieve?)*

<b>Description</b>	<b>Target</b>
Leave Records Entered by Employee	85%
Leave Modifications by Payroll Clerks	500 records/month
Dream Sheet Preferences Entered by Employee	85%
Tracking of Overtime Availability Notice	Yes Tracking Occurs
FMLA Tracking	75%

5. *When is the benefit likely to be achieved?*  
Majority of the efficiency benefit target levels are expected to be achieved within three years of web interface implementation which is currently planned for ~~end of October 2014~~ 2<sup>nd</sup> Qtr. 2015.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

*Example: Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings



## King County

### Information Technology Project Benefits Achievement Plan (Version 2)

#### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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3. To establish accountability for identifying and achieving benefits.
4. To ensure benefits are achieved.

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<b>Department/Division Name</b>	Department of Community and Human Services (DCHS) Developmental Disabilities Division (DDD)
<b>Project Title</b>	DCHS/DDD Financial System
<b>Project Number</b>	1124221

#### Section 2. Business Owner Accountability

Business owners are responsible for achieving project benefits and ensuring the BAP is regularly updated and completed when benefits are achieved. Business owners are required to be at the level of deputy department director or higher.

Josephine Wong, Deputy Director, Department of Community and Human Services

#### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. The King County Information Technology Business Analysts or Technology Project staff may assist in benefit identification and documentation. Listed below are the staff who contribute to the benefit achievement plan:

Name	Title / Division	Project Role
Esther Wu	Business and Finance Officer IV – DDD	Subject Matter Expert
Joe Carter	Project Manager III – DDD	Project Lead
Louis Lok	Program Evaluator – DDD	Subject Matter Expert
Theary Chot	Fiscal Specialist II – DDD	Subject Matter Expert
Sandy Ou	Fiscal Specialist II – DDD	Subject Matter Expert
Susy Stremel	Employment Program Manager III - DDD	Subject Matter Expert
Magan Cromar	Early Intervention Program Manager III - DDD	Subject Matter Expert
Scott Leonard	Employment Program Manager III - DDD	Subject Matter Expert
Wendy Harris	Early Intervention Program Manager III - DDD	Subject Matter Expert
Katherine Festa	Program Manager I - DDD	Subject Matter Expert
Richard Wilson	School-to-Work Program Manager – DDD	Subject Matter Expert
<i>Unknown/Not yet assigned</i>	King County Information Technology (KCIT) Business Analyst	KCIT Business Analyst

## Section 4. When should the Benefit Achievement Plan be started, updated, and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual benefits report that PSB compiles.
3. To support funding release requests and if there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online and do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the Section 5 table (If there are no changes, type none.)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete the BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only.”</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual Review	7/02/2014	Joe Carter	Initial Draft	8 hours
Legislative Feedback	7/21/2014	Joe Carter	Revised draft	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of KCIT investments generally fit into the following four categories:

1. External service benefits: Improving the quality or quantity of services provided to the public.
2. Internal service benefits: Improving internal operations, including the quality or quantity of internal services.
3. Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures.
4. Reduced cost to produce services (internal or external).

Each category is described below and most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public.
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services.
- Category #3: Maintaining service levels by replacing or upgrading older technology.
- Category #4: Reduced cost or cost avoidance to produce services.

**Category #1 External Service Benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

***Example:** If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

***Example:** If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries, so please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed KCIT investment to produce the benefit(s).*

The DDD provides administrative and contract management supports for programs funded by the Washington State Department of Social and Health Services (DSHS), Developmental Disabilities Administration (DDA), the Washington State Department of Early Learning (DEL), and numerous King County school districts.

Currently, DDD does not have an automated contracting and billing data system for processing contracts and billings. If the current system was replaced by a web-based single point of data entry database, in which data flowed in an automated fashion to other systems, and in which contract data was stored along with the billing data, the DDD will see the following benefits:

A decrease in the time contractors spend on billings

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Contractor's decrease time spent on processing billings will be measured through a survey of the division's contractors to determine time spent on processing monthly billings.

3. *What is the current baseline for this measure?*

The current baseline is 9 hours per provider per month

4. *What is the target for this measure? (How much improvement will this project achieve?)*

A 10 percent reduction in the time required for contractors to complete billing.

5. *When is the benefit likely to be achieved?*

These benefits should be visible within six months of project completion.

**Category #2 Internal Service Benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

**Example:** *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of six currently checked. This will allow the agency to handle the 20 percent increase in workload projected in the next three years without adding more staff.*

**Example:** *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

**Example:** *The Active Directory Consolidation project is part of an overall effort to promote KCIT standardization. This project will make the current management of user accounts, applications, and devices easier for KCIT administrators in Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries, so please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed KCIT investment to produce the benefit(s).*

If this project is approved it is expected that that the Department would expect:

Benefit A:

Decrease in processing times

- Quicker and more accurate processing
- Reduced data entry
- Reduced transferring of data between data sources

Benefit B:

Timely and more automated reports

- Data would be stored in a single database
- Less prone to error
- Quicker and more accurate
- New reports we have not been able to produce before

The decrease in processing time and more timely and accurate reports will generate the following benefits to the Division:

Benefit C:

Improved Program Outcomes – Division staff will have more time to devote to contract oversight and management. This would include the implementation of the following projects:

- Provide intensive technical assistance for contracted service provider agencies with compliance issues.
- Implement a pilot program to provide outreach to unserved people with developmental disabilities.
- Coordinate outreach efforts to underserved racial and ethnically diverse communities.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Benefit A: Decrease in processing times

- We will measure Decrease in processing times by measuring time it takes from receipt to payment

Benefit B: Timely reports and new automated reports

- We will measure timely reports and new automated reports by measuring how long it takes to produce monthly fiscal program and management reports and whether we can produce new reports automatically

Benefit C: Improved Program Outcomes

- Increased Intensive Technical Assistance (ITA) – Reduction in the number of service providers with corrective action plans, based on contract monitoring visits performed between July 2014 and June 2015.
- Outreach to unserved adults – Increase in the number of adults who become employed.

3. *What is the current baseline for this measure?*

Benefit A: Decrease in processing times

- Time it takes from receipt to payment is 18 working days

Benefit B: Timely reports and new automated reports

- Time it takes produce monthly fiscal program and management reports now is 8 days
- There are no automated reports
- *Note: The division is not currently able to produce demographic and program outcome reports from a single database.*

Benefit C: We will measure Improved Program Outcomes by measuring

- Increased Intensive Technical Assistance (ITA) – We will have our baseline when the 2014 contract reviews are complete.
- Outreach to unserved adults – Currently 45% of DSHS/DDA clients aged 21-65 receive day program services

4. *What is the target for this measure?*

Benefit A: Decrease in processing times from receipt of bill to payment

- We will be able to reduce this time by 10 percent

Benefit B: Timely reports and new automated reports

- We will be able to produce monthly fiscal program and management reports in 4 days
- We will be able to produce the following new automated reports

- Monthly functional program report
- Contract consideration versus expenditure
- Demographic reports
- Outcome reports

**Benefit C:** The target for Improved Program Outcomes will be

- Increased Intensive Technical Assistance (ITA) – 100 percent of agencies with contract compliance issues will be in compliance by July 2016.
- Outreach to unserved adults – 47 percent of DSHS/DDA clients aged 21-65 will be receiving a day program service, an increase of two percent

5. *When is the benefit likely to be achieved?*

Full benefits for Benefit A and B should be achieved within six months of project completion.

The target for improved program outcomes will be achieved by twelve months after project completion.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication (AA) solution which will allow King County to comply with United States Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, AA must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install Accounts Payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will*

reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average two percent, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries, so please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed KCIT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)?
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve?)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits and use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999 percent uptime for an additional five years. This project is currently functioning at 99.999 percent uptime and will report annually for the next five years on uptime levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate Accounts Payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1-day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to	Processing	• 10 days	• 1 day	2-day

	<p><i>deliver service. This project reduced processing time from the current average of 10 days to less than 1 day allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>Time annual savings and percentage of purchases receiving prompt payment discounts</i></p>	<p><i>processing time</i></p> <ul style="list-style-type: none"> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<p><i>processing time</i></p> <ul style="list-style-type: none"> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<p><i>processing time</i></p> <p><i>20 percent of purchases are receiving prompt payment discounts</i></p> <p><i>\$200,000 savings</i></p>	
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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DES/RALS/Recorder's Office
<b>Project Title</b>	Recording System Replacement
<b>Project Number</b>	1124175

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Norm Alberg, Records & Licensing Division Director

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jon Scherer	Section Manager, RO	SME for Recorder's Office business, Project contact
Norm Alberg	Division Director, RALS	Business Owner
Megan Pedersen	Deputy Director, RALS	
Thea Thach	Supervisor, RO	
Kathleen Baker	Supervisor, RO	
Sean Bouffiou	Finance Manager, RALS	
Syd Phillips	IT Business Analyst, KCIT	Business Analyst (during budget submittal process)
Margaret Brownell	DES IT SDM, KCIT	

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.

2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	12/31/13	Jon Scherer	New, initial draft	60 min
Conceptual review	12/31/13	Molly Cherkin	Provided feedback on initial draft	30 min
Conceptual review	1/23/14	Molly Cherkin	Review with Margaret Brownell and updates	45 min
Conceptual review	2/7/14	Margaret Brownell	Final edits	30 min
Gate #2	6/30/14	Syd Phillips	Updates	60 min
	9/12/14	Sean Bouffiou	Address KCC staff comments/suggestions	3 hrs
	11/3/14	Sean Bouffiou	Address additional KCC staff comments and suggestions	90 min

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

The existing software solution (Anthem) has been deployed in the Recorder's Office since 2002 (12 years), though it was effectively an upgrade (not a platform change) from the system implemented in 1999 (ISOL). The existing vendor product was phased out by the vendor over four years ago, with the introduction of their next generation platform. While the Anthem system is still technically supported by the vendor for existing customers, support is limited to maintenance with the exception of changes mandated by state or federal law. With all of the vendor's investment and new development focused on their next generation platform, no new development on the retired platform has occurred in years. The functionality is limited, particularly online access for electronic recording and the processing of Real Estate Excise Tax (REET) affidavits and the associated taxes and fees. Recorded documents processed prior to August 1991 are maintained either in paper, microfilm, or digitally imaged. Digitally imaged documents, including most documents recorded August 1, 1991 or after, are available to the public online via the Recorder's Office web site. Certified copies are not available electronically via an online system, and the index used to search and find relevant documents has historically been weeks or months behind actual recording dates, making searches more difficult and incomplete.

With a new system, the public will be able to:

- A. Request documents electronically through a Web-based interface
- B. Submit requests electronically through a Web-based interface
- C. Receive faster and more accurate service from the county.
- D. Access multiple functions and services via self-service online
- E. Documents will be immediately searchable for the Public (vs. searchable after they fully indexed, which takes additional time), and searches will be more accurate and more intuitive.
- F. The County will be able to receive Excise Tax payments online.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- A. Percentage of document requests received online (v. mail)
- B. Percentage of hard-copy document submissions (v. electronic)
- C. Staff time devoted to quality control measures (Image review/data entry verification)
- D. Number (count) of customer self-service functions available online  
Quantity/percentage of self-service transactions conducted online vs. over the counter.
- E. Backlog in indexing
- F. System in place and operational to process Excise Tax payments online

3. *What is the current baseline for this measure?*

- Current:
  - A. 100% of document requests received via mail (vs. electronic)
  - B. 60% hard-copy document submissions (vs. electronic)
  - C. 15 minutes of time staff currently devoted to quality control measures
  - D. One (1) self-service function available online (records searches)  
One (1) day for documents to be fully searchable and available online  
To be determined
  - E. One (1) day indexing backlog
  - F. Zero (0) excise tax payments received electronically

RALS is currently establishing baselines based on Lean event tracking. We will measure new state vs. historical data. The current system has poor reporting capability making actual baseline measures very difficult.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- Target:
  - A. 75% document requests received via online v. mail
  - B. 80% electronic documents submitted (v. hard-copy documents)
  - C. 2 hours/day of time staff currently devoted to quality control measures
  - D. 3 or more customer self-service functions available online
    - 1 days for documents to be fully searchable and available online
  - E. No indexing backlog
  - F. Ability to process REET affidavits online.

5. *When is the benefit likely to be achieved?*

6 to 12 months after go live (once staff becomes completely familiar with new systems and processes) and customers are aware of and using online tools.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

A new system will help increase operational efficiency and flexibility in the following ways:

- G. Documents will be immediately searchable by staff and this is important to operations because customers can find documents more easily for themselves without needing to visit the office or call and take up valuable staff time. (vs. searchable after they are indexed, which takes additional time),
- H. Searches will be more accurate and more intuitive. The current system only allows for minimal search criteria and does not accommodate multiple searches simultaneously or the direct comparison of documents. This makes it difficult for staff and customers to quickly determine which documents are needed. Modern search systems also allow for autofill of commonly searched items.

- I. Accountability with change tracking will be higher. Managers and supervisors will have better tools for oversight through more robust internal tracking (changes to indexes, receipts, images/rescans, etc.) system notifications, user privileges, reports, etc.
- J. The County will be able to minimize chances of future backlogs which is important because it minimizes overtime and means documents are available sooner for the public.
- K. The County will be able to receive Excise Tax payments electronically, allowing conveyance of property transactions to be performed at remote locations and by electronic submission which will speed up delivery and reduce the consumption of paper and postage.
- L. Automation will free up staff time to focus on higher value work such as quality control and the prompt delivery of recording services.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- G. Amount of time it takes for a document to be searchable and available online
- H. Expanded search capability including multiple search fields and simultaneous searching (= greater accuracy)
- I. Internal reports available for managers and supervisors
- J. Size of backlog - Days pending release/return of original document
- K. Ability to receive and process Excise Tax payments electronically, percentage of affidavits processed electronically vs. over the counter/mail.
- L. The BAP will be updated after project planning phase to identify the level of staff resources estimated to be freed up by the project and the specific activities those staff will now be able to do. Examples of the use of freed up staff time include, but should not be limited to staff time devoted to quality control.

3. *What is the current baseline for this measure?*

- G. 1 day for documents to be fully searchable and available online
- H. Limited search functions and single searches at a time
- I. Limited reports available without KCIT technical assistance
- J. No indexing backlog
- K. No ability to process REET affidavits online.
- L. A baseline will be identified as part of the planning process for this project. An example of a baseline is, no time is currently spent on quality control.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- G. 1 day for documents to be fully searchable and available online
- H. Multiple search field functionality and simultaneous search capability
- I. Standard and ad hoc reporting available to supervisors and managers without technical support.
- J. No indexing backlog
- K. Ability to process REET affidavits online.
- L. Targets will be identified as part of the planning process for this project. An example includes, all production work is verified as a quality control measure.

5. *When is the benefit likely to be achieved?*

6 to 12 months after go live (once staff becomes completely familiar with new systems and processes)

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The current system (Anthem) was implemented by the County in 2002, as an upgrade to an existing version placed into production in 1999 (ISOL). The hardware to support the current system is between 5 and 7 years old (servers, storage disk arrays) and in need of replacement. Replacement has been delayed due to a desire to align new hardware with a new system in order to optimize both the hardware and software systems. The life cycle of software platforms likely varies, however 7 to 10 years is generally the duration of time before a replacement option, platform migration, is available from the vendor. The life cycle of hardware varies as well, but the availability of manufactures' support and/or third party support is a reasonable indicator and/or driver for replacement of mission critical hardware. A life cycle of five (5) years and manufacturer warranty only (vs. third party after warranty support) is the County standard.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The public record for King County is dependent upon an accurate and reliable recording system to maintain the prompt recording of documents and accurate retrieval of documents. These documents are critical to citizens for any number of legal transactions. RALS have estimated that the Recorder's Office could function without an electronic recording system for approximately 4 hours without diminishing services or failure to meet legal mandate. With outdated hardware and aging code, the risk of not being able to recover quickly from a failure increases. Delays in recovering to production level could impact financial and other transactions that occur in the public and private sector, as they rely on recording or recording information.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit

analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** Reduced cost to produce service. *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example:** Cost Avoidance. *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

**To be completed when benefits have been achieved or no further benefits are expected.** *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be*

*assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• <i>10 days processing time</i></li> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>1 day processing time</i></li> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<ul style="list-style-type: none"> <li><i>2 day processing time</i></li> <li><i>20 percent of purchases are receiving prompt payment discounts</i></li> <li><i>\$200,000 savings</i></li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
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<b>King County Department/Agency Name</b>	Executive Services, Records and Licensing Division, Archives and Records Management Section/Archives
<b>Project Title</b>	King County Archives Collection Management System
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

**Business Owner Name and Title:** Carol Shenk

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Carol Shenk	Archivist/KC Archives	Business Owner
Donna Frisk	Project Manager/KCIT	Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

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Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Funding release	12/5/13	Carol Shenk	New, initial draft	3 hours
<b>Example:</b>				

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The public cannot currently search the Archives collection database and must rely on browsing lists and narrative finding aids posted to the Archives' Web site. These finding aids only cover a portion of the Archives' holdings and new finding aids are created infrequently because they are not integrated into our existing systems and must be separately developed and published. Thus the current online content does not reflect the Archives' entire holdings and researchers do not know of many of the records held in the Archives and how those records may be of use. The proposed Collection Management System (CMS) will allow the public to search current data on Archives holdings and will allow increased direct online access to individual Archives records. Also, with the entire collection searchable, enhanced description, and increased direct availability of records online, patrons will be able to conduct more of their own research and more accurately determine whether or not the Archives has the records or information they are seeking before they contact us, saving them time.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- 1) Usage of the CMS: Stats from the CMS will show how many users searched the database and Web stats will show how many unique visitors there were to the site.
- 2) Numbers of requests generated based on CMS research: staff will inquire (for phone/email contact) and direct request from online interface will indicate whether the patron searched the CMS before contacting us.
- 3) An overall increase in requests relating to non-recorded archival records (we anticipate that the number of requests for recorded documents will stay stable, as these are already publicly searchable in Anthem.). This can be measured by tracking requests in reference request module.
- 4) Feedback in an online usability survey will rate user experience and inform how the system is being used and potential improvements.

3. *What is the current baseline for this measure?*

- 1) Usage of the CMS can be compared to traffic on Archives' current Web site (*awaiting Web stats from KCIT*).
- 2) The Archives receives approximately 100 research requests relating to non-recorded archives records each year. (This number also excludes requests for records not held at the Archives that are referred to other agencies).
- 3) Baseline is zero.
- 4) Baseline is zero.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- 1) Twice as many visits to the CMS site as compared to Archives site (pre-CMS)
- 2) 10% increase in requests relating to non-recorded Archives records
- 3) 30% of requests relating to non-recorded Archives records come from patrons who initially searched CMS.
- 4) 80% average positive (Satisfactory, Good, or Excellent) customer ratings on online survey.

5. *When is the benefit likely to be achieved?*

By 12/2015. Knowledge of the resources available will gradually grow after the online CMS is in place.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

**Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

**Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.

**Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

**Section 7. Benefit Achievement Summary**

**Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the*

benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DES / Human Resources Division
<b>Project Title</b>	NEOGOV evaluation and/or replacement with another ATS System
<b>Project Number</b>	1124179

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Phillip Browning, Human Resources Systems Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Syd Phillips	Business Analyst / KCIT	Business Analyses (during budget submittal process)
Phillip Browning	Human Resources Systems Manager	Manage and lead project
Tina Canul	Employment Manager / HRD	Participate, advise, and contribute
Ruth Harbaugh	Business Analyst / HRD	Participate, advise, and contribute, focusing on business process updates and changes

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as

information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	6/9/14	Phillip Browning / Kendall LeVan Hodson	New, initial draft	2 hours
	9/10/14	Phillip Browning	Updates	2 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Surveys conducted by The Talent Board, surveying over 45,000 applicants, and CareerBuilder.com say that the main reason for applicants not applying for open positions is related to technical issues. They tell us that 61% of applicants who had a positive experience during the application process will actively encourage colleagues to apply. Conversely, 27% of those that have a negative experience will discourage colleagues from applying. In addition, 65% of candidates state they will leave a company website that isn't mobile optimized.

Benefit A:

- Best in class county candidate experience
  - Appealing recruiting site
  - Leverage social media in the recruitment process
  - Mobile functionality features enhances user experience
  - Simplify the application process
  - Applicants can apply for future job openings; not just current postings
- Current system reinforces a cumbersome and out dated civil service processes that do not fit in with the county's culture of "Best Run Government" and "Employer of the Future"

Benefit B:

- Appeal to a more diverse applicant base through use of social media and referral technologies.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Benefit A:

- Survey of Applicants
  - Ease of finding a particular job posting
  - Site appeal
  - Ease of use
  - Time to apply
  - Other process specific questions
- Real-time Survey of Applicant Experience
  - Within ATS System at time of application
- Time to Hire
  - How long it takes from the time of job posting to the hire and onboarding is impacted by having a smaller candidate pool and systems that are cumbersome for recruiters and hiring managers.

Benefit B:

- See an increase in the diversity of the pool of applicants

3. *What is the current baseline for this measure?*

Benefit A:

- The amount of negative feedback was captured by the Applicant Tracking Systems (ATS)

Review. This internal survey reflected that the applicant experience was poor. There were common complaints from applicants that the system was not user friendly; that features within the system were not intuitive. In addition, our applicants were unsupported by NEOGOV for those portions of the applicant process that we do not have access to. Since the county does not have access to any of the applicant information entered into NEOGOV prior to the applicant's submission of their application, should they run into technical difficulty prior to submission, we are unable to provide assistance. NEOGOV's customer service has been historically poor.

Benefit B:

- Simply, with the difficulties in using the current ATS we know that we are losing a portion of our potential applicants. This decreases the potential for having a diverse applicant pool and thus can hinder us from meeting our ESJ goals.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Benefit A:

- Our expectation is that we will have a decrease in negative applicant feedback and an increase in the amount of positive feedback.

Benefit B:

- We expect the results of comparing the current diversity of our applicant pool with the future pool to show increases in numbers and diversity.

5. *When is the benefit likely to be achieved?*

We expect to see benefits to our applicants immediately upon go live.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

A challenge that we face is that almost all of our recruiters are part-time and have many other duties to fulfill within their HR position. Thus, it becomes more important to provide systems that are intuitive and not labor intensive to aid in the recruitment process.

#### Benefit A: Recruiting Benefits

- Ease of Use
  - Getting rid of copy and paste processes and clunky data updates
  - Integrated scheduling tool for interviews
  - Intuitive user interface for our population of part time recruiters
- Workflow
  - Reduce the number of steps in the job posting process
  - Simpler vetting process. The new system will allow for an easier way to filter through the applicant pool and identify desired applicants.
  - Efficiently pass job postings and candidates between hiring managers and recruiters
  - Logical flow through the posting to hire process. The ATS should have features that allow for moving applicants through the hire process within the system (e.g. flagging desired applicants to recommend to hiring manager, hiring manager having the ability to move desired applicants to the interview and schedule the interview within the ATS system, store interview notes and ultimate recruitment status, interface hire data with our HCM system to help populate indicative data).
- Automated Integration between ATS and HR system. Our ideal situation would be one where classification specifications and general job details would be loaded from PeopleSoft to the ATS system. The ATS system would leverage social media to help highlight job postings. In addition, our ideal state would be to leverage pertinent applicant data to populate PeopleSoft upon hire.
  - Classification
  - Job Posting
  - Indicative Data
- Moving from a reactive system approach to a passive candidate database of qualified applicants that can be sourced for other job openings. The desired ATS would allow us to track candidate detail such that we would have a database of skillsets and interview notes of applicants that may not have been selected for the position that they applied for, but have needed skillsets within the county in other needed positions. Recruiters would have the ability to leverage this information to help fill other positions with qualified applicants already in the ATS.

#### Benefit B: Talent Acquisition Management Potential

- Leveraging stored applicant and talent information to recommend qualified applicants for other related positions that were not hired initially. With an ATS that allows us to better track applicant details through the recruitment process (e.g. skillsets, strengths, experience, interview details), recruiters would be better positioned to look through an existing candidate pool of prior applicants that have desired skills needed in positions that the

applicant did not initially apply for.

- Analytics that would help form training plans and initiatives in the future to develop our existing workforce to fill foreseeable gaps in talent left by future attrition projections. As our applicant pool grows, so will our ability to assess existing skillsets within our current employee base and potential applicant pool. This will become increasingly valuable in assessing gaps in needed skillsets. For example: if we are going to see employee turnover of up to 46% in the next 5 years at the county, having a clear understanding of highly skilled positions that will become vacant, identifying up and coming or existing potential county wide, and looking to see clear gaps in the existing candidate pool. This will help us understand our development needs and recruiting challenges and will aid in putting us in a proactive situation.

#### Benefit C: Highly Skilled and Diverse of Applicant Pool

- ATS that is more appealing and user-friendly will yield an applicant pool that is more highly qualified and more diverse. This will assist us greatly in meeting our ESJ goals.

### 2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

#### Benefit A: Recruiter Survey to Recruiter Group

- Time to Hire – This measure is of how long it takes from the time of posting for a position to fill the position. We would expect that with a larger applicant pool and an easier system for recruiters that the time to hire would decrease.
- Ease of use
- Decrease the number of steps to post for positions
- Applicant Screening and Sorting
- Quality of Hire

#### Benefit B: Talent Acquisition Management

- The measure is simply its existence. Today there is not a programmatic way of leveraging applicant data or employee data to accurately determine skillset gaps and thus training needs. The ATS is a significant vehicle for delivering to this need, understanding it is not the whole solution.

#### Benefit C: Applicant Pool Diversity

- An increase in the number of diverse applicants as compared to current state.

### 3. *What is the current baseline for this measure?*

Benefit A: The amount of negative feedback was captured by the Applicant Tracking Systems (ATS) Review. This internal survey reflected that the majority of recruiters were displeased with the following items;

- System Not User Friendly
- Too Many Steps to Post Jobs
- Editing Features are Not Useful
- Poor representation of the county – “Dated, Clunky System”

Benefit B: The current baseline for talent acquisition management is that this does not exist today.

This would be new and needed functionality hoped to be provided by a new ATS that can capture this type of data.

Benefit C: Numbers with NEOGOV of diversity of applicant pools will provide the baseline figures in measuring future diversity.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Benefit A: Our expectation is that we will have an increase in positive feedback from our recruiters in the following area;

- System is user friendly
- Fewer steps to post jobs
- Enhanced tools and features
- System is more appealing to candidates with a more modern look and feel.

Benefit B: Having the data available to conduct analysis of talent in the existing talent pool is the target.

Benefit C: Our applicant pool will have more depth and diversity. Depth and diversity will be determined by meeting our ESJ goals.

5. *When is the benefit likely to be achieved?*

We expect to see benefits after an initial “learning period” for our recruiters.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

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#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

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***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

### **Section 7. Benefit Achievement Summary**

#### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
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## IT Project Benefits Achievement Plan (Version 3)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Executive Services
<b>Project Title</b>	Countywide Electronic Payment Implementation Support
<b>Project Number</b>	1124170

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner and Title: Ken Guy, Finance Director, DES

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Margaret Brownell	IT Service Delivery Manager / DES	Project oversight
Ken Guy	Finance Director / DES	Project sponsor
Scott Matheson	Treasury Manager / DES	Project manager
Syd Phillips	Business Analyst / KCIT	BA (during budget submittal process)
Anthony Laberge	Electronic Payments Coordinator / FBOD	Project lead

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or

actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	3/21/14	Syd Phillips	New, initial draft	2 hours
Benefits Achievement Plan	5/13/14	Syd Phillips, Margaret Brownell	New, initial draft	30 minutes
Benefits Achievement Plan	5/15/14	Syd Phillips	Update	1 hour
Business Case	5/13/14	Syd Phillips	Initial draft	1 hour
Business Case	5/30/14	Ken Guy / electronic payment team	Update draft	5 hours
Benefits Achievement Plan	6/3/14	Syd Phillips	Update	2 hours
Benefits Achievement Plan	6/5/14	John Backman	Update	1 hour
Benefits Achievement Plan	6/6/14	Scott Matheson	Update	1 hour
Benefits Achievement Plan	3/16/15	Tony Laberge	Update	30 minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Current electronic payment policies and management plans create barriers to the expansion of electronic payment options for County services. This investment will update electronic payment policies, develop a new strategic plan, guide the selection of a new enterprise electronic payment solution, and provide support to agencies seeking an electronic payment solution.

This project will:

- Meet the needs and expectations of the County's customers by making it easier and more convenient for customers to use credit cards and other electronic payment methods when conducting their County business
- Develop new electronic payment policies and establish a management framework which will accommodate the very broad range of agency needs for electronic payment implementations
- Provide direct and targeted support to agencies for the analysis, planning and implementation of electronic payments
- Provide an enterprise level electronic payment solution(s)

This approach will significantly lower barriers to the adoption and implementation of new electronic payment channels. Agencies will be incentivized to adopt new payment options through a combination of funding, knowledgeable support and access to a broader range of technical solutions.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Benefits will be measured by:

- Meeting customer expectations for offering electronic payments, similar to a retail business (Soliciting feedback from citizens or businesses regarding their level of satisfaction with electronic payment methods may prove helpful, but this is primarily a customer expectation now and customers are frustrated that the County does not have consistent electronic payment methods in place for all services/products).
- Adoption of a revised Electronic Payment Strategic plan and a revised electronic payment policy
- An increase in the number of agencies that offer electronic payments to customers
- An increase in the number of County products and services that offer electronic payment options
- Of the agencies that currently offer electronic payment methods to customers (e.g. only credit cards), increase in the number of electronic payments methods offered (e.g. credit cards, debit cards, and e-checks)
- Expanding electronic payment channel options, including point-of-sale (i.e. counter), online, mobile and IVR<sup>1</sup>.
- An increase in the annual number of electronic payment transactions
- An increase in the portion of revenue collected from electronic payment transactions (e.g. if 20% of all revenue is collected via electronic payment transactions, 30% of all revenue will be collected via electronic payment transactions by end of 2016.)

3. *What is the current baseline for this measure?*

<sup>1</sup> IVR – Interactive Voice Response, telephone based services using touch-tone or voice commands

As of May 2014:

- About 25% of County agencies that accept payments offer customers electronic payment options either online or at point-of-sale transactions. An inventory of County payments is in progress and this will be used to confirm baseline trends and to assess where there are new opportunities for electronic payments.
- Approximately 20% of County products and services (e.g. court fines, pet licenses, birth/death certificates, property taxes and transit fares) offer electronic payment options
- Of the agencies that currently offer electronic payment options, the primary methods offered are credit card and/or e-check. Only two agencies currently accept debit card payments
- The number of electronic payment transactions in 2013 was 1.38 million
- The amount of revenue collected via electronic payment transactions in 2013 was \$263.3 million

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- **Standardized payment acceptance for county agencies.** Citizens will be able to use payment methods that they are accustomed to using in their daily lives.
- **Number of agencies that offer electronic payment options.** An increase from 25% to 33% by the end of 2014, 60% by the end of 2015, and 80% by the end of 2016. After completion of the strategic plan, we will be able to refine the expectations.
- **Number of products and services that offer electronic payment options.** An increase from 20% to 30%
- **Of the agencies that currently offer electronic payment methods, increase the number of electronic payment options that they offer.** Of the nine agencies that offer electronic payment options, at least 30% (three) will increase the type of electronic payment options by at least one option (e.g. three agencies will offer debit cards in addition to credit cards).
- **Number of annual electronic payment transactions.** Increase from 1.38 million to 1.79 million
- **Amount of revenue collected via electronic payment transactions.** Increase from \$263.3 million to \$342.3 million

5. *When is the benefit likely to be achieved?*

Benefits will be achieved incrementally over the two-year life of the project. The project is intended to be an intense two-year effort to expand electronic payments methods across the County and to migrate current applications to a vendor-supported enterprise system.

Update 3/16/2015:

New e-payment services installed:

Point-of-sale, Superior Court (FCO/JCS), January 2015

New e-payment service installation in progress:

Point-of-sale, Judicial Administration

Point-of-sale, RALS For Hire Vehicle & Operator Licenses

New e-payment services Business Case under review:

DNR/Parks, Facility Scheduling System Replacement Project

District Court, Unified Case Management System (UCMS) project

KCGIS, Registration System project

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

**Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

**Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.

**Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

The addition of electronic payments may produce operational and/or financial benefits for individual agencies or departments. Accrual of benefits will depend on a wide range of factors. Potential areas of savings include reductions or possibly elimination of cash handling, shifting payments from in-person transactions to online services, options to convert paper based invoicing to electronic invoicing and other direct and indirect benefits.

2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

FBOD expects that individual agency and department electronic payment business cases will assess and quantify expected benefits. FBOD ~~will be hiring a TLT~~ has hired a Special Assignment electronic payment coordinator to help agencies with business plan analysis and implementation.

3. What is the current baseline for this measure?

As each agency implements electronic payments, it will develop a baseline for the efforts required prior and post implementation of the electronic payments.

.

4. What is the target for this measure? (How much improvement will this project achieve?)

As each agency implements electronic payments, it will develop targets for the improvements expected post implementation of the electronic payments.

.

5. When is the benefit likely to be achieved?

Achievement of benefits will vary depending upon when the electronic payment implementation

occurs. Each project will identify when any expected benefits will occur. .

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

*Example: Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment	Processing Time annual savings, and percentage of purchases receiving prompt payment	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment

	<i>discounts.</i>	<i>discounts</i>	<i>\$100,000</i>	<i>savings</i>	<i>discounts</i> <i>\$200,000</i> <i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Executive Services / Business Resource Center
<b>Project Title</b>	PeopleSoft 9.2 Upgrade
<b>EBS Project Number</b>	1122181

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Ken Guy – Finance and Business Operations Division Director  
Nancy Buonanno Grennan – Human Resources Division

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Mike Betschart	IT Manager / DES	Architect / Technical Lead
Tracey Dang	HCM Supervisor / DES	Functional Lead
Joseph Isaacks	IT Supervisor / DES	Technical Lead
Pam Bell	Supervisor Payroll Operations / DES	Representing FBOD Business Owner
Kendall LeVan Hodson	HR APPS Manager / DES	Representing HRD Business Owner

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	7/22/13	Mike Betschart	New, initial draft	3 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
*The 9.2 release level carries with it a number of functional improvements which will enhance the value of owning PeopleSoft and increase the quality of the product for the business owners. Examples of these enhancements include:*
  - *PeopleSoft automated Testing Framework solution. This feature is new to King County and comes with the latest PeopleTools release. The feature adds value by providing automated testing functionality, which will help standardize the testing process and reduce the risk of human error. The time it takes to properly test changes to the PeopleSoft application should decrease, resulting in reduced cost of ownership.*
  - *New application patching methodology which allows an increase in the frequency of applying feature packs and minimizing length of future upgrades. This patching methodology is a new feature in PeopleSoft system and provides King County better options to specifically tailor patches to apply to components which are in use here. The current “one-size fits all” patches are large and burdensome to test. Not being in a position to accept or apply vendor provided*

*fixes to the software negatively impacts the quality of customer service by requiring King County to develop internal solutions (customizing the application) to resolve identified issues. Developing these fixes internally takes time, costs money and increases the risk of error. By being in a position to frequently apply vendor provided fixes, King County reduces the need to resolve issues through custom development. Often system problems are fixed by the vendor before they are identified internally thereby, causing no negative impact on the customer.*

*This new patching feature will allow the support team to meet changing business needs more rapidly by enabling us to apply PeopleSoft supplied patches with greater frequency and regularity. This will improve the ability for the PeopleSoft team to respond to business needs.*

- Creating the opportunity to replace 9.0 modifications with new 9.2 delivered functionality, thereby, simplifying future upgrades. The current version of PeopleSoft contains customizations unique to King County. The newer version of PeopleSoft provides new and more robust features unavailable in the current version.*
- Immediate access to information using new Workcenter (dashboard) functionality. This feature is nonexistent in the current PeopleSoft version King County is using. The additional feature provides quicker meaningful access to information allowing managers to more closely review employee related information in an easily understandable way using charts and graphs that make the data readable visually.*

*2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- In order to determine whether the PeopleSoft automated Testing Framework is providing a benefit would be to review the count of defects introduced into production due to faulty testing. Fewer defects introduced into production means better utility for the business (i.e. functions work as designed to satisfy business needs) and less rework for the BRC.*
- In order to determine whether the new patch application methodology is providing a benefit would be to monitor the frequency of patch applications.*
- In order to determine whether replacing 9.0 modifications with new 9.2 delivered functionality is providing a benefit would be to monitor the reduction in the number of customizations carried forward during the upgrade - (By reducing the number of customizations carried forward, King County will be more operationally efficient and in a better position for sustaining the PeopleSoft system.)*
- In order to determine the amount of benefit provided by Workcenter / dashboard functionality would be to gauge the business benefit provided by more immediate access to information. As the type of information presented by Workcenters is currently unknown (will be determined during the course of the project) a specific metric must be established at a later date.*

*3. What is the current baseline for this measure?*

- Testing Framework: Baseline defect rate = 2% of modifications*
- Patching Methodology: Baseline patch application = 0 PeopleSoft application bundles applied (tax patches not withstanding)*
- Replacing 9.0 customizations: Baseline customizations in existence = 1866 customizations made since January of 2010. (Customizations are unique changes made by software developers that adapt the PeopleSoft system to the County's business processing requirements. A reduction in the number of required customizations mean an increase in operational efficiencies. This includes decreasing operational and administrative costs.)*

*4. What is the target for this measure? (How much improvement will this project achieve?)*

- *Testing Framework: Target defect rate less than 2% of modifications*
- *Patching Methodology: Target = 2 PeopleSoft application bundles applied (tax patches not withstanding)*
- *Replacing 9.0 customizations: Target = A reduction of 5% of customizations made since 2010, or the elimination of 93 customizations. As explained above, customizations are expensive to implement and create costly operational and administrative overhead to support. Fewer customizations reduce cost and risk of error while increasing the County's ability to proactively maintain the system. PeopleSoft provides regular updates and fixes to the system. Due to King County's high level of customizations and limited support resources, the benefit of implementing a patch or update is outweighed by the cost and risk of implementing it. Fewer customizations allow King County more options and agility to support its PeopleSoft asset and business owner needs.*

5. *When is the benefit likely to be achieved?*

- *Reduction of defects – after upgrade stabilization (2<sup>nd</sup> quarter after upgrade)*
- *Patch application – 12 months after upgrade*
- *Reduction of customizations –immediately upon implementation*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

*The main driver of the PeopleSoft upgrade is that vendor support for our release level will be ending in 2015. This will mean that payroll tax rates in the system will soon become inaccurate, causing incorrect tax amounts to be withheld.*

*The 9.0 release was released to the public in 2006. This makes it eight years old in 2014. The typical lifecycle of a PeopleSoft release is eight years (9.0 was extended an extra year to 2015, so we were able to delay this upgrade). Upgrades usually take about nine months to complete.*

*If support for King County's version of PeopleSoft were to lapse, King County would be solely responsible for maintaining the PeopleSoft system. Upgrading the system will ensure the continuity of full vendor support and will allow the County to continue to meet tax and regulatory requirements included in Oracle's support agreement. Continuing support protects the substantial investment that*

*King County had made in its PeopleSoft system.*

*Continued support provides the following at no cost:*

- *Technical support*
- *Updates, fixes, and security alerts*
- *Major product and technology releases*
- *Upgrade support*
- *Certification with new third-party products/versions*
- *Tax, legal, and regulatory updates*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

*The risk that support for the current release will end in 2015 is a certainty. This is according to the published PeopleSoft support schedule.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.*** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.*** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Executive Services/ Office of Risk Management
<b>Project Title</b>	Risk Master Upgrade
<b>EBS Project Number</b>	1122190

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Jennifer Hills – Director, Office of Risk Management

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Todger Koerker	Application Developer/ KCIT	Application Support
Jennifer Hills	Director/ORM	Business Owner
Chauntelle Hellner	Finance Manager/ORM	Project Sponsor

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	7/22/13	Chauntelle Hellner	New, initial draft	2 hours
Conceptual review	10/22/2013	Chauntelle Hellner	Updated, new version	30 minutes
Project Completion	3/25/2015	Chauntelle Hellner	Benefits Achievement Summary	30 minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

The current version of Risk Master will not allow us to comply with reporting requirements and we could face fines up to \$9 million/year as a result. The current version of Risk Master World is 5 years old. The upgrade from our current version - Risk Master World, to Risk Master Accelerator which is a web based version will provide the necessary feature set to include ICD-10 codes which will keep us in compliance with the mandated reporting requirements to the Centers for Medicare Services and prevent delays and fines.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

The Medicare Reporting Requirements for ICD-10 codes go into effect by 4<sup>th</sup> Quarter 2014. If we do not upgrade we are at risk of being out of compliance and we will be facing fines which could amount up to \$9 million per year.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

*This project, upgrade the Risk Management claims software system Risk Master, was successfully completed in July 2014. The anticipated benefit was to keep us in compliance with the mandated reporting requirements to the Centers for Medicare Services and prevent delays and fines. This project has achieved this benefit as the new version provides the necessary ICD-10 codes which will keep us in compliance.*

*Without these codes, we were at risk of being out of compliance and could have faced fines of up to \$9 million per year.*

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

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<b>King County Department/Agency Name</b>	DES/FMD Real Estate Services
<b>Project Title</b>	Acquisition Database Replacement
<b>EBS Project Number</b>	1122184

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title:  
Tom Koney, Deputy Director, Department of Executive Services

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Leo Griffin	Assistant Operations Manager	Division IT Lead
Steve Salyer	Real Estate Services Manager	Oversees Real Estate Section
Anna Morgan	Real Property Agent	Primary User
Kevin Workman	Acquisition and Permit Supervisor	Supervisor of Primary User. New employee starting September 18, 2013.
Connie Wong	Real Property Agent	GIS Assistance
Tami Elmer	Real Property Agent	Fixed Asset System coordination
Sandra Fujioka	Business and Finance Officer	Financial and Accounting assistance
Ameer Faquir	Deputy Director FMD	Project Oversight
TBD	KCIT Staff	Analysis and Design. An initial meeting with KCIT was held but the exact person who will staff this project hasn't been determined.

Name	Title / Agency	Project Role
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**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

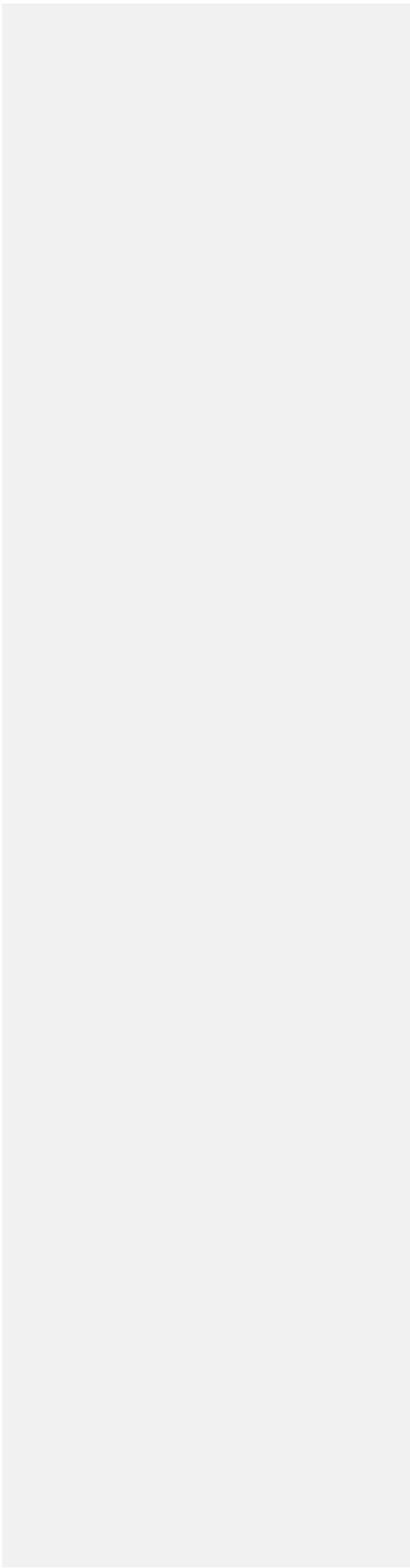
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**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review approval	4/12/13	Leo Griffin	Approved by PSB on 4/12/13 ok’ed to proceed to checkpoint #2	14 hours at Division Level
Cost Benefit Analysis	6/10/13	Leo Griffin	Completion of Cost Benefit Analysis	8 hours at Division Level
Benefit Achievement Plan	7/22/13	Leo Griffin	Completion of Benefit Achievement Plan	8 hours at Division Level
Benefit Achievement Plan Edits	9/3/13	Leo Griffin	Edits of Benefit Achievement Plan to better address issues Council Staff identified.	6 hours at Division Level
Benefit Achievement Plan Edits	10/24/13	Leo Griffin	Updated new form with updated information.	3 hours at Division Level
Benefit Achievement Plan Edits	11/1/13	Leo Griffin	Made improvements to BAP suggested by Council Staff	2 hour at Division Level
<b>Benefit Achievement Plan Summary</b>	<b>6/15/2015</b>	<b>Michael Kulish</b>	<b>Summarize results of the project</b>	<b>2 Hours</b>

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## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

*This project does directly benefit the public. The primary basis or benefit for the project is maintaining service at current levels and replacing older technology.*

2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?).

*What is the current baseline for this measure?*

*What is the target for this measure? (How much improvement will this project achieve?)*

4. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

This database is a tool to help the internal operations of Real Estate Services. The benefits for this project are primarily in Category 3 (replacing older technology)). The primary internal operational benefit of this project is widening the number of staff in Real Estate that are able to use it, Expanding users is important because if more users can access the database directly they do not have to rely on just one or two staff members to get the information they need to do their work. The increased security of the new system would allow wider deployment of the software.

Additional benefits include:

- A more modern database would also allow users to take advantage of current software functionality. The current DOS program does not support mouse use or “cut and paste” the lack of these common features is frustrating to staff and requires them to re-type information into emails (which leaves the possibility of errors).
- Operations will also be improved by having drop down features to provide for better data quality controls

- The new system would have greater ability to be exported to other programs or analyzed with Excel.
- . Converting to a normalized database would make it easier for IT to support it. It also would likely improve the accuracy of records in the database, and possibly decrease the amount of data entry.
- Possibility of improved data uniformity in Acquisition Database and Oracle Fixed Asset System. The current database does not seem to have extensive rules that help keep data uniform. Address, capitalization, and date format entry don't have rules that aid in sorting, etc. Data entry rules have been successful mostly due to the limited number of people doing entry and self-enforced entry conventions. If properties become purchased they are entered into the Fixed-Asset System. It may be possible for the Acquisition Database to create an export file that could be uploaded to the Oracle Fixed-Asset System. This export file could increase consistency of data between the two systems and may save a small amount of duplicate entry.
- Increased documentation will make the software easier to operate and easier for FMD to train users on. Converting the database to a KCIT supported system will also make it less likely for FMD to receive a potential audit finding regarding using an unsupported system.
- Additionally, currently reports that RSD sends to FHWA (Federal Highway Administration) have to be hand created in Excel since the report generator is broken. The other report that is broken is the one that generates 1099-S tax forms (proceeds from Real Estate Transaction). This report is required to be provided to the sellers of property to the County. This tax form is currently generated separately outside of the database: it would be an improvement to have a database report generate it.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- The number of people being able to access the database,
- Better data quality control (addresses, locations, descriptions, etc. conventions could be selected by drop downs rather than entered by hand).
- By evaluating whether the new program allows easier data copying techniques such as mouse use and "cut and paste."
- Whether extracts of this data could be uploaded to the fixed asset system which would allow uniformity between the two systems.
- If the report generator function is operational and it generates reports that are needed.

3. *What is the current baseline for this measure?* The current database is fairly restricted due to concerns about security and inadvertent deletion of data. Currently only 2 to 3 people use the database. Currently the data is fairly uniform but there probably is room for improvement. The program does not support mouse use or "cut and paste".

4. *Proper database design.* The current database is homegrown. The data is not normalized. Additionally, the current baseline is that the database doesn't generate the needed report. Little work has been done to try and repair this problem because the entire database needs replaced and the software is unsupported by the manufacturer.

5. *What is the target for this measure? (How much improvement will this project achieve?)* The target for this measure is that every FMD employee that might need the information be granted access. This could broaden the number of users to as much as a dozen.

The target for improved data quality is consistency of entry. Fields such as street address, property parcel number, city, etc. could all benefit from standardization. The standardization increases accuracy of searches, reduces misspelling, truncations and abbreviation. It is also possible that spell check could be added to the database which is a feature it doesn't currently have. The improved data quality may also improve data quality transferred to Oracle Fixed Assets

6. *When is the benefit likely to be achieved?* This benefit will be achieved upon deployment of the new program.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

This project replaces older technology-- FoxPro, flat file database running on DOS – and replaces it with current, supported technology.

The most likely cause of a failure is a DOS Windows emulation issue. The last version of MS-DOS (7.10) was released seventeen years ago in September 1996. Windows has supported DOS emulation but since it is emulation, not the true operating system, problems including issues with graphic display occur. Additionally, at some point DOS emulation will likely be discontinued. FoxPro user groups have reported issues of FoxPro not being able to be installed on current Windows Operating Systems. There are other reports where users just get a blank screen, or a locked computer, or can't print and receive error messages. While the Acquisition database is backed-up and it is probably possible to reformat a computer with ancient operating system software, this solution postpones the inevitable. An emergency re-write would probably cost \$82,500; this is likely to be \$40,000 more than proactively responding to this problem. The emergency situation would likely consist of a short timeline, more overtime, more rework (due to it being an accelerated schedule). There could also be lost productivity due to the database being unusable or data having to be validated or re-entered.

It appears the last time any work was done on the database was thirteen years ago in the year 2000. It has several benefits:

Benefit 1: The current Acquisition database is running on an un-supported platform (DOS) and is written in software (FoxPro) that has not been supported for some time. If the data were lost, and a new database had to be created as an emergency project and the data had to be re-entered from scratch it would likely cost \$82,000 to complete. Continuing to use the current software would be difficult as it is hard to find someone with skills in this software and there is risk that Microsoft could drop support for windows DOS emulation. DOS emulation can also be an issue for peripherals (printers, etc.) which is another thing to address. Addressing both of these issues would be a tremendous benefit to the department. Having this in a currently supported program also helps with hiring and training. It is much easier to find employees that have skills in current software than in old unsupported programs.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.* Partial failure has already started to occur. Reports do not operate and portions of some screens are not visible due to a clash between video drivers. Current video drivers display screens sometimes have irrelevant ASCII characters, or missing colors, making the screen difficult to read. Failure within the next year is 25%. Failure within the next three years is predicted to be 75%.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example:** *Cost Avoidance.* *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?  
The cost of keeping the database in the current program is minimal.
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve) The amount of savings depends on the amount of final costs of this project.

When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage	Processing Time annual savings, and percentage of purchases receiving prompt	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt

<i>of prompt payment discounts.</i>	<i>payment discounts</i>	• <i>Savings of \$100,000</i>	• <i>\$400,000 savings</i>	<i>payment discounts \$200,000 savings</i>
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1 Replace older Technology

The new database is implemented in SQL Server a standard application maintained by KCIT. Data and application can be migrated forward through standard county processes. Data conversion was completed prior to any critical system failure in the old FoxPro system and without need for an emergency response. The new application has a web-based fronte end that fully supports current mouse, keyboard, video requirements.

2 Allow all Authorized Staff access

Access is controlled by standard KCIT procedures. Login is based on Windows login authentication. Any number of users may be granted login privileges by the administrator. The previous system was limited to a single user.

The new application can be used by any computer-literate worker. No special application or database training is required for normal day to day usage.

3 Improved quality control

The SQL database contains inherent data integrity controls for data type and values and can be audited using industry standard tools and methods.

4 Data can be exported to standard business applications

The new application supports a variety of data export methods including adhoc export of search results to Excel.

5 Data exported to Excel can be formatted to meet varying reporting formats

All data within the system can be exported to Excel format. Using the standard office tools within Excel users can tailor reports to any number of required output formats.

While only minimal specific metrics for benefits were established at project initiation all of those were achieved. The new application provides data and program security, any number of users can access the tools, catastrophic failure and replacement cost was avoided, the new application can be maintained within the established maintenance budget, and data integrity can be audited and maintained.

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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Judicial Administration (DJA)
<b>Project Title</b>	Core ECR Replacement Project
<b>Project Number</b>	Project #: 1111942

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

- Business Owner Name and Title: Teresa Bailey, DJA Deputy Director
- Business Owner Contact Information: 477-0768; teresa.bailey@kingcounty.gov

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Teresa Bailey	DJA Deputy Director	Project Director
Paula Adams	DJA Project Manager	Project Manager
Stephen Bell	DJA Technology Services Div. Manager	Technology Oversight

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.

4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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Benefits Achievement Plan	Feb. 2014	Teresa Bailey	Annual Benefits Report	2 hours
<u>Benefits Achievement Plan</u>	<u>Feb. 2015</u>	<u>Teresa Bailey</u>	<u>Annual Benefits Report</u>	<u>15 minutes</u>

### Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved,*

inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

**Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.

**Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The Department of Judicial Administration (DJA) has a complex policy framework supporting its mission: This framework begins with Article 4, Section 26 of the Constitution of the State of Washington and includes a variety of RCW's, State and Local Court Rules, the King County Charter, and County Ordinances. Through this complex codification, DJA serves as a customer service office of the Superior Court and manages all records associated with Superior Court cases. The Washington State Constitution identifies Superior Court as a court of record, meaning that all Court records need to be retained indefinitely. DJA has Superior Court records dating back to the 1800's and currently receives more than 7,000 documents each day that must be maintained indefinitely. Finally, DJA constantly performs complex technology operations to provide the public and courts access to court records in support of many business needs, not the least of which is daily court operations.

DJA maintains, manages and distributes Superior Court records through a central application known as Core ECR or "Core." Core ECR provides work flow, routing, retention and viewing of these electronic documents.

Core ECR is based on an outdated technology set (FileNet 3.6 ESE) that severely limits Core's support, enhancement potential, and operating system platform compatibility. FileNet 3.6 ESE also uses a proprietary document repository format to store documents. Given this outdated technology platform and multiple associated consequences, it is conceivable for the Core ECR to fail catastrophically in the near term, severely impacting DJA and Superior Court business continuity.

The existing Core ECR system was originally developed in 1999 and is at end-of-life. Although the life expectancy of IT systems can vary depending upon system-specific characteristics, a 10 year production lifespan without major redevelopment/replacement is typically the maximum<sup>1</sup>. Core ECR has far exceeded this rule of thumb and now poses a significant risk to Clerk and Superior Court operations because its outdated technology platform is extremely difficult to maintain.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Given Core's operating system platform compatibility issues, the likelihood of a catastrophic failure is near certain without a system replacement in the near term.

<sup>1</sup> Ten (10) years is an industry-accepted rule of thumb for the lifespan of technology systems: Commercial vendors tend to issue software updates/upgrades every couple of years and typically engineer software with backward compatibility with underlying platforms for 2 or 3 versions. This is true of IT systems in general as well as systems specific to clerk operations.

As further background, Core has previously failed catastrophically on two separate occasions (once in 2005 and again in 2008), leaving DJA to operate manually for long periods of time. DJA consequently made multiple changes to its technology environment in order to bring Core back on line and to increase its stability. These failures brought tremendous stress and inconvenience to the Clerk's Office, the court, and a broad customer base. Avoiding a much more catastrophic scenario in the future is the fundamental justification for the Core ECR Replacement Project.

Finally, a relatively quick-fix option (as was performed in response to past Core ECR failures) cannot and should not be assumed as viable in response to a future event. Already, the FileNet 3.6 ESE platform has proven to be so outdated that only a very small and unique collection of contractors have any capability to work with it.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
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<b>King County Department/Agency Name</b>	Department of Judicial Administration (DJA)
<b>Project Title</b>	Delta Viewer Replacement Study Project
<b>Project Number</b>	Project #: 1122186

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

- Business Owner Name and Title: Teresa Bailey, DJA Deputy Director
- Business Owner Contact Information: 477-0768; teresa.bailey@kingcounty.gov

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Teresa Bailey	DJA Deputy Director	Project Director
Paula Adams	DJA Project Manager	Project Manager
Stephen Bell	DJA Technology Services Div. Manager	IT Oversight
Aiello, Sarina	DJA Kent RJC Div. Manager	Business Process Oversight
KCIT/Vendor	Business Analyst	Business Process/Use Case Development/ Technology Option Recommendations

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Budget Process	Jul. 2013	Teresa Bailey	Initial Project Request	2 hrs.
Benefits Achievement Plan	Feb. 2014	Teresa Bailey	Annual Benefits Report	2 hrs.
<b><u>Benefits Achievement Plan</u></b>	<b><u>Feb. 2015</u></b>	<b><u>Teresa Bailey</u></b>	<b><u>Annual Benefits Report</u></b>	<b><u>30 min.</u></b>

### Section 6. Description of Project Benefits

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- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

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**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

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inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

#### **PROJECT IS NECESSARY TO EFFECTIVELY PLAN A FUTURE SYSTEM REPLACEMENT:**

The Delta Viewer Replacement Study Project constitutes the *planning phase* of an eventual Delta Viewer system replacement project. As such, this project does not upgrade the existing Delta Viewer, but will facilitate scope development for the eventual upgrade project by documenting Delta Viewer business processes and use cases.

The Technology Research and Alternative Analysis portion of this project also allows DJA to assess the most effective and sustainable technology options available. These deliverables will position DJA to craft documentation that is likely to attract the most effective and sustainable technology options during the eventual procurement process.

DJA's central mission is to manage the Superior Court records store and distribute those documents to Superior Court and multiple other Law Safety and Justice (LSJ) agencies. Given that the Delta Viewer is the mechanism used by such agencies to view electronic court records, it is imperative that an eventual Delta Viewer replacement effort proceed smoothly and deliver the end product(s) desired by DJA customers.

#### **POTENTIALLY INFORMING OTHER TECHNOLOGY UPGRADES:**

As further background, DJA's central document processing, storage and distribution system ~~is maintains and manages Superior Court records on an IBM FileNet application and repository known as Core ECR or Core.~~ Like the Delta Viewer, Core is scheduled to be replaced within the next 2-3 years. DJA's Core ECR system interfaces with multiple viewing and document processing applications (satellite systems), including the Delta Viewer. These applications were each developed separately and with different technology platforms.

When a new Core is implemented, it must still interface and exchange data with all satellites, including the Delta Viewer<sup>1</sup>. Rather than forcing the eventual ECR contractor to develop highly customized interfaces between Core and each satellite system, DJA is gradually modernizing and reducing the number of interface components within each viewing and document processing system. This work reduces the customization required for communication between the satellites and a new Core ECR.

This makes the Technology Research and Alternatives Analysis portion of The Delta Viewer Replacement Study Project particularly important, since technology recommendations for a new Delta Viewer informs DJA's continuing work to modernize internal interface components.

The existing Delta Viewer has been in place at DJA since 2005. Although life-span can vary from system to system, a reasonable rule of thumb is ten (10) production years without major redevelopment/replacement<sup>2</sup>. Initiating this planning project at this juncture assumes a maximum lifespan for the existing Delta Viewer, since another IT project will be required to perform the

<sup>1</sup> In addition to the Delta Viewer, satellite systems that must communicate with Core include a public document viewer; a document stamping application; eFiling for online document submittals; and a web services application designed to queue documents for faster retrieval and viewing – among others. They are distinctly different from the Delta Viewer in their functional uses, and were all built at different times with the technology available at those times.

<sup>2</sup> Ten (10) years is an industry-accepted rule of thumb for the lifespan of technology systems: Commercial vendors tend to issue software updates/upgrades every couple of years and typically engineer software with backward compatibility with underlying platforms for 2 or 3 versions.

actual replacement.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The Delta Viewer Replacement Study is a risk management project in that it prepares DJA to successfully execute a future viewing system replacement project. Although there is very little risk during this planning phase, the due diligence represented by this project positions the eventual system replacement for success and avoidance of costly rework once the Delta Viewer replacement effort is under way.

In addition, industry research shows that there is some potential to secure document viewing functionality within a new document management system (Core ECR Replacement Project) or Case Management System (SCOMIS Replacement Project), thus making the Delta Viewer obsolete. Should DJA receive bids on a system(s) with the document viewing capability needed for all user groups, the documented business processes, use cases and suggested improvements will be used to evaluate the effectiveness of the proposed viewing functionality.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

#### Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Judicial Administration (DJA)
<b>Project Title</b>	SCOMIS Replacement Project (DJA-CMS)
<b>Project Number</b>	1123900

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

- Business Owner Name and Title: Teresa Bailey, DJA Deputy Director
- Business Owner Contact Information: 477-0768; teresa.bailey@kingcounty.gov

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Teresa Bailey	Deputy Director/DJA	Project Director
Paula Adams	Project Manager/DJA	Project Manager
Stephen Bell	Technology Services Div. Manager/DJA	Technology Oversight
Sarina Aiello	Kent RJC Division Manager/DJA	<ul style="list-style-type: none"> <li>• Business Process Oversight</li> <li>• Ensuring that stakeholder business needs are met</li> </ul>

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Benefits Achievement Plan	May 30, 2014	Teresa Bailey	Initial submission to request project approval	2 hours
Benefits Achievement Plan	July 3, 2014	Teresa Bailey	Edits per PSB review	1 hour
Benefits Achievement Plan	August 10, 2014	Teresa Bailey	Edits per Council Review	2 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures

4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

**1. Describe why you expect the proposed IT investment to produce the benefit(s).**

Benefit A, BUSINESS CONTINUITY: Although the external benefits listed below are critical and position DJA for multiple service improvements, the SCOMIS Replacement (DJA-CMS) Project is first and foremost a business continuity project made essential by AOC's planned decommission of the SCOMIS system within the next 3-4 years. In addition to the service enhancements listed below, a modern CMS solution replaces the functionality provided by SCOMIS. Should DJA lose business continuity in the areas of case management and associated finance and accounting operations, the manual work requirements could prevent both the court and the public from processing cases and accessing critical information in a time frame required for reasonable

court operations.

Benefit B, TIMELY PUBLIC ACCESS TO CRITICAL DATA: A significant service limitation of AOC's SCOMIS system is the 24-hour turn around between defendants/offenders making payments with the Clerk (known as a Legal Financial Obligation or LFO), and that same payment being uploaded to the AOC finance and accounting module(s) in Olympia. *The data associated with the payment is not available for reporting until upload is complete.* Customers therefore cannot verify receipt or required distribution of LFOs in real time, causing a great deal of frustration and requiring DJA customers to make multiple inquiries to secure verification of funds received, paid or distributed. Although there are many reasons that customers are inconvenienced, two particularly common scenarios include: 1) After paying on an LFO for many years, payers make the final payment and want immediate verification that their obligation is fulfilled; and 2) LFO payers must often provide proof of a fulfilled obligation when purchasing vehicles or real estate. **This second example is particularly important because** third-party transactions cannot close if the payer does not have the required documentation. A modern Case Management System will upload LFO data in real time, thus allowing DJA staff to access the requested detail and provide **requested** financial information timely to customers. Additionally, in many circumstances juvenile offenders are eligible to have their records sealed upon completion of certain criteria by a specific date. When juvenile offenders make their final payment **on their LFO right just** before the **specific** date when the Judge **will** considers sealing their case, not having up to date financial data is problematic.

Benefit C: EQUITY AND SOCIAL JUSTICE - PUBLIC ACCESS TO DATA: Assisting case parties timely is particularly responsive to King County's Equity and Social Justice agenda, since a certain portion of Superior Court clients come from disadvantaged populations that have difficulty accessing the Clerk's Office on even a single occasion. When a customer comes in and makes a final payment on their LFO, they expect they can leave with an accounting printout showing **the their** balance is paid in full. Due to the delay in posting payments, an accounting history cannot be provided until the following business day. Turning these individuals away and/or asking them to call or return on the following business day for updated information may not be realistic from the point of view of ensuring equal public access to DJA services. Considering that a portion of DJA customers are jail and prison inmates, DJA's inability to provide real time data is particularly disparate. These individuals also call DJA to inquire about LFO payments and distributions, and there can be significant ramifications for their court cases. Nevertheless, DJA still cannot provide accurate data until the following business day; if an inquiry is made on a Friday, the requestor must wait until the following Monday.

DJA's industry research shows that a COTS solution will deliver real time reporting capability. This translates to questions associated with case status or LFO payments being answered in real time with the most accurate information. (Although a new CMS also brings with it the potential for accessing critical data online, DJA still must answer in-person and telephone questions from case parties timely, since some disadvantaged individuals

do not have access to a computer. Any public facing web data access points would also show real time data, however.)

Benefit D, OPPORTUNITY FOR PUBLIC CONVENIENCE: DJA has recently completed industry research and observed analogous case management systems installed in other Superior Court Clerk Offices around the country. It is clear that COTS CMS solutions can facilitate an intuitive public web interface and convenient access to court data for the general public, the judiciary and the legal community. The potential to filter data by various fields such as date, party name or case positions DJA to assist both the public and the legal community in accessing critical case management data timely.

As mentioned earlier, industry research also shows the potential to expand the way DJA receives payments (i.e. credit cards) and offer multiple options for providing receipts (e.g., printed or emailed).

The legacy SCOMIS system that is owned and operated by the Administrative Office of the Courts (AOC) in Olympia, WA is also built on a decades-old platform. The public interface is counter-intuitive and quite backward against the public's expectation for current technology: For example, users must tab between fields and cannot use a mouse; 2) the entire user interface is code dependent and, without in-depth knowledge of system commands and consistent practice, public users, as well as the legal community and the judiciary find SCOMIS nearly impossible to navigate. Consequently, SCOMIS remains a highly inefficient tool for case research. With the data owned and managed by the AOC in Olympia, DJA has been unable to affect service levels associated with public access to data. A modern Case Management System designed to accommodate County business needs will and position DJA to design a public-facing web interfaces and present case information in a straightforward and helpful manner.

Benefit E, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: LFO recipients often receive multiple payments from multiple payers on a given day. However, the current AOC financials associated to SCOMIS only permit a single check for each individual LFO payer, meaning that DJA often issues multiple checks to a single LFO recipient on a given day. For example, the State Department of Social and Health Services (DSHS) can receive anywhere between 100 and 150 checks from DJA on a given day; banks and insurance companies can receive as many as 20 checks on a specific day. A modern finance and accounting module (typically designed into COTS Case Management Systems) will benefit Legal Financial Obligation (LFO) recipients directly by allowing DJA to cut a single check covering payments from multiple LFO payers. This will simplify banking operations for LFO recipients.

**2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)***

Benefit A, BUSINESS CONTINUITY: A successful project results in DJA operations continuing without interruption once SCOMIS is decommissioned.

Benefit B, TIMELY PUBLIC ACCESS TO CRITICAL DATA + Benefit C: EQUITY AND SOCIAL JUSTICE - PUBLIC ACCESS TO DATA : DJA can measure the number of customer requests for financial data that cannot be immediately answered in a given time period. A successful project will result in this number being either zero or a *de minimis* amount.

Benefit D, OPPORTUNITY FOR PUBLIC CONVENIENCE: The public benefit for DJA's new Case Management System can also be measured through the commentary of the public and the judiciary. A successful project will create a comment record indicating that customers can conduct case and document research through straightforward web-based interfaces. Such commentary can be secured through surveys and focus groups.

Benefit E, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: DJA can monitor the number of checks issued to individual LFO recipients on any given day. A successful project will show a daily average of 1 check per LFO recipient.

**3. *What is the current baseline for this measure?***

Benefit A, BUSINESS CONTINUITY: The SCOMIS system is currently available and fully utilized by DJA for case processing and financial management.

Benefit B, TIMELY PUBLIC ACCESS TO CRITICAL DATA: Currently, customers cannot secure verifying data associated with court-ordered financial payments on the same day that a payment is processed by the Clerk. Once a payment is processed, DJA cannot provide *verification* of payment made and/or distributed until the next business day. This is particularly troubling if the request is made on a Friday.

Benefit C: EQUITY AND SOCIAL JUSTICE - PUBLIC ACCESS TO DATA: As with item A above, DJA cannot provide verification of payments made and distributed until the next business day. With respect to Equity and Social Justice, this service deficit forces disadvantaged populations to either access a computer or make a return trip to DJA offices on the following business day, neither of which may be realistic. For incarcerated customers, family members often call or visit DJA offices in order to secure the information once

it is subsequently available.

Benefit D, OPPORTUNITY FOR PUBLIC CONVENIENCE: The state SCOMIS system is difficult to use and, from a case research point of view, nearly prohibitive. Considerable time is reportedly wasted by customers trying to navigate the displayed data. Because DJA does not own or manage AOC's case data, the CMS case data that DJA does offer online is fairly limited. It is currently impossible to filter case data online by document type, case type, attorney name or hearing date.

Benefit E, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: As noted above, the State Department of Social and Health Services (DSHS) can receive anywhere between 100 and 150 checks from DJA on a given day. Banks and insurance companies can receive as many as 20 on a specific day.

#### **4. *What is the target for this measure? (How much improvement will this project achieve?)***

Benefit A, BUSINESS CONTINUITY: The target for this measure is no disruption and/or reduction to DJA service levels once SCOMIS is decommissioned.

Benefit B, TIMELY PUBLIC ACCESS TO CRITICAL DATA + Benefit C: EQUITY AND SOCIAL JUSTICE - PUBLIC ACCESS TO DATA: The target for this measure is zero lag time between data entry and data availability. Any finance questions that cannot be answered in real time will be de minimis and highly specialized circumstances.

Benefit D, OPPORTUNITY FOR PUBLIC CONVENIENCE: The targets for this benefit include: 1) reductions over time in the number of customers who visit DJA offices for services for information that can be secured online; 2) feedback from customer surveys and/or focus groups designed to assess the satisfaction of the public and the judiciary with the new CMS system - the target would be an average rating of either "satisfied" or "very satisfied"; and 3) offering robust online case management research capability serving both the public and the judiciary.

Benefit E, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: The target for this benefit will be an average of one (1) check issued to each LFO recipient on a given day.

#### **5. *When is the benefit likely to be achieved?***

Upon SCOMIS Replacement Project (DJA-CMS) go-live.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

**1. Describe why you expect the proposed IT investment to produce the benefit(s).**

~~Benefit A, INCREASED AUTOMATION:~~ Multiple COTS products exist that also offer DJA the opportunity to innovate through efficiency and customer service delivery. For example, many systems on the market ~~allow include the ability for~~ data included in court minutes created within the system to automatically ~~populate be utilized~~ throughout the system. This means that a future court date included in the clerk's minutes can automatically add a calendar entry in the case management system and would include the docket entry for the clerk minutes. Additionally, the SCOMIS system has multiple screens that contain certain data fields and it is necessary to go to various screens to enter data. Data entry should be easier and more intuitive in a modern system.

**2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)**

This benefit can be measured by reviewing data elements in the new system and determining whether any of the data requires double data entry. That information can be compared to the data entry currently required. Ease of data entry can also be determined by comparing the steps currently necessary to input data to the steps required by a new system.

**3. What is the current baseline for this measure?**

DJA currently has performance measures in place to track time required for data entry. Time required for data entry depends on the type of case, type of document, and type of processing required by staff for a particular document. The baseline measure is available for the various types of documents filed.

**4. *What is the target for this measure? (How much improvement will this project achieve?)***

The target for this measure is data entry that is 2-4% more efficient than the current system supports. In addition to more efficient data entry there should also be increased accuracy and less time spent due to the elimination for the need to duplicate data. Overall, DJA staff should have more time to spend on other value added work, such as enhanced customer service.

**5. *When is the benefit likely to be achieved?***

The quicker data entry will likely be achieved within 6 months of go-live. Staff are currently very fast and accurate and there will be a learning curve while they all transition to a new system that operates quite differently than the SCOMIS system.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

**1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.***

RCW 2.32.050 designates County Clerks as the official record keeper for the Superior Court's case records. The Department of Judicial Administration (DJA), which is the King County Clerk's Office, requires an electronic system to fulfill this role: specifically, to track and index court records and facilitate public and government access to those records. For more than 30 years, DJA has fulfilled its record-keeping responsibilities with the Superior Court Management Information System (SCOMIS), a statewide DB2 mainframe system operated and maintained by the Washington State Administrative Office of the Courts (AOC) in Olympia. SCOMIS serves as a Superior Court case management index for the entire state. It is used

by the court, the public, the Bar, and Law, Safety and Justice (LSJ) agencies seeking information pertaining to specific Superior Court cases. DJA staff enter data directly into SCOMIS that is used as the official index and docket, and also for limited case management purposes. As further background, SCOMIS does not maintain actual case documents; those remain stored within individual County Clerk Offices. Rather, SCOMIS stores *critical data associated to each case*.

County Clerks in the state of Washington enter and maintain data in SCOMIS and also in various systems within each Clerk's Office. SCOMIS and multiple DJA systems' data are kept in synch via highly outdated screen scrape methodology. SCOMIS is engineered from extremely old and inflexible mainframe technology, the functional limitations of which have forced the establishment of multiple IT systems in order facilitate performance of DJA's record-keeping and case management responsibilities (DJA systems for case scheduling and exhibit management are two examples). As the largest Clerk's Office in the state of Washington, DJA has long been limited by the AOC SCOMIS system, which was designed and constructed in the late 1970's.

As further background, AOC is currently managing the State Superior Court Case Management System (SC-CMS) Project, which seeks to replace SCOMIS within the next 3-4 years. King County has recently made the decision to *not* participate in the statewide project due to multiple characteristics of the Project and AOC's chosen solution that are incongruent with mission-critical business practices and/or strategic goals of DJA and Superior Court. DJA places high value on its ability to respond quickly to changing operating requirements typically stemming from local rules, urgent changes to practice, or increasing customer demands. AOC's chosen solution will be designed as a functional common denominator among Clerks Offices in Washington; and to some extent, with functionality that is even less desirable than the legacy SCOMIS solution. DJA has long needed an updated Case Management System (CMS) to: 1) capitalize on modern computing functionality that allows for data exchange and more efficient business practices; 2) improve the customer service delivered to the public and the court; and 3) update and consolidate DJA's technology platform and position the department for service excellence well into the future.

King County's decision to separate from AOC's SC-CMS Project was made extremely carefully and with close coordination with the Executive's Office, Budget Office, Superior Court Administration, Superior Court leadership, and the County Council. Nevertheless, DJA intends to provide data to facilitate a statewide view of official case records.

In addition to constructing its own case management system, DJA must also develop a unique system for data exchange between a County-specific system and the AOC solution in order to feed King County's case data to the statewide repository.

Finally, as part of its project to replace SCOMIS, AOC will also retire financial management systems that are used by all County Clerks in the state. (These financial systems are comprised of the Judicial Receipting

System (JRS) and the Judicial Accounting Sub System (JASS).) Accordingly, DJA must replace the functionality provided by JRS and JASS. DJA will require a finance management system that is suitable for a large, high-volume Clerk's Office before SCOMIS and JRS/JASS are decommissioned. Without procurement of a financial module, DJA will be left without the capacity to fulfill its financial obligations to the court and public.

**2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.***

Without a new CMS system and an accompanying Finance and Accounting module to replace the functionality that will be lost when AOC decommissions SCOMIS, it is assured that DJA will be unable to perform the vast majority of its mission critical business processes. Such a scenario has a profoundly negative effect on both DJA and Superior Court operations.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.*** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.*** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000</i>

				<i>savings</i>	

## IT Project Benefits Achievement Plan

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the of the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To fill this document out fully, please read all of the colored sections and fill in the white cells.

<b>King County Department/Agency Name</b>	DNRP/WTD
<b>Project Title</b>	Jaspersoft Amazon Cloud Pilot
<b>Project Number</b>	1111144 (PPD Overhead)

### Section 2. Business Owner Accountability

*Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.*

Business Owner Name and Title: Hans Erickson-Project Control Supervisor  
 Business Owner Contact Information: [hans.erickson@kingcounty.gov](mailto:hans.erickson@kingcounty.gov) (206)-684-1074

### Section 3. Who is Involved in Developing the Benefit Achievement Plan?

*The development of the benefits achievement plan will include significant involvement from the operations or management staff related to this project and the services it will support. Involve staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:*

Name	Title / Agency	Project Role
Joe Barnett	Project Control Manager/WTD	Project Sponsor

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

*The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:*

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.

3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

**Section 5. How long will it take to complete the benefit achievement plan?**

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this processes in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	9/1/13	Hans Erickson	Initial	2 hours
Project Completion	3/13/15	Hans Erickson	Final Status	1 hour

**Section 6. Description of Project Benefits**

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following five categories:

- Category #1: Increased quantity of service
- Category #2: Increased quality of service
- Category #3: Maintaining service level by replacing or upgrading older technology
- Category #4: Reduced cost to produce service
- Category #5: Better access to services for the public

Most projects will have benefits in one or two categories; only a few projects will have benefits across all five categories. Some projects will have more than one benefit in a particular category and should include a description for each type of benefit.

Select the category(ies) that best fit(s) for the project. There is a section below for each category of benefit. **For each of the projected benefits** ,please report: :

1. Why you expect the proposed IT investment to produce the benefit.
2. How will you measure the benefit? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement/savings will this project achieve?)
5. When is the benefit likely to be achieved?

Please update the document online. Do not delete your previous text. Include date and the update directly in the text. Make sure that you upload the updated version to Innotas. The idea is that this single document shows the history of benefits over the course of the project. List any changes in the table on section 5. (If there are no changes, type none) **The example below is the model for each benefit category. In subsequent sections, only the summary is displayed to improve readability. Please follow this full example for each benefit category below.**

**Example: Reduce cost to produce service.** (Savings of \$300,000)

Why do you think this project will achieve this benefit? If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average

2%, yielding annual savings of about \$300,000.

With support from the County's Lean group, the Procurement Office convened a work group of three of our largest purchasing agencies (agencies X, Y, and Z) to identify ways to take more advantage of prompt payment discounts. The work group concluded that the current manual processes precluded fast handling of payables because of the need to send documents back and forth among agencies. The group estimated that at least four additional FTEs would be needed to speed up the workload under the current system, which would wipe out potential savings from the vendor discounts.

The County procurement association recently held a Webinar describing software systems that integrate agency and central purchasing approval processes. Based on this, our IT staff reviewed five software packages and identified at least three that have the potential to reduce processing time to one day or less. The cost to purchase, customize, and install this software is estimated at \$250,000-\$500,000, with annual licensing costs of \$25,000-\$35,000.

The work group analyzed current County purchases and determined that about 10% are currently receiving prompt payment discounts, about 40% are for purchases where such discounts are not offered, and about 20% are for complex purchases in which considerable review before payment is unavoidable. The remaining 30% of County purchases (about \$15,000,000 annually) could receive prompt payment discounts if we could reduce processing time from the current average of ten days to three days or less. Because the proposed software should reduce processing time to one day or less, we believe this full benefit can be achieved.

How will you measure the benefit?

We will measure the benefit in dollars saved as a result of prompt payment. We will run a report at the end of the year identifying the average processing time and how many purchases received prompt payment discounts.

What is the current baseline for this measure? If you don't have an actual measured baseline or a reasonable estimate, consider selecting another measure.

The county currently saves \$100,000 annually as a result of prompt payments.

What is the target for this measure? (How much improvement or savings do you anticipate achieving?)

We expect to save \$400,000 annually (\$300,000 more than currently)

When do you expect to meet the above target?

Benefits realization should be possible within three months of successful software implementation. This will provide time for County staff to adjust to the new process.

**Category #1: Increased quantity of service, either in absolute terms or in amount produced per time period. These projects will allow the County to offer more services or produce more service with the same financial and staff resources.**

**Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

1. Describe why you expect the proposed IT investment to produce the benefit.  
Reporting and data access is currently conducted across multiple platforms. Standardizing on a common platform will increase efficiency and reduce maintenance/upkeep of multiple applications.
2. How will you measure the benefit? (How will you know if the benefit has been achieved?)  
Reduction in processing time of current reports can be determined.
3. What is the current baseline for this measure?  
Existing monthly/quarterly workload requirements for the PRISM business analyst and adhoc system dba requests.
4. What is the target for this measure? (How much improvement/savings will this project achieve)  
Overall 0.5 FTE could be released in repurposed workload assignments.
5. When is the benefit likely to be achieved?  
If the pilot is successful, production would be implemented in 1Q-2015

**Category #2: Improved quality of service, such as faster response times, greater reliability, or greater accuracy. To the extent possible, the reasons such quality improvements are desirable should be explained.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to install larger email servers is approved, the current slow response times experienced by users in some County buildings will be eliminated. Users currently complain of delays of 15-30 seconds in response during peak periods. The expanded servers will reduce this to no more than 2 seconds even with our current expected increase in traffic of 20% over the next three years. Some increase in productivity will result, but the principal benefit is increased user satisfaction.*

1. Describe why you expect the proposed IT investment to produce the benefit.  
*Standardized automatic data transfers will replace manual processing for report generation. It is expected power users will be able to self-manage most data query requests currently handled by dbas.*
2. How will you measure the benefit? (How will you know if the benefit has been achieved?)  
*Improved report processing and reduced dba adhoc requests.*
3. What is the current baseline for this measure?  
*Existing monthly/quarterly workload requirements for the PRISM business analyst and adhoc system dba requests.*
4. What is the target for this measure? (How much improvement/savings will this project achieve?)  
*Cycle times for monthly/quarterly reports will be reduced.*
5. When is the benefit likely to be achieved?  
*If the pilot is successful, production would be implemented in 1Q-2015*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology. If the project involves any improvements to services, please note it above.**

*Example: A project to repair an emergency radio tower will allow the continued operation of emergency radio services in the northeastern portion of the county until the next-gen radio system is developed.*

1. Describe why you expect the proposed IT investment to produce the benefit.  
*Jaspersoft is a next generation business intelligence software capable of handling the standard reporting and data access required by WTD, SWD and WLRD.*
2. How will you measure the benefit? (How will you know if the benefit has been achieved?)  
*Sunsetting of multiple legacy reporting applications.*
3. What is the current baseline for this measure?  
*Retirement of existing Filemaker Reporting database.*
4. What is the target for this measure? (How much improvement/savings will this project achieve?)  
*Only maintain a single platform.*
5. When is the benefit likely to be achieved?  
*If the pilot is successful, production would be implemented in 1Q-2015*

**Category #4: Reduced cost to produce service**

*This category is for those projects that will reduce the costs to deliver a county service. The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the*

project.

**Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

1. Describe why you expect the proposed IT investment to produce the benefit.  
Automated monthly reports will reduce current manual processing.
2. How will you measure the benefit? (How will you know if the benefit has been achieved?)  
Current processing times are known.
3. What is the current baseline for this measure?  
Current processing times are known.
4. What is the target for this measure? (How much improvement/savings will this project achieve?)  
Overall 0.5 FTE could be released in repurposed workload assignments.
5. When is the benefit likely to be achieved?  
If the pilot is successful, production would be implemented in 1Q-2015

**Category #5: Better access to services for the public. This category includes those projects that will expand public access to services. Please note whether current methods of access will be reduced or changed.**

**Example:** If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.

1. Describe why you expect the proposed IT investment to produce the benefit.  
N/A
2. How will you measure the benefit? (How will you know if the benefit has been achieved)  
N/A
3. What is the current baseline for this measure?  
N/A
4. What is the target for this measure? (How much improvement/savings will this project achieve)  
N/A
5. When is the benefit likely to be achieved?  
N/A

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

1) Describe why you expect the proposed IT investment to produce the benefit.  
Reporting and data access is currently conducted across multiple platforms. Standardizing on a common platform will increase efficiency and reduce maintenance/upkeep of multiple applications.

Results: The Jaspersoft pilot was a successful proof of concept for platform development, data handling and data display. WTD management approved next level Jaspersoft development expected to begin in 2Q-15 when KCIT has Amazon Cloud server set-up is complete where Jaspersoft can be deployed.

2) Describe why you expect the proposed IT investment to produce the benefit.  
Standardized automatic data transfers will replace manual processing for report generation. It is expected power users will be able to self-manage most data query requests currently handled by dbas.

Results: Proof of concept data management routines were successfully tested and power user testing was completed.

3) Describe why you expect the proposed IT investment to produce the benefit.  
Jaspersoft is a next generation business intelligence software capable of handling the standard reporting and data access required by WTD, SWD and WLRD.

Results: Successfully tested multi-agency data management.

4) Describe why you expect the proposed IT investment to produce the benefit.  
Automated monthly reports will reduce current manual processing.

Results: Six months of monthly reporting data was successfully simulated.


## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DNRP/WTD
<b>Project Title</b>	Mainsaver Conversion to ABT
<b>Project Number</b>	1037876

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Tim Aratani	Finance Manager/WTD	Project Sponsor

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

<b>Revision History Table</b>				
<b>Stage</b>	<b>Date</b>	<b>Revised By</b>	<b>Description</b>	<b>How long did it take?</b>
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Draft Submittal	2/14/14	Hans Erickson	Initial	2 hours
Final Submittal	3/20/14	Hans Erickson	Final	1 hour
Project Completion	3/13/15	Hans Erickson	Final Status	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: N/A**

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

- 1. Describe why you expect the proposed IT investment to produce the benefit.  
Significantly more EBS requisition, work order, inventory and Peoplesoft data records will be processed on a daily basis compared to the IBIS system because of the way EBS data is recorded. Daily processing of these values ensures accuracy in business process transactions. Accurate inventory is necessary for work order planning and delivery.*
- 2. How will you measure the benefit? (How will you know if the benefit has been achieved?)  
Successful processing of the additional data volume and reliable data transfer in place.*
- 3. What is the current baseline for this measure?  
IBIS data was processed real time. EBS data is processed daily*
- 4. What is the target for this measure? (How much improvement/savings will this project achieve)  
Deliver reliable daily processing of valid Project, Organization, Expenditure Type, Task and Award (POETA) values, requisitions, work orders, inventory and bi-weekly Peoplesoft data.*
- 5. When is the benefit likely to be achieved?  
Daily valid POETA values Jan-12. Peoplesoft data Jan-12. Requisition, work order and inventory processing was targeted for Jan-12 but do to BRC resource limitations this was delayed to 3Q-13.*

**Category #3: N/A**

**Category #4: N/A**

### **Benefit Achievement Summary**

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***Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

**Section 7. Benefit Achievement Summary**

1) Describe why you expect the proposed IT investment to produce the benefit.  
 Significantly more EBS requisition, work order, inventory and Peoplesoft data records will be processed on a daily basis compared to the IBIS system because of the way EBS data is recorded. Daily processing of these values ensures accuracy in business process transactions. Accurate inventory is necessary for work order planning and delivery.

**Results:**  
 -Daily valid POETA values have been successfully processed since Jan-12.  
 -Mainsaver has been used to process timesheets to Peoplesoft through interface data transfer since Jan-12.  
 -Requisition, work order and inventory processing has occurred successfully since 3Q-13. Some workarounds have been implemented due to BRC indefinitely deferring remaining interface development.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DNRP - WTD
<b>Project Title</b>	IBIS and Business Objects Retirement
<b>EBS Project Number</b>	745408050

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: John Bodoia, Chief Financial DNRP

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Molly Cherkin	Business Analyst, KCIT	Business Analyst
Max Foster	Business Finance Officer, DNRP	WTD SPOC
Margaret Brownell	Service Delivery Manager, KCIT	Project Lead/Director (update 3/17/15)
Lyza Gatmaytan	Web Developer, KCIT	Project Manager (update 3/17/15)

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as

information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Budget Process	9/3/13	Molly Cherkin	New, Initial draft	4 hours
Budget Process	9/5/13	Max Foster and team	Research, collaboration for choosing metrics	4 hours
Budget Process	10/16/13	Molly Cherkin	Re-doing BAP in new form	30 minutes
Annual report/project implementation – Phase 3	3/17/15	Lyza Gatmaytan	Review, project status update. (update 3/17/15)	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services.

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance (update 3/17/15)

Category #4: Reduced cost or cost avoidance to produce services (update 3/17/15)

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
  - Reduce cycle times - If this project is approved, WTD staff will be able to more quickly and efficiently access relevant data so they can provide accurate and timely responses to customer inquiries and keep up with ongoing operational duties. Specifically, the following cycle times will be decreased as a result of the solution's implementation:
    - Response to escrow request
    - Early pay-off (unapplied receipts)
    - Early pay-off (escrow request)
    - Lien request preparation
    - Returned item processing
    - Overpayment research
  - Reduce deficit - If this project is approved, WTD staff will have more time and resources to focus on decreasing the backlog of work (including decreasing a \$1.9 million deficit in "at-

risk” delinquent accounts) resulting in part from the current inefficient data retrieval process.

- *Note: The \$1.9 deficit only refers to “at-risk” accounts, accounts on which a lien can be filed and thus WTD staff is more likely to be able to collect payment (“at risk” accounts are those within 30 days of being 3 years delinquent and older that do not have a lien against the property).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- Decreased cycle times
- Decreased balance of delinquent payments

3. *What is the current baseline for this measure?*

- Cycle times
  - Response to escrow request – 2 days
    - Average of 250 escrows received daily. Average response time is 2 days. If no research is needed to complete the request, it takes between 5 - 20 minutes to respond. However in most cases additional research is needed and/or WTD staff must contact local agency for confirmation which may take up to a week to complete the original escrow request. This project’s focus is to reduce this research delay.
  - Early pay-off (unapplied receipts) – 1 day
    - On average, this process takes about 1 day. Of the 14,000 invoices that are mailed out each month, WTD gets approximately 7 to 15 pay-offs daily in the unapplied receipts. It takes anywhere from 60 - 90 minutes to process, depending on how fast the invoices are printed. This cycle time is also affected by a glitch in the Oracle Concurrent Manager, which may increase the processing time to overnight. From the pay-off, WTD also has to complete the process by closing future invoices and closed/inactive accounts. If this leads to refunds, which often happens, the process can take 1 hour to days to find the correct data. This project’s focus is to reduce the delay’s from the system and missing data in the EBS customer records.
  - Early pay-off (escrow request) – 15 minutes
    - For payoffs due to an escrow request, it takes 5 to 15 minutes to process the early payoff.
  - Lien request preparation – 2 hours
    - Preparation for lien requests takes approximately 2 hours.
  - Returned item processing – 1 hour per item
    - There are currently approximately 7,022 items of outstanding returned mail. Cycle time varies depending upon how much research and account maintenance is needed for each piece. Estimated cycle time per piece is 10 minutes to 1 hour.
- Delinquent deficit – \$1.9 million as of 8/31/2013
  - WTD pulls this report annually and as of 8/31/2013, the deficit for the “at-risk” accounts was \$1.9 million.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- Cycle times
  - Response to escrow request – 5 to 60 minutes depending on the amount of research needed

- Early pay-off (unapplied receipts) – 15 to 75 minutes
- Early pay-off (escrow request) - 5 minutes
- Lien request preparation – 45 to 60 minutes.
  - 15 minutes for drafting Intent to File Lien (then 3 weeks to deliver via post office processing) and 30 to 45 minutes processing time (with up to one day for signature approval) to file lien.
- Returned item processing– 10 to 30 minutes to process each item (and the elimination of the backlog)
- Delinquent deficit –
  - The total deficit will be less than one million by 8/31/2014

5. *When is the benefit likely to be achieved?*

- Cycle times - likely decrease within 2 months of implementation
- Delinquent deficit – 1 year
  - The deficit would reduce over 5-10 years as each property with a lien changes hands. The amount at risk would become \$0 within 12 to 24 months. Any amounts delinquent over 3 years will have lien filed so the actual amount will not have an “at risk” status.

NOTE: The Capacity Charge Section will undertake a Lean Business Process Improvement Project starting with a Lean Event in October 2013.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

- HP ends all support for the HP-UX operating system used by IBIS and Business Objects on December 31, 2015.
- BRC does not have the resources or knowledge to provide support moving forward.
- IBIS and Business Objects software programs are very old and have not been upgraded. It is very fragile.
- Program software incompatibility. KC employee/standard workstations can no longer access IBIS and Business Objects. Extra "IBIS only" workstations with very old configurations have been put in place to resolve the issue. (update 3/17/15)

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?

A market research was conducted Q4 2014 to identify possible solutions to replace IBIS and Business Objects. One of the proposed solutions is a Cloud-based ITL with BI. Cost is projected at: \$20,000 for Data Migration and Implementation, and \$45,000 for Annual Subscription. (update 3/17/15)

2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved) *Implementation success measures incorporated into the project – UAT acceptance, implementation for 3-6 months with no problems/errors, cost reduction.* (updated 3/17/15)

3. What is the current baseline?

Yearly cost for maintaining IBIS and Business Objects in 2014 is \$141,289.92. (updated 3/17/15)

4. What is the target for this measure? (How much savings will this project achieve)

Approximately an annual savings of \$90,000. (update 3/17/15)

5. When is the cost reduction likely to be achieved?

Q1 2015 (updated 3/17/15)

#### Section 7. Benefit Achievement Summary

##### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

***Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014.*

The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
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<b>King County Department/Agency Name</b>	DNRP/WTD
<b>Project Title</b>	PRISM Conversion to ABT
<b>Project Number</b>	1037876

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Joe Barnett	Project Control Manager/WTD	Project Sponsor

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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4. When a material scope change is identified and reported.
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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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Draft Submittal	2/14/14	Hans Erickson	Initial	2 hours
Final Submittal	3/20/14	Hans Erickson	Final	1 hour
Project Completion	3/13/15	Hans Erickson	Final Status	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: N/A**

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

- 1. Describe why you expect the proposed IT investment to produce the benefit(s).  
Significantly more EBS expenditure data records will be processed compared to the IBIS system because of the way EBS data is recorded. Expenditure data will be processed on a daily basis up from bi-monthly under IBIS. Additionally, data for 150+ Operating projects will be processed for contract payment Project, Organization, Expenditure Type, Task and Award values.*
- 2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)  
Successful processing of the additional data volume and reliable data transfer in place.*
- 3. What is the current baseline for this measure?  
Bi-monthly data processing under IBIS.*
- 4. What is the target for this measure? (How much improvement will this project achieve?)  
Deliver reliable daily processing of expenditure data and valid POETA values.*
- 5. When is the benefit likely to be achieved?  
Valid POETA values Jan-12. Additional Operating projects Jan-12. Daily expenditure actuals processing was targeted for Jan-12 but do to BRC resource limitations this was delayed to 4Q-13.*

**Category #3: N/A**

**Category #4: N/A**

### **Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

***Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

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**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
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## Section 7. Benefit Achievement Summary

- 1) Describe why you expect the proposed IT investment to produce the benefit(s).  
*Significantly more EBS expenditure data records will be processed compared to the IBIS system because of the way EBS data is recorded. Expenditure data will be processed on a daily basis up*

*from bi-monthly under IBIS. Additionally, data for 150+ Operating projects will be processed for contract payment Project, Organization, Expenditure Type, Task and Award values.*

*Results:*

*-PRISM data structures were successfully modified for EBS data and blended with historic IBIS data to seamlessly cover historic expenditures on over 1400 projects totaling over \$4.5B total cost. System changes were in place in Jan-12. Historic budget and expenditure data conversion to EBS was certified by PSB in 1Q-14.*

*-Valid POETA values for Capital and Operating projects have been successfully processed on a daily basis since Jan-12.*

*-Daily automated expenditures transfer from EBS to PRISM was implemented in 4Q-13. EBS data delivery procedures were revised in mid-2014 to handle additional data cases. Automated QA procedures were implemented in 4Q-14.*

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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<b>King County Department/Agency Name</b>	Department of Natural Resources & Parks Solid Waste Division
<b>Project Title</b>	Faster Web
<b>Project Number</b>	914799811

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Pat McLaughlin, Division Director

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Chris Gavigan	Interim Asst. Operation Manager/SWD	Business Manager
Lisa Huntley	Project Program Manager IV/ SWD	Project Manager
Update: Lynn Walters	Shop Supervisor	Supervisor

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Conceptual Review	2/10/14	Lisa Huntley	New, initial draft	2 hours
Update	2/23/15	Lisa Huntley	Updates added	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
*This project will enable real time entry of maintenance activities at all Solid Waste work locations, eliminating duplication (tech writes up service in the field, then enters the same thing in the computer later), while allowing better oversight of maintenance activities. Real time entry will also reduce delays as Faster Web allows techs to order parts in real time. Finally, parts and equipment warranties are flagged in real time allowing proactive follow up and better warranty recovery.*  
*Update 2/23/15:*  
*Real time entry at all SWD locations has been achieved and has eliminated duplication. Oversight by supervisor and leads is now also real-time. More staff, such as site staff, have been added as technicians to the program so that their work can be captured, increasing the amount of data collected in FasterWEB. Warranty processes are currently under review to standardize across personnel and conform with Faster features.*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

*Reduction in delays/faster processing time will be reflected in equipment downtime. This is a measure of hours a piece of equipment is unavailable for use during operational hours. Less downtime means more uptime for customers, such as transfer station operators and truck drivers, to do their jobs without delay.*

*Update: 2/23/15*

*Downtime in Faster is a complicated measure with many settings. These have been reviewed and updated, so while downtime has not decreased from previous figures, the data itself is more accurate.*

*3. What is the current baseline for this measure?*

*This measure is tracked monthly with a target of no more than 5%. In January, downtime was 4.7%.*

*Update: 2/23/15*

*Downtime for January 2015 using the FasterWeb report was 10.58%.*

*4. What is the target for this measure? (How much improvement will this project achieve?)*

*The target is to reduce downtime by 10%, so the new goal would be no more than 4.5% downtime.*

*Update 2/23/15*

*While the target was not met, the method of data collection for this measure has improved.*

*5. When is the benefit likely to be achieved?*

*There will be a learning curve for the new software, so the benefit will likely be achieved in the second quarter of use (6 months).*

*Update: 2/23/15*

*The benefit we are looking towards now is a more targeted preventive maintenance program to better respond to the downtime data. Based on the more accurate data, a new goal for downtime is 8%. We hope to achieve this by the end of Q2 2015.*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**Example:** *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

**Example:** *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

*1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

*2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

#### **Section 7. Benefit Achievement Summary**

##### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

***Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DNRP/Solid Waste
<b>Project Title</b>	DNRP Solid Waste Division Transfer Transaction system upgrade (DNRP – SWD – Paradigm Upgrade)
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Linda Bremer	SWD/Finance and Administration Manager	Financial Decisions
Cynthia Adams	SWD/Special Projects Administrator	Agency Contact
Ken Wong	SWD/Accounts Receivable Supervisor	End User
Tom Nguyen	KCIT/IT System Specialist	Technical Support
Gary Hocking	IT SDM / KCIT	BAP edits
Lloyd Jordan	IT PM III	Project Manager
Sue Delaat	IT Services Manager II	Supervisor

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

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Conceptual review	6/4/14	Alejandra Calderon	New, initial draft	2 hours
Functional software system	3/13/15	Cynthia Adams	Upgrade	1 hour

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Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

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Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
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*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The functional software system is no longer supported and needs to be replaced by December 2016.

Completion of this project would improve the overall reliability of the system. Less down time will reduce delays at the scale houses. Although we currently cannot measure wait times both the customers and staff will benefit from system reliability and less unplanned maintenance. This will also help us reduce staff over time for unscheduled maintenance.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

We will measure the support staff call out / call back support hours.

3. *What is the current baseline for this measure?*

Our call out / call back hours for unscheduled support of the system are highly variable. We are currently averaging 6 hours per week of call out / call back time for an hourly employee. There are additional support hours provided by a salaried employee that are not measurable.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Our target is to reduce call out / call back support hours to an average of 2 hours per week.

5. *When is the benefit likely to be achieved?*

We will be able to measure the benefits about six months after implementation is final. The adjusted completion date for the project is 12/31/2016. So, we should be able to begin measuring benefits in mid-2017.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Completion of this project will automate the preparation of the transaction file uploaded to the Oracle EBS financial system. This is currently a manual process that results in staff overtime.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

We will track any staff overtime related to preparation of the EBS upload.

3. *What is the current baseline for this measure?*

Preparation of the EBS upload file currently results in 4 hours of overtime per week.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Our target is to completely eliminate this overtime.

5. *When is the benefit likely to be achieved?*

Full changeover of all the transfer stations to the new system will take approximately one year, beginning in February 2016. So, we will be able to begin measuring results in mid-2017.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

This project will upgrade the hardware, server operating system, and Paradigm software that make up the Solid Waste Division weigh scale / transaction system. This upgrade is necessary because:

- The age of the existing server hardware is 7 years old. The average lifecycle of this technology is about 4 years.
- The age of the current server operating system is 10 years. Microsoft is dropping support for this operating system (Microsoft Windows Server 2003) in July 2015.
- We are also using an older version of the Paradigm transaction system. Our vendor will be supporting the version we are using until 2018.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The Windows Server 2003 operating system that is currently used in this system is being retired by Microsoft in July 2015. After that date Microsoft will no longer support this software. The current server hardware is old, and does not support the Microsoft Windows Server 2012 operating system. A system failure is becoming more likely; currently there are isolated failures approximately every 3 months.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
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### **Benefit Achievement Summary**

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*If one of these towers failed physically, the cost to the county would be enormous, generally in the*

neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
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<b>King County Department/Agency Name</b>	DNRP/WTD
<b>Project Title</b>	West Section Control System Replacement
<b>EBS Project Number</b>	1038125, 1114374 & 1114376

### Section 2. Business Owner Accountability

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Business Owner Name and Title: Christie True, DNRP Department Director

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Name	Title / Agency	Project Role
Kathy Loland	Section Manager/WTD	Sponsor
Dan Grenet	Section Manager/WTD	Sponsor/Customer
Randy Smith	Supervisor/WTD	Customer
Steve Zamperin	Supervisor/WTD	Customer

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<b>Revised per Council Request</b>	10/14/13	Ann Grothe	Revised, changed to new format	2 hours

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- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: N/A**

**Category #2: Internal service benefits: N/A**

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*  
This project will completely replace the current West Section control system. The expected life span of a SCADA or DCS (distributed control system) is 10-20 years. The current control system technology, installed in the 90's, is failing. The hardware is no longer manufactured and the software is no longer supported by the manufacturer. As this system is critical to plant operations, timely replacement is necessary to avoid Ecology permit violations.
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*  
Existing hardware and software is already failing. The probability of complete system failure is 100% within a year. The replacement has been phased to prioritize the replacement of critical and failing hardware first.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance – N/A**

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>

Metric Description	Metrics	Baseline	Target	Actual
		•	•	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DNRP, Parks and Recreation Division
<b>Project Title</b>	Parks Facility Scheduling System Replacement
<b>Project Number</b>	1124159

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Katy Terry, Assistant Director of the Parks and Recreation Division

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Leslie Arai	KCIT	Project Manager
Gary Hocking	IT SD Manager	Project Advisor
Doug Hodson	Finance Manager	Project Advisor
Jennifer Lehman	Business Finance Officer	Project Team Member
Macile Assink	Business Finance Officer	Project Team Member
Helen Wolski	Recreation Coordinator	Project Team Member

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.

3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
2015/2016 Budget Process	11/4/14	Jennifer Lehman	New, initial draft	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public**
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services**
- Category #3: Maintaining service levels by replacing or upgrading older technology**
- Category #4: Reduced cost or cost avoidance to produce services**

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

By creating a web portal for customers to reserve facilities, register for classes, and pay online, the proposed IT system is anticipated to improve customer experience by providing more options for customers to access parks services.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The division will measure the public satisfaction with the web portal by inserting a short survey at the end of the online reservation process about the customer's experience with booking and paying online.

Furthermore, the division will measure the proportion of bookings and payments via the web portal versus traditional methods (in person and over the phone).

3. *What is the current baseline for this measure?*

Currently, the only way for customers to book and pay for reservations/registrations are over the phone, in person, and mail. Several customers have requested the ability to book and pay online.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The division strives for a positive reception of the web portal. The target is survey results indicating 75% of users are satisfied with the new system, including easy of navigation and useful information.

Furthermore, the division anticipates a material amount of bookings and payments will shift towards the web portal. According to an **American Customer Satisfaction Survey** from January 2014, roughly one-third of all users of federal services interface with agencies most frequently via websites.

5. *When is the benefit likely to be achieved?*

There is likely to be a transition and education period for Parks' customers to get acquainted with the web portal. The division anticipates to shift the amount of transactions occurring to the web portal six months after implementation, and to yield survey results indicating 75% of users in favor of the new system one year after implementation.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

**Example:** *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

By allowing customers to enter their information directly into the booking and payment system, for example camp sites and picnic shelters, the proposed IT project is expected to free up Parks employees' time for other higher-level duties. In doing so, Parks employees' time can be dedicated to other activities such as timely follow-up to customer questions, coordinating booking of larger events including timely review of required paperwork for the larger events (e.g. insurance documentation), and more frequent bank reconciliation.

Parks does not anticipate any staff reductions due to this project because some reservations, such as ballfields, weddings, and birthday parties, will continue to be booked via traditional methods.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Parks will roughly measure the resources currently spent on reservations, and describe how that freed-up staff time is used.

Parks will also measure whether timeliness for other higher-level duties improves. For example:

- (1) improve the frequency of changing lock combinations at camping facilities from monthly to weekly; and
- (2) reduce the median follow-up time to customer questions to within the work day.

3. *What is the current baseline for this measure?*

Currently, Parks has four FTEs spending a significant amount of time dedicated to reservations and bookings (>75%), and another eight FTEs who spend a portion of their time (<50%) on reservations, particularly during the busy, summer season.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

This project is anticipated to shift the number of FTEs currently spending a significant amount of time to reservations and bookings to only a portion of their time (<50%) on reservations.

5. *When is the benefit likely to be achieved?*

Within two years of implementation, Parks anticipates the number of staff spending a significant amount of time dedicated to reservations and bookings to shift to spending only a portion of their time (<50%) on reservations. As the business process surrounding online reservations and bookings is developed, a more thorough timeline will be identified.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project**

**will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

*1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

Parks and Recreation Division is currently using an information system from CLASS Software Solutions (now called The Active Network) as its registration and scheduling system, as well as tracking accounts receivable on user fees and entrepreneurial efforts. This application is vital to division operations.

King County's 200 parks provide venues to meet the increasing recreation demands of our growing population. King County Parks today operates 82 athletic fields available for a variety of team sports and other activities, 29 play areas, 26 picnic shelters, 2 equestrian arenas, regional and back-country trails, a campground and a world-class aquatic center. King County Parks processes over 26,000 bookings, 3,000 user groups, and manages close to \$4 million in revenue annually through its current system, CLASS.

CLASS has been in operation since March 2000. Since that time, the Division underwent a business transition plan, adopted by the King County Council that emphasizes community and corporate partnerships and greatly reduced the division's dependence on King County's general fund. Since 2003, the Division has successfully taken many strategic actions that have generated revenue or created efficiencies, including implementing or increasing user fees and establishing corporate and community partnerships that enhance park amenities and maximize the investment of taxpayers' dollars.

However, The Active Network is phasing out CLASS Software Solutions. The company has announced that it will no longer support the software system beyond 2017. As a result, the Division seeks a replacement solution to reliably support three business offices (Marymoor Park, King County Aquatic Center, and the Regional Scheduling Office) to do their jobs more effectively and help the public continue to have seamless process to book facilities and classes through King County Parks.

The Division is seeking a SaaS solution for this system. This type of solution is continually updated by the system vendor. A very long life cycle is anticipated, but cannot really be quantified at this time due to the relatively short period of time the current SaaS vendor model has been in place.

*2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The CLASS software system may fail if a replacement system is not fully implemented before 2017, resulting in permanent data loss and significant, manual- and paper-intensive process workarounds.

Prior to 2017, it is likely the system will experience delays or errors as Active Network begins phasing

out support for the system, but still remain functional. To mitigate this risk, the Division is investing in virtual server storage and SQL standard server to ensure CLASS continues to be operational until a replacement is implemented.

After 2017, it is guaranteed the system will fail without regular support from Active Network.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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<b>King County Department/Agency Name</b>	Assessments
<b>Project Title</b>	DOA Acctg System Update
<b>EBS Project Number</b>	1117788

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Richard Watson: Administrative Services Division Director  
 Business Owner Contact Information: richard.watson@kingcounty.gov ; 206-263-2356

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Richard Watson	Administrative Services Division Director	Business Owner
Al Dams	Project Program Manager IV	Project Manager
Brendan Camarda	Budget & Procurement Coordinator	Budget Coordinator
Norene McPherson	IT Project Manager I	Project Manager

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Annual report	2/11/14	Rich Watson, Al Dams, Brendan Camarda	New, initial draft	15.5 hrs.
Annual report	3/19/14	Rich Watson, Al Dams, Brendan Camarda	Revised. Updated based upon comments from PSB and Council	5.5 hrs.
Project Closeout	2/19/15	Rich Watson, Al Dams, Brendan Camarda	Project Completed. RFP developed.	1.0 hr



## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
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**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

#### Implementation phase (unfunded)

*An updated accounting system (PBS) will allow King County to:*

- *Improve levy rate calculation accuracy to ten decimal points to address State Auditor's Office repeat finding. The levy rate accuracy is required to ensure that the County's development of the Property Tax Roll is fair and equitable, and property tax revenue is fairly distributed to taxing jurisdictions.*
- *Taxing Jurisdictions' Budget Development - Reduce cycle time for producing levy rates from over ten (10) weeks to one (1) to two (2) weeks would allow jurisdictions to receive budget query responses and models more quickly, supporting their budget development.*
- *Offer service enhancements to our taxing jurisdictions through additional query and forecasting ability.*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)  
The benefits will be measured against the project milestones, that include:*

#### Implementation phase (unfunded)

- *Do levy rate calculations have 10 decimal places?*
- *Has cycle time been reduced to 1 to 2 weeks?*
- *Have response times improved to taxing jurisdictions levy rate and budget questions?*
- *Are the taxing jurisdictions using the enhanced query and forecasting?*

3. *What is the current baseline for this measure?*

#### Implementation phase (unfunded)

- *Levy rates currently have five (5) decimal places.*
- *Cycle time is currently ten weeks for levy rate calculation.*
- *Jurisdictions currently have no query capabilities.*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

#### Implementation phase (unfunded)

- *Levy rates have ten decimal places*
- *Cycle time is less than two (2) weeks for levy rate calculation.*
- *Taxing jurisdiction information requests are responded to within one (1) business week.*
- *100% of jurisdictions have the ability to access the data and write queries.*
- *50% of jurisdictions are accessing the data and writing queries.*

5. *When is the benefit likely to be achieved?*

**Implementation phase (unfunded)**

- *2 - 5 years. This benefit would require budget authority*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

**Study phase (funded)**

- *By engaging a KCIT Business Analyst and outside consultant to analyze and document work flow, business requirements and future state opportunities, this project will inform the County's decision process to select/build the future accounting system (Property Based System or PBS).*

## Implementation phase (unfunded)

*An updated accounting system (PBS) will allow King County to:*

- *King County Assess to Collect Line of Business Efficiency – Reduce cycle time from over ten (10) weeks to one (1) to two (2) weeks which will benefit DOA, FBOD Treasury and other agencies by allowing a faster response to intra-agency communication and action on the development of levy rates and budget forecast responses to OEFA which in turn would improve forecasts, duplicative work that exists in the current system.*
  - *Additional saved capacity would include:*
    - *Reduction of Accounting Sales Identification document processing backlog*
    - *Reduction of Accounting Exemption application processing backlog*
    - *Repurpose of Accounting staff FTE to higher level audit functions*
- *Update outdated business processes reliant on the mainframe to improve efficiency resulting in better resource allocation using LEAN methodology (not gained from mainframe re-host).*
- *Eliminate inefficient workarounds created to mitigate mainframe deficiencies (not gained from mainframe re-host).*
  - *Estimate of inefficient work process savings would include:*
    - *Reduction of Accounting Sales Identification document processing backlog*
    - *Reduction of Accounting Exemption application processing backlog*
    - *Repurpose of Accounting staff FTE to higher level audit functions*
    - *Levy rate calculation efficiencies*
    - *and other Work/Business Process or LEAN process efficiencies as identified in the MTG report.*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)  
The benefits will be measured against the project milestones, that include:*

## Study phase (funded)

- *Final analysis and approval of the build/buy/hybrid decision*
- *Staffing model approved for build decision*
- *Business Requirements gathering for the Request for Proposal (RFP) for buy decision*
- *Approval of Business Requirements*
- *Development of RFP for buy decision*
- *Number of qualified RFP respondents*
- *Validation of connectivity with other systems already in place, CAMA, Oracle Core Financial, etc.*
- *Evaluation measures for RFP submittals*

### Implementation phase (unfunded)

- *Has cycle time been reduced to 1 to 2 weeks?*
- *Have intra-agency response times improved for levy rate and budget forecast questions?*
- *Have the number of rebillings been reduced?*
- *Have the new business processes had cycle times reduced?*
  - *Sales Identification Backlog reduced?*
  - *Exemption Application Backlog reduced?*
  - *Accounting staff FTE repurposed to other higher level functions, i.e. auditing, evaluation, etc.*
- *Have the mainframe workarounds been eliminated?*
  - *Sales Identification Backlog reduced?*
  - *Exemption Application Backlog reduced?*
  - *Accounting staff FTE repurposed to other higher level functions, i.e. auditing, evaluation, etc.?*
  - *LEAN business processes implemented per MTG report?*

3. *What is the current baseline for this measure?*

### Study phase (funded)

- *No baseline. We have no process to move forward on this decision. (Awaiting final project report to determine next steps and entry baseline.)*

### Implementation phase (unfunded)

- *Cycle time is currently ten weeks for levy rate calculation.*
- *Sales identification processing backlog of 5 – 6 months*
- *Exemption application processing backlog of 10 – 12 months*
- *No repurposed auditing FTE in Accounting*
- *No LEAN process improvements in Accounting*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

### Study phase (funded)

- *The target is an approved build/buy or hybrid decision, RFP if required, vendor selected.*

### Implementation phase (unfunded)

- *Cycle time is less than two (2) weeks for levy rate calculation.*
- *Sales identification processing wait less than three (3) weeks*
- *Exemption application processing wait less than three (3) months*
- *Auditing or other repurposed FTE budgeted and active in Accounting Division*
- *LEAN process improvements implemented.*

5. *When is the benefit likely to be achieved?*

### Study phase (funded)

- *Build buy decision 3<sup>rd</sup> quarter 2014.*

### Implementation phase (unfunded)

- *2 - 5 years. This benefit would require budget authority.*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

- *Current mainframe programing in existence since early 1970s. Cobol programing is already obsolete, and does not have the capacity for the required changes that need to be made to support business process improvements.*

- *Current re-host scheduled for go-live in June 2014 with no enhancements or process improvements (same inefficient applications and business processes supported by updated code, which will be more difficult to upgrade due to a loss of staff expertise and lack of system foundational knowledge.*
- *Current silo model work flow across County agencies with no process ability to work across agencies in current system. All interagency work is done manually, outside of this technology solution.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>

The Accounting System Update project achieved its primary goal/benefit of informing a Build or Buy decision for the County's future property tax system to be known as the King County Interagency Property Tax Accounting System (PTAS). The project met the goal by producing an analysis, The "MTG Report", of the options available and arriving at a Hybrid/Buy decision. This report spanned input from several King County Agencies and was a collaborative effort at analyzing our current Property Based System (PBS). The analysis provided the Business Requirements and other elements necessary for a completion of a PTAS Request for Proposal (RFP). The project achieved these benefits on time (in 2014) and within budget. Since the department concentrated its efforts on REHOST success and in discussions with

Performance, Strategy and Budget (PSB) the PTAS funding decision was delayed and the RFP was not issued and thus project metrics of number of RFP respondents and evaluation measures of RFP submittals were not met.

Benefits Described:

- *By engaging a KCIT Business Analyst and outside consultant to analyze and document work flow, business requirements and future state opportunities, this project will inform the County's decision process to select/build the future accounting system (Property Based System or PBS). - **ACHIEVED***
- *Final analysis and approval of the build/buy/hybrid decision – Hybrid decision reached. – **ACHIEVED***
- *Staffing model approved for build decision – **NOT APPLICABLE***
- *Business Requirements gathering for the Request for Proposal (RFP) for buy decision - **ACHIEVED***
- *Approval of Business Requirements – **ACHIEVED.***
- *Development of RFP for buy decision – **ACHIEVED.***
- *Number of qualified RFP respondents – **NOT ACHIEVED. Department withheld RFP to fully support REHOST as a priority.***
- *Validation of connectivity with other systems already in place, CAMA, Oracle Core Financial, etc. – **NOT ACHIEVED, See above.***
- *Evaluation measures for RFP submittals – **NOT ACHIEVED, See above.***
- *The target is an approved build/buy or hybrid decision, RFP if required, vendor selected. – **NOT ACHIEVED, See above.***
- *Build buy decision 3<sup>rd</sup> quarter 2014. – **ACHIEVED in 4<sup>th</sup> Qtr. 2014.***

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Assessments
<b>Project Title</b>	KCIT DOA Electronic Val Notice
<b>EBS Project Number</b>	1121494

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Richard Watson: Interim Chief Deputy Assessor /Administrative Services Division Director  
 Business Owner Contact Information: richard.watson@kingcounty.gov ; 206-263-2356

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Richard Watson	Interim Chief Deputy Assessor /Administrative Services Division Director	Business Owner
Al Dams	Project Program Manager IV	Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	10/21/13	Rich Watson, Al Dams, Brendan Camarda	New, initial draft	30 min.
Annual Report – Update	3/19/14	Rich Watson, Al Dams, Brendan Camarda	Provided updates based upon PSB comments	15 min

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Because taxpayers will have the option of choosing between regular and electronically mailed valuation notices. Some taxpayers would prefer to have their valuation notice in electronic format instead of the current paper format. We have received suggestions from taxpayers to move to electronic notices and this will satisfy those requests. These requests for electronic notices were based on several factors, including convenience for the taxpayers, cost savings for taxpayers, and environmental considerations (reduced use of paper and reduced transportation for mail delivery). Taxpayers that wish to continue to receive paper notices can do so. This investment will increase taxpayer options.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Number of taxpayers who opt in for the electronic notice program, and the percentage increase in taxpayers who opt-in year-over-year.

3. *What is the current baseline for this measure?*

Zero for residential valuation notices. (Pilot program in place for small number of commercial taxpayers and government agencies)

4. *What is the target for this measure? (How much improvement will this project achieve?)*

10% in first full year of implementation.

5. *When is the benefit likely to be achieved?*

Upon implementation.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.
2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

**1. Describe why you expect the proposed IT investment to reduce costs?**

Over time, there will be a reduction in printing and mailing costs as taxpayers opt into the electronic valuation notice program, and we print and mail fewer paper valuation notice post cards. Our projection is for 10 percent of taxpayers to opt into the electronic notices in year one – this would save about \$22,500 in postage and paper/printing costs (we currently spend \$225,000 annually on postage and paper stock). We project to increase that to 20 percent in year two for a savings of \$46,200 in postage and paper/printing costs that year. There will also be a small reduction in the staff time needed to print and handle the paper postcards.

**2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)**

The number of taxpayers that opt into the electronic notice program. Track postage and printing costs for revaluation notices and compare to baseline.

**3. What is the current baseline?**

Number of post cards printed and mailed annually. Total postage and printing costs for revaluation notices (\$225,000 in 2013).

The Department of Assessments is required to send property valuation notices to every property owner in King County annually – totaling nearly 740,000 notices sent by regular mail every year, incurring a large annual printing, postage and paper supply expense. The state legislature has authorized electronic notification of property valuation notices, with King County as a lead lobbyist, effective in Fall 2013.

**4. What is the target for this measure? (How much savings will this project achieve)**

10 percent of taxpayers opt into the program (of 740,000 total) for a commensurate 10 percent cost savings (\$22,500) in first full year of implementation. We believe this target is reasonable based on experiences of a local vendor that provides electronic valuation notice services to Assessors, and the reception our eAppeals program has received (30 percent of appeals being filed electronically as of this submission). Over the longer-term (four to five years), our target for taxpayers in the electronic valuation notice program would be in the 40 percent range, for a savings of about \$90,000 per year (in 2013 dollars). This estimate is based upon a review of vendor discussions concerning Yakima and other counties and their projection of similar type counties with King County type demographics.

**5. When is the cost reduction likely to be achieved?**

Upon implementation.

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.***

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014.*

The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	Council, Board of Appeals/Equalization
<b>Project Title</b>	Property Tax Assessment Appeal Project
<b>Project Number</b>	1111665

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Neal Cook (Project Sponsor & Business Owner for Board of Appeals/Equalization)  
Dennis Pulsipher (Project Co-Sponsor, Business Owner for Assessor Office)

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Neal Cook	Manager/Clerk of Board of Appeals/Equalization	Business Owner, Project Sponsor
Dennis Pulsipher	Chief Appraiser, Assessor Office	Business Owner, Project Co-Sponsor
Amy Calderwood	Ombudsman, King County Council	Steering Committee member
Rebecha Cusack	Director of Strategic Policy Initiatives, King County Council	Steering Committee member
Bill Kehoe	CIO, KCIT	Steering Committee member
Kevin Dickie	Developer, Assessor Office	Project team member, technical
Hoang Nguyen	IT Director, Assessor Office	Project team member, technical
Barb DeLauter	Business Analyst, KCIT	Gather business requirements
Juliette Peze	Project Manager, KCIT	Manage project

Cindy Hunter	Staff, Board of Appeals/Equalization	Project team member, Business SME
Millie Hagedorn	Staff, Board of Appeals/Equalization	Project team member, Business SME
Barbara Sbisa	Staff ,Tax Advisor	Project team member, Business SME
Keovernkhone, Vanthida	Staff ,Tax Advisor	Project team member, Business SME

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
BPA document	3/7/14	Neal Cook & Dennis Pulsipher	Updating BPA using new template	3 hours
BPA document	3/19/15	Neal Cook & Dennis	Updating BPA	3 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The major goal of the project was to enable King County constituents to file their property tax assessment appeal online rather than on paper. The project will measure adoption and usage of the new online tool/process by the public. This will confirm that the project met this goal.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Benefit is being measured regularly by Neal Cook, as the business owner. Neal compiled and published statistics on number of appeals received and processed.

3. *What is the current baseline for this measure?*

The project expected that 10% of the total appeals being filed online upon introduction of the new eAppeals web application.

eAppeals version 1.1 was made available to the public in June 2013 on kingcounty.gov and by October 2013, the team reported that 30% of the total appeals filed were being done on-line. This figure has been staying pretty constant over time (no decrease).

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The team is now expecting to increase this figure with newer eAppeals releases (version 2.x). These releases will add new features that will make it easier for online filers to submit their appeals. The team is hoping to bring the percentage of online appeals to 50% of the total submitted by end of 2015.

5. *When is the benefit likely to be achieved?*

The new target for eAppeals version 2.x is expected to be met by end of 2015.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than**

**provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example:* This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

*Example:* This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology
2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

*Example: Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to

upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing	Processing Time annual savings, and	<ul style="list-style-type: none"> <li>• 10 days processing time</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of</li> </ul>	2 day processing time

<i>time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<i>purchases are receiving prompt payment discounts</i> <ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>
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This project successfully released eAppeals version 1.3 (latest update) and measured adoption/usage rate of 31.59% as of January 2014.

Update as of March 2015:

The first release of eAppeals version 2 was completed in August 2014 on kingcounty.gov. The overall usage of eAppeals increased from 30% (in 2013) to 54% (in 2014), with the majority of increase being for non-residential type of appeals.

This figure is expected to increase over 2015 as the business owner, Neal Cook, is conducting great outreach work with the non-residential community and new features are being added to the eAppeals web application for making online filing more convenient for filers.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Assessments
<b>Project Title</b>	KCIT Assessors Tablet PC Replacement
<b>EBS Project Number</b>	1111959

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Richard Watson: Administrative Services Division Director  
 Business Owner Contact Information: richard.watson@kingcounty.gov ; 206-263-2356

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Richard Watson	Administrative Services Division Director	Business Owner
Al Dams	Project Program Manager IV	Project Manager
Brendan Camarda	Budget & Procurement Coordinator	Budget Coordinator
Don Saxby	IT Project Manager I	Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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Annual Report	2/11/14	Rich Watson, Al Dams, Brendan Camarda	New, initial draft	3 hrs.
Annual Report	3/19/14	Rich Watson, Al Dams, Brendan Camarda	Revision. Updated based upon Council and PSB comments.	30 min.
Annual Report	2/19/15	Rich Watson, Al Dams, Brendan Camarda	Annual Update	1.0 hr.
Annual Report	2/23/15	Rich Watson, Al Dams, Brendan Camarda,	Annual Update	1.0 hr.

		Hoang Nguyen, Don Saxby		
Annual Report	3/19/15	Rich Watson, Al Dams, Brendan Camarda	Annual Update	1.0 hr.

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Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

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- 4) Reduced cost to produce services (internal or external)

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**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

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*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

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***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

- *Describe why you expect the proposed IT investment to produce the benefit(s).*

*The Assessor Tablet PC Replacement project includes real time synchronization between the tablet devices and the real property database and the ability to use GIS to map site visits and minimize driving. The time saved will:*

- *Allow the DOA to meet increasing property parcel count without adding field appraisal hours through the year 2017. Keeping appraisal labor hours steady has the benefit of not adding new appraiser labor costs in the 2015 -2016 biennial.*
- *Full use of the new mobile device technology will result in an average efficiency gain of 30 minutes per field day per appraiser.*
  - *Assumption is that this efficiency is gained during the 75 % of the time residential appraisers spend in the field.*

- *Efficiencies are gained in a number of ways, including: iPad syncs photographs taken of properties instead of appraisers manually performing this function; data gathered in the field is downloaded in real time from the field, without having to physically link the mobile device with the server in the office; iPad battery has longer charge capacity, allowing appraisers to work a whole day on one charge without taking time out to charge.*
  - *Allow DOA to document increasing new construction activity (post-recession) with increased field data collection – Added benefit 2/19/15*
- *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
  - *Average parcel inspection count per appraiser per day*
  - *No new field appraisal hours added through 2017*
- *What is the current baseline for this measure?*
  - *3.74 per hour – physical inspections in residential division*
  - *147,000 appraisal hours*
- *What is the target for this measure? (How much improvement will this project achieve?)*
  - *3.96 per hour – physical inspections in residential division*
  - *Appraisal hours remain constant despite increase in parcel count*
  - *OEFA estimate/projections for new construction*
- *When is the benefit likely to be achieved?*
  - *Phase 1 in 2014,*
  - *Phase 2 in 2015*
  - *Phase 3 in 2016*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

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**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

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**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	King County International Airport
<b>Project Title</b>	Maximo Upgrade
<b>Project Number</b>	1028664

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Robert I. Burke

### Section 3. Who is involved in developing the Benefit Achievement Plan?

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Name	Title / Agency	Project Role
Michael Colmant	Deputy Director	Project Manager
Joel Abanes	Info Systems Specialist	Provide technical assistance on Maximo
Kent Sherburne	Fin & Admin Svcs Mgr	Provide assistance to Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Budget Process	2013	Gary Tripp	Added the additional budget of \$278,640 received in the 2013-14 budget ordinance.	2 hours
Update (2/6/15): Conceptual Review	Feb, 2015	Kent Sherburne	KCIT assisted KCIA in conducting a solutions analysis of existing KC asset management systems. Spent \$58,000 on this stage that went from April 2014 to Jan 2015. Since no system has yet to be chosen or implemented it will be another 1-2 years before	1 hour

			benefits will start to be achieved.	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

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**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
The investment will improve internal processing and reporting, functionality, and the accuracy of the data. The current system's reporting capability has declined. For example, the cost roll-up feature does not work anymore so supervisors have to try to piece together different data on an excel spreadsheet; the inventory report does not pick up all of the data you need extracted so you have to manually intervene to piece together the right data. There are database capacity limitations on the system that is slowing the response time down significantly so supervisors and those inputting data are spending more time with the system.
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*  
The benefits will be achieved if the system saves labor in producing reports, enhances data accuracy since errors are more likely when piecing together reports from different fields and files, and reduces the labor time in inputting and extracting data.
3. *What is the current baseline for this measure?* (1) Time spent in extracting data and producing a

report from current level to a new system. Producing a report can take several hours instead of minutes. (2) Improve data accuracy by comparing report results of the old method and the new system's standard reports. (3) Improve the amount and variety of custom data that can be extracted and integrated into a single report.

4. *What is the target for this measure? (How much improvement will this project achieve?)*  
Spend 50% less time inputting data into the system and extracting reports.

5. *When is the benefit likely to be achieved?*  
Within 3 months after installation and training in the new system.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project	Processing Time annual	• 10 days processing	• 1 day processing time	2 day processing

<i>reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>savings, and percentage of purchases receiving prompt payment discounts</i>	<i>time</i> <ul style="list-style-type: none"> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<i>time</i> <i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>
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Benefits have not been achieved because the project has not started.

Update (2/6/15): Benefits have not been achieved because project is only at the stage of evaluating three replacement systems (EAM, M5, and City/Works) to meet KCIA's functional requirements.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation/Transit
<b>Project Title</b>	ADA Broker Equipment
<b>EBS Project Number</b>	1111983

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Bob Sahn	Supervisor/Transit	Supervisor of project managers
Janey Elliott	Transportation Planner III	Original Project Manager
Michael Glauner	Transportation Planner IV	Ending Project Manager
Matthew Weidner	Transportation Planner III	Technical IT Planner

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Benefit Achievement Plan	11/24/14	Michael Glauner	Updated	2 hours
Annual Update	3/3/15	Kathleen McMurray		

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

The Broker Equipment Project funded a variety of technology systems for the Access Transportation Program, the final phase being the IVR replacement. Because the majority of expenses occurred between 1993 and 2005, this benefit achievement plan focuses on the IVR upgrade. The upgrade and new install were completed in 2012 and included both hardware and software used by the telephone system and added additional features including SMS/text messaging and Spanish language line.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The final phase of this project involved upgrading the ACCESS Transportation Control Center (ACC) Interactive Voice Response (IVR) system. This is the menu driven phone system used by riders in the program. Additional elements of the new system include automated booking, text messaging capabilities and Spanish language line.

- a. **Call Distribution.** Call distribution statistics were expected to improve greatly with the new ACC IVR system.
- b. **Automated Booking.** The goal of this element is to allow riders to make transportation requests, confirm requests and cancel requests. This can all be done using the new touch tone automated system.
- c. **SMS/MMS Text Messaging.** The goal of this element is to offer an additional method of notification for riders that carry newer mobile data technology. In addition to the current automated dial-out functions of the system, riders can now request notifications by text messaging or use their device to initiate a request for trip information that is then texted back.
- d. **Spanish Language Line.** The goal of this element is to offer additional language support for Spanish to the IVR. Riders can choose to navigate the entire system in Spanish and be routed to a Spanish speaking call taker.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The new system should maintain or improve existing ACC call handling functions and statistics. In addition, new features will be brought online and implemented and measured.

- a. **Call Distribution.** Improvements to call distribution were measured by looking at average hold times and calls answered within 3 minutes.
- b. **Automated Booking.** This element did not exist prior to implementation. Success will be measured by the number of successful logins, successful bookings and successful cancellations.
- c. **SMS/MMS Text Messaging.** This element did not exist prior to implementation. Success will be measured by the number completed outgoing messages.
- d. **Spanish Language Line.** This element did not exist prior to implementation. Success will be measured by the number of users that are able to navigate the new menu system.

3. *What is the current baseline for this measure?*

The existing phone system tracks multiple call statistics including avg. hold times and % calls answered within threshold. New feature tracking measures will include:

- a. **Call Distribution.** The baseline for average hold times was 3:57 minutes and the baseline for calls answered within 3 minutes was 90%.
- b. **Automated Booking.** Success will be measured by the number of successful logins, successful booking and successful cancellations. Current baseline is 0%
- c. **SMS/MMS Text Messaging.** Success will be measured by the number of completed outgoing messages. Current baseline is 0%
- d. **Spanish Language Line.** Success will be measured by the number of users that are able to navigate the new menu system. Current baseline is 0%

4. *What is the target for this measure? (How much improvement will this project achieve?)*

As part replacement and part new implementation, call statistics should remain the same or improve. New features will be tracked using new metrics as described below.

- a. **Call Distribution.** The target measure for average hold times was 3:30 minutes and the baseline for calls answered within 3 minutes remained 90%.
- b. **Automated Booking.** The goal of this element is to allow riders to make transportation requests, confirm requests and cancel requests. Target for this element is a cumulative 100 users per day.
- c. **SMS/MMS Text Messaging.** The goal of this element is to offer an additional method of notification for riders that carry new mobile data technology. Target for this element is 100 SMS/MMS outgoing per day.
- d. **Spanish Language Line.** The goal of this element is to offer additional language support for Spanish to the IVR. Target for this element is 25 language line users per day.

5. *When is the benefit likely to be achieved?*

The majority of benefits of the replacement were achieved by the close of the project including the menu driven phone system, text messaging and Spanish language line.

- a. **Call Distribution.** This benefit has been achieved. Average hold times is now 00:48 minutes and calls answered within 3 minutes are 94.39%.
- b. **Automated Booking.** The IVR features of automated booking are currently working, but are waiting on an upgrade to the scheduling software from another vendor 1st quarter 2015 to fully implement. This was caused by a change in the scope of work for the scheduling software as outside partners were brought into the system. Additional customizations need to be completed on this outside software in order for it to distinguish between non-Access Transportation providers and funding sources.
- c. **SMS/MMS Text Messaging.** This function is currently in use, but has not reached goal due to a lack of knowledge of its availability on the part of riders. Additional outreach efforts will be made in 1<sup>st</sup> quarter 2015 to educated riders on the availability and benefit of this function.
- d. **Spanish Language Line.** This function is currently in use and has been incorporated into Access Transportation Ride Line. Mainstream usage has been slow due to the ready availability of bilingual call takers available in the call center as well as the use of the 3<sup>rd</sup> party language line.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be*

*improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

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1. Describe why you expect the proposed IT investment to reduce costs?
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## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1

day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**The ADA Broker Equipment project closed in 2012. This is an annual update to the Benefits Achievement Plan.**

The ADA Broker Equipment Project funded a variety of technology systems for the Access Transportation Program, the final phase being the IVR replacement. Because the majority of expenses occurred between 1993 and 2005, this Benefit Achievement Plan focuses on the IVR upgrade. The upgrade and new install were completed in 2012 and included both hardware and software used by the telephone system and added additional features including SMS/text messaging and Spanish language line. Although target goals have not been fully met, the final three functions and metrics did not exist before the upgrade and are fully functional. Usage has been limited by a lack of general knowledge on the part of riders that these features are available to them. Further growth in use of these functions requires further outreach and education of riders to better notify them of the availability of these new features.

Metric Description	Metrics	Baseline	Target	Actual
Call Handling ( <i>Benefits achieved</i> )	<ul style="list-style-type: none"> <li>• Avg. hold time</li> <li>• % calls answered under 3 minutes</li> </ul>	<ul style="list-style-type: none"> <li>• 3:57 minutes</li> <li>• 90%</li> </ul>	<ul style="list-style-type: none"> <li>• 3:30 minutes</li> <li>• 90%</li> </ul>	<ul style="list-style-type: none"> <li>• :48 minutes</li> <li>• 94.39%</li> </ul>
SMS Text Messaging	# successful outgoing	• N/A	• 100 per day	3 per day
Spanish Language Line	# using language option	• N/A	• 25 per day	4 per day
Automated Booking	# successfully booked	• N/A	• 100 per day	TBD*

\*For full functionality, this will require an upgrade to another vendor's scheduling software before full deployment, scheduled 1st quarter of 2015.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
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<b>King County Department/Agency Name</b>	DOT/Transit
<b>Project Title</b>	Capital Management and Reporting System
<b>EBS Project Number</b>	1028812 , Appropriation A00580

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Liviu Prisecaru	IT Project Manager II, DOT Transit Division	Project Manager
Jill Krecklow	Finance Manager, DOT Transit Division	Stakeholder
Randy Witt	Design & Construction Manager DOT Transit Division	Stakeholder

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Conceptual Review	06/20/14	Liviu Prisecaru	New, initial draft	1 hour
Conceptual Review	08/14/14	Kathleen McMurray	Revision	3 hours
Annual Report	02/19/15	Liviu Prisecaru	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff..*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

Metro Transit Division manages a 6 year Capital Improvement Program (CIP) worth over \$1.4 billion. The program encompasses facility, IT and bus procurement project activities that are performed by several different Transit sections using their own systems, processes and methods. Project data in Transit is maintained in dispersed and non-integrated, mostly manual systems. Creating consolidated Transit CIP reporting from the existing data is problematic, lacks timeliness and is limited to what is available for manual compilation. Compiling the data is very time consuming and by the time the final reports are created, some of the data may be already outdated, making it impossible to use for the identification of problems or issues with a project. Further, the need for improved CIP reporting and revised practices has been part of several audit recommendations. Transit's response to these audit recommendations identified a management and reporting system as a necessary item to fully

implement improvements. Audits have included:

- **1999:** Transit Management Audit of the King County Department of Transportation (performed by Doolittle and Company) several recommendations regarding capital program management and reporting
- **2005:** Performance Audit of Transit Capital Planning and Management – Executive response to the audit identifies the need for a capital management and reporting system with the goal at that time of evaluating Oracle Projects as part of the ABT process.
- **2009:** Performance Audit of Transit – recommendations for the capital program reporting and the overall recommendation of making more data driven decisions require us to be able to gather and report information on the capital program in a consistent manner.
- The Washington State Auditor, also completed an audit of King County’s capital programs which has resulted in the development of several standards and reporting requirements which currently are difficult to implement without a system.

If this project is approved, the new Capital Management and Reporting System (CMRS) would support improvements in the CIP that include project management standardization, process efficiencies, increased reporting accuracy and improved capital project delivery rates:

**1. Project management standards.** All capital projects in Transit will be managed within the CMRS utilizing standards established during the course of this project. These standards will be scalable to project size and complexity and are expected to result in improved visibility to project delivery performance throughout the organization.

**2. Process efficiencies.** The project is expected to result in efficiencies due to the elimination of the need to extract and consolidate data from dissimilar sources. Transit and King County project reporting and budget processes are expected to be streamlined as a result of using a single data source.

**3. Accurate and timely reporting.** The project is expected to result in more accurate reporting because the data and processes used to create the data will have less variability across the organization. Consolidated CIP reporting will not require the manual manipulation to form the information into a single data structure – thus saving time and reducing the likelihood of errors.

**4. Capital project performance.** Better project planning and the ability to identify issues early through timely reporting is intended to improve project performance, including capital project delivery rates. For example, the new system will have historical information, including project schedules, that can be used help identify trends and improve overall project management.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

**1. Project management standards.** This benefit will be measured by using the number and percentage of Transit capital projects that are maintaining all data required by the Capital Management and Reporting System (CMRS). Data requirements will include information to support reporting as well as standard project management practices.

**2. Process efficiencies.** This benefit will be achieved when the need to extract and consolidate capital project data from dissimilar or manual systems is eliminated.

**3. Accurate and timely reporting.** This benefit will be measured by the speed with which consolidated CIP reports are prepared (less ‘stale’ data) and CIP report recipients’ satisfaction with

output.

**4. Capital project performance.** As part of this project, Transit will identify performance metrics to demonstrate performance in meeting major milestones, and budget metrics. Examples could include:

- Percent of projects setting a baseline as compared to planned.
- Roll up portfolio wide- construction/implementation contract dollars awarded year to date compared to plan
- Final project results – scope, schedule and budget compared to baseline
- Roll up portfolio of final project results - % delivered scope on time and on budget

3. *What is the current baseline for this measure?*

**1. Project management standards.** Currently, Transit capital projects are not managed within a central system. Therefore, the baseline for this measure is zero. The percent of projects following standard practices is not known.

**2. Process efficiencies.** Currently, Transit staff must extract and consolidate project data from dissimilar systems. As an example, Transit capital program data must be manually entered into the King County budget system.

**3. Accurate and timely reporting.** Currently, it takes Transit staff hours to prepare limited consolidated CIP reports and this allows for very limited analysis of the information. CIP report recipients' will be surveyed to determine their current satisfaction level with the accuracy of reports.

**4. Capital project performance.** As part of this project, Transit will identify specific performance and budget metrics. If no baseline data exist, then the first year of data can be used as a baseline. Transit's overall annual program "accomplishment rate" is currently 90%.

5. *What is the target for this measure? (How much improvement will this project achieve?)*

**1. Project management standards.** The target is to have 100% of Transit capital projects managed within the central system and to have 100 percent of capital projects entering all required data.

**2. Process efficiencies.** The target is to eliminate the need for Transit staff to extract and consolidate project data from dissimilar and manual systems.

**3. Accurate and timely, reporting.** Project status updates are performed within 5 days of month closing. Reports on financial elements of project performance are available within 5 days of EBS closing. Targets for other reporting measures will be developed as the project progresses. The target is for Transit staff to spend more time analyzing and interpreting capital program data than developing it. CIP report recipients' will be surveyed to determine their satisfaction level with the accuracy and timeliness of reports using the new Capital Management and Reporting System. It is expected that the target level of satisfaction will be 80% or more as stakeholders become familiar with the system and reports.

**4. Capital project performance.** Transit will identify specific performance and budget metrics and identify targets as part of this project. The target for Capital Project Delivery information to be readily available and program under expenditure to be reduced to 5%. The target accomplishment rate would therefore be 95%.

6. *When is the benefit likely to be achieved?*

**1. Project management standards.** The benefit will happen in phases with the first phase establishing a threshold level of required data for all capital projects. The level of data will likely be expanded in subsequent phases of the project. Likely to have 100 percent of projects entering all required data at each phase. .

**2. Process efficiencies.** The benefit will likely be achieved within 1 year following implementation.

**3. Accurate and timely reporting.** The benefit will likely be achieved within 2 years following implementation.

**4. Capital project delivery rates.** The benefit will likely be achieved within 3 years following implementation.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing*

time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Transit Customer Information Systems Refresh
<b>EBS Project Number</b>	1111785

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Damon Berbert	IT Project Manager II, DOT Transit Division	Project Manager
Terry White	Sales and Customer Services Supervisor, Customer Information Technology, DOT Transit Division	Project Sponsor (in lieu of retiring Section Manager)
Matt Hansen	Customer Communications & Services Manager	Project Sponsor (official replacement for retired Section Manager)

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Annual Report	11/27/13	Damon Berbert	Converted plan from Benefit Realization Plan into Benefit Achievement Plan format	2 hours
Annual Report	03/20/14	Damon Berbert	Revised per feedback	1 hour
Annual Report	03/13/15	Damon Berbert	Review only; updated Project Sponsor	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
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- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

Outdated technology platforms limit the ability of Transit to effectively deliver customer service information to the public. Information accessed by customers can be inaccurate, incomplete, delayed or difficult to obtain. Technology and procedural issues prevent effective data sharing between customer information systems resulting in inconsistent outputs.

This project will implement software products that will include improved data sharing and integration between systems. The following are the customer information systems that require replacing or upgrading in order to improve the sharing of data and message content:

1. Online Trip Planner – implemented in 2001
2. Tracker – implemented in 2005
3. Customer Relations Management system (including Lost and Found) called MCS – implemented in 2005
4. IVR (BusTime) – implemented in 1991

After each system is replaced or upgraded, it will then be on a 3-year re-evaluation cycle. The re-evaluation will include reviewing the method of data sharing.

Updating these systems is also expected to provide increased customer satisfaction as users will be able to take advantage of improved user interfaces, various modes of accessing transit information (for example, mobile phones), and reduced Call Center traffic.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central*

*purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example:** *Cost Avoidance.* *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

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3. *What is the current baseline?*
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5. *When is the cost reduction likely to be achieved?*

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

**To be completed when benefits have been achieved or no further benefits are expected.** *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that*

qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• <i>10 days processing time</i></li> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>1 day processing time</i></li> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>2 day processing time</i></li> <li>• <i>20 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$200,000 savings</i></li> </ul>

## IT Project Benefits Achievement Plan (Version 3)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Data Infrastructure Replacement Project
<b>EBS Project Number</b>	1112007

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Amy Spangler	IT Project Manager II, DOT Transit Division	Project Manager
Dan Overgaard	Systems Development and Operations Supervisor, DOT Transit Division	Project Sponsor

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Annual Report	12/6/13	Amy Spangler	Converted plan from Benefit Realization Plan into Benefit Achievement Plan format	2 hours
Annual Report	3/11/2014	Amy Spangler	Revised per feedback	1 hour
Annual Report	3/6/2015	Amy Spangler	Review Only	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

*1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

King County Transit has a set of databases that store critical fixed route bus service, schedule and geographic data needed by many transit vendor applications including ORCA, On-board Systems/ Control Center Systems (OBS/CCS) and various customer information systems. The transit “data infrastructure” consists of

- this set of databases
- programs that populate the data into the databases from transit source applications
- programs that translate the data into different forms as necessary for use
- programs that retrieve data from the databases and send it to transit applications that rely on the data

The current data infrastructure was developed over 30 years ago. The data stored in the databases is of a different format than newer transit vendor applications require. As a result, adding new transit vendor applications has placed an ever-increasing strain on this method of supplying data. There are more and more data translations that need to occur, leading to delays in delivering the data. In addition, errors are introduced when extensive processing is required to create and translate this data.

The errors and delays in processing data have impacted both fare collection and bus operations – including radio operations. Customer related information systems such as bus stop signage and trip planning require extensive data manipulation to work properly. Though there are no industry standards on average life cycle replacement timeframe, the current transit infrastructure is not sustainable. Transit needs a new foundation of data and data delivery methods upon which to operate current and future technology.

The Data Infrastructure Replacement Project is expected to enable transit staff to

- deliver data to operations system such as On-Board Systems, so that buses are consistently provided with current schedule data in time to operate on that schedule
- combine the creation of transit schedules with bus stop information, reducing the inconsistencies in the schedule information that customers see.
- reduce the amount of programs required to translate the data into different forms in the data infrastructure.

As part of this project, Transit is developing an “enterprise architecture model”, a set of information that captures the business processes, data, applications, and hardware currently in place to support transit. This will help the project understand the pieces of the current data infrastructure and all of the

transit systems to which it is connected. This model will help project planning and analysis for the data infrastructure replacement, and help transit and IT maintain transit systems and prioritize future transit projects. The project is employing a federally-funded “standard” Enterprise Architecture model, called Transit Enterprise Architecture and Planning framework (TEAP), from which to customize a model for King County Transit.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The impacts to fare collection, operations, and customer information from the outdated data infrastructure already occur today. For example, after the completed transition to the new On-Board Systems in 2012, there were repeated occurrences during bi-weekly schedule adjustments of buses not being provided with the current schedule data in time to operate on that schedule. This led to problems such as some customer information being inaccurate, or bus operators needing assistance in system sign-on processes. This and other impacts to transit systems have been handled through extra efforts on the part of transit and IT staff to mitigate the impacts and fix the problems. These efforts take staff away from their regular responsibilities. The intention with a new data infrastructure is to alleviate these impacts that occur today, and allow transit and IT to focus their efforts back on their primary responsibilities.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

#### Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	HASTUS Employee Performance Module (EPM)
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jim O'Rourke	Transit Operations Manager, DOT Transit Division	Sponsor
Ralph Keyport	Planning/Technical Support Services Supervisor, DOT Transit Division	Advisor

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Annual Report	01/21/14	Ray Burgess	Converted plan from Benefit Realization Plan into Benefit Achievement Plan format	4 hours
Annual Update	2/11/15	Kathleen McMurray	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Transit Operations is currently required to manually pull data from multiple systems and paper documents to track operator work performance, unavailability's, accidents and completed training. This data is used to determine potential disciplinary actions, plan training activities and schedule replacement operators on daily driving assignments as needed.

The addition of the HASTUS Employee Performance Module (EPM) will enable Transit Operations to pull all relevant operator data into a single database where it can be tracked and viewed as required. The EPM module has user-defined and modifiable rules for identification of trends and specific issues with an individual operator or a group of operators. User tools will allow Chiefs to create custom queries when trying to manage very specific operator problems or very general workforce problems. The level of tools and access available to the average Chief will increase significantly over the current system version.

**Expected benefits:**

- a. Reduces the entry by base administrative staff from paper operator records into Laserfiche.
  - b. Reduces time spent by Transit Operations chiefs and supervisors gathering and analyzing personnel records from multiple sources for each operator.
  - c. Improved accuracy of employment actions (disciplinary, etc). Current practice is prone to errors due to incomplete or inaccurate information.
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
- a. **Reduces the entry by base administrative staff from paper operator records into Laserfiche** – Success will be measured by a reduction number of paper records to be entered into Laserfiche by the base administrative staff.
  - b. **Reduces time spent by Transit Operations chiefs and supervisors gathering and analyzing paper personnel records from multiple sources for each operator** – Success will be seen in chiefs and supervisors spending less time gathering and analyzing personnel records as the information would available via EPM.
  - c. **Improved accuracy of employment actions (disciplinary, etc.). Current practice is prone to errors due to incomplete or inaccurate information** – Success will be the elimination of any error in employment actions for operators.
3. *What is the current baseline for this measure?*
- a. **Reduces the entry by base administrative staff from paper operator records into Laserfiche** – Baseline for this measure is an estimate of 500 hours per month for each base from a survey done by Base Operations.
  - b. **Reduces time spent by Transit Operations chiefs and supervisors gathering and analyzing paper personnel records from multiple sources for each operator** – Baseline for this measure is not recorded as it involves a desk audit and the cost of doing a desk audit is not justified by the estimated time savings.
  - c. **Improved accuracy of employment actions (disciplinary, etc.). Current practice is prone to errors due to incomplete or inaccurate information** – Baseline for this measure is not producible as Base Operations does not keep statistics on inaccurate employment actions as they are corrected as soon as discovered. Any error records are buried within the thousands of quality employment actions done annually by Base Operations.
4. *What is the target for this measure? (How much improvement will this project achieve?)*
- a. **Reduces the entry by base administrative staff from paper operator records into Laserfiche** – Should see at least a reduction of 1 hour per day per base the time spent by base administrative staff doing entry from paper operator records into Laserfiche. This equates to a total of approximately 140 hours per month for all seven bus bases.
  - b. **Reduces time spent by Transit Operations chiefs and supervisors gathering and analyzing paper personnel records from multiple sources for each operator** – the EPM module will be used 100% for employment actions with no reliance upon personnel files.
  - c. **Improved accuracy of employment actions (disciplinary, etc.). Current practice is prone to errors due to incomplete or inaccurate information** – No errors in employment actions.

5. *When is the benefit likely to be achieved?*

The benefits of the EPM module will be seen immediately upon implementation but will not be fully realized for at least 6 months. This slow realization of benefits will be due to the changing of procedures and behaviors by the affected base personnel.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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*Example: Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

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## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

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**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

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**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing</i>	<i>Processing Time annual savings, and percentage of purchases receiving</i>	<ul style="list-style-type: none"> <li><i>• 10 days processing time</i></li> <li><i>• 10 percent of purchases are receiving</i></li> </ul>	<ul style="list-style-type: none"> <li><i>• 1 day processing time</i></li> <li><i>• 30 percent of purchases are receiving prompt payment</i></li> </ul>	<i>2 day processing time 20 percent of purchases are receiving</i>

	<i>us to take advantage of prompt payment discounts.</i>	<i>prompt payment discounts</i>	<i>discount</i> • <i>Savings of \$100,000</i>	<i>discounts</i> • <i>\$400,000 savings</i>	<i>prompt payment discounts</i> <i>\$200,000 savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation, Transit
<b>Project Title</b>	HASTUS Planning Module
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Kevin Desmond, General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Marty Minkoff	Supervisor, Service Planning	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Stakeholder

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	6/5/2014	Yan Zhang	New, initial draft	.5 hours
Budget process	10/2/14	Kathleen McMurray	Updates based upon Council staff feedback.	3 hours
Annual Update	2/11/15	Kathleen McMurray	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. ***Describe why you expect the proposed IT investment to produce the benefit(s).***
  - a. ***Streamlined processes.** The Transit Service Planning workgroup currently uses a labor-intensive, Excel-based process to produce draft timetables, which are used to estimate costs and otherwise evaluate transit service design concepts. Service Planning also uses a variety of GIS-based tools to generate spatial views of network design concepts and produce street-by-street instructions for publication in paper-based service change packages. If this project to implement the HASTUS Planning Module is approved, Metro would acquire a new module for HASTUS, the software suite currently used by the Scheduling group to produce vehicle and operator/crew schedules. The new module would be used primarily by the Service Planning group to develop and evaluate route and transit network concepts, including the associated costs.*

*The HASTUS Planning Module is integrated with other HASTUS modules currently used by Transit for Scheduling and Operations. Incorporating this module would enable planners to easily access current ridership, run-time and trip arrival/departure data and more efficiently incorporate these data in the development of route and network design concepts. This would streamline the service planning task of developing service alternatives and identifying more realistic/accurate cost estimates. It would also reduce steps (and effort) in the handoff of planner guidance to schedulers who could then take that imported planner estimate and develop full vehicle and crew schedules from the same data source inside the same software/platform. This effort may also streamline/simplify the process of creating maps that could then be used for public presentation, both in the planning process or later on for public consumption of live or future transit information.*

- b. **Elimination of duplicate data entry.** Service Planning uses different tools than other workgroups involved in the production of service change data. As a result, Service Planning's Excel-based timetables and paper-based maps and routing instructions must be manually re-created in HASTUS by other workgroups in Transit. If this project to implement the HASTUS Planning Module is approved, the need for other Transit workgroups to re-create this information in order to proceed with the production of transit service change data can be eliminated.*

*When combined, both a and b are expected to result in savings in labor hours that will be reinvested in higher value activities. The project will determine the exact nature of these savings as well as any new costs associated with this module as part of the business process review.*

- c. **Improved service efficiencies.** If this project to implement the HASTUS Planning Module is approved, process improvements that will be enabled by the addition of the module to Transit's HASTUS application are expected to result in more efficient service. This will increase the amount of service hours available for serving our customers, which will in turn impact ridership, productivity and the overall value Metro provides to King County.*

**2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)**

- a. **Streamlined processes.** We will know that this benefit has been achieved when we realize the aforementioned process efficiencies in developing and evaluating route and transit network concepts, including the associated costs.*

- b. **Elimination of duplicate data entry.** We will know that this benefit has been achieved when Service Planning's Excel-based timetables and paper-based maps and routing instructions do not need to be manually re-created in HASTUS.*

*For both a and b, Transit will identify the specific bodies of work to be done by freed up hours from these efficiencies .*

- c. **Improved service efficiencies.** We will know that this benefit has been achieved with increases in service trips (Service Trip per Plat/Vehicle Hour) and/or productivity (Riders per Plat/Vehicle Hour).*

3. *What is the current baseline for this measure?*

- a. **Streamlined processes.** *The baseline for this measure will be determined at the early stages of the project when all of the steps that can be eliminated have been identified.*
- b. **Elimination of duplicate data entry.** *The baseline for this measure is that it takes hundreds of labor hours each service change to re-create Service Planning's Excel-based timetables and paper-based maps and routing instructions in HASTUS.*

For both a and b Transit will identify the work to be done by freed up hours and note the current level of that work.

- c. **Improved service efficiencies.** *The baseline for Service Trip per Plat/Vehicle Hour and/or Riders per Plat/Vehicle Hour is currently zero as we are not able to easily calculate these measures of service efficiency. (Note that these measures are different than the overall system efficiency measures as they enable a comparison of productivity between individual service hours (e.g. how much of a route is in revenue service versus deadhead or layover.) The baseline will be determined during the first year of operation.*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- a. **Streamlined processes.** *The target for this measure is elimination of unnecessary steps from the process to produce draft timetables, which are used to estimate costs and otherwise evaluate transit service design concepts.*
- b. **Elimination of duplicate data entry.** *The target for this measure is the elimination of the need to re-create Service Planning's Excel-based timetables and paper-based maps and routing instructions in HASTUS.*

For both a and b Transit will identify the work to be done by freed up hours and note the target level of that work.

- c. **Improved service efficiencies.** *The target is a 2% improvement in these measures.*

5. *When is the benefit likely to be achieved?*

- a. **Streamlined processes.** *This benefit is likely to be achieved within a year of implementation.*
- b. **Elimination of duplicate data entry.** *This benefit is likely to be achieved within a year of implementation.*

For both a and b, staff should have freed up staff time available for higher value work within one year of implementation.

- c. **Improved service efficiencies.** *As this benefit can only be measured at a service change event and Transit is moving to two service changes a year by the time this project is implemented, we would anticipate achieving this benefit in 3 years (or 4 service changes after the baseline data is developed).*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older**

**technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
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<b>King County Department/Agency Name</b>	Department of Transportation/Transit
<b>Project Title</b>	HASTUS Upgrade
<b>EBS Project Number</b>	1111783

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, General Manager Transit

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jim O'Rourke	Manager Transit Operations/ Transit	Sponsor
Victor Obeso	Manager Service Development/ Transit	Sponsor
Ralph Keyport	Supervisor of Planning Technical Support Services/ Transit	Subject Matter Expert
Jon Bez	Supervisor of Route Planning/ Transit	Subject Matter Expert

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Funding Release	11/08/2013	Ray Burgess	New, initial draft	8 hours
Annual Report	1/31/2014	Kathleen McMurray	Review only	.25 hours
Annual Report	2/14/2014	Jill Krecklow	Modified benefits discussion	.75 hours
Annual Report	2/12/2015	Cathy Snow	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

**Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

**Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The HASTUS application system is crucial to the scheduling of transit routes and the management of bus and train operators on a daily basis. This system must be available to the multiple customers within Transit for them to perform their jobs.

The current HASTUS software is version 2006 and has only 2 more years of guaranteed maintenance. The version of Crystal Reports that comes with HASTUS 2006 is currently unsupported. The new software, HASTUS 2014, will provide 10 years of guaranteed maintenance. In addition it comes with a fully supported version of Crystal Reports.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The HASTUS system is an essential component of day to day Transit operations. This project addresses the fact that the risk of system failure would increase if Transit were to operate on a version that was no longer supported by the vendor. The reporting component of the system is already not supported. Changes such as upgrading operating systems and servers by King County increase the risk that older, unsupported software will experience a failure.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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Metric Description	Metrics	Baseline	Target	Actual

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<b>King County Department/Agency Name</b>	Department of Transportation, Transit
<b>Project Title</b>	M5 Yard Manager – Dispatch Replacement
<b>Project Number</b>	

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Kevin Desmond, General Manager

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Name	Title / Agency	Project Role
Randy Winders	Vehicle Maintenance Manager, Transit Vehicle Maintenance	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Finance Manager

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Conceptual review	6/4/2014	Yan Zhang	New, initial draft	.5 hours
Conceptual review	7/1/2014	Kathleen McMurray	Update	.5 hours
Conceptual Review	10/2/2014	J. Krecklow	Update	2 hours
Annual Report	2/18/2015	Catherine Boon	Update	.5 hour

## Section 6. Description of Project Benefits

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- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).  
~~The potential for automated yard mapping of coaches would produce operational benefits as coach location would be known without any need for manual tracking. Currently vehicle location is identified and entered into a dispatch system that provides location information to Operators looking to leave the base in their assigned coach and vehicle maintenance staff bringing coaches in for scheduled maintenance. The benefit would be time savings likely in the form of reduced overtime.~~
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)  
~~Many factors influence overtime paid to Transit Operators and VM staff. Quick location of vehicles eliminates the need to source parking lanes for the right bus and lane position. Capturing savings from operators would be difficult to achieve. Within VM before and after time studies could be done to identify the amount of time savings from the use of automated vehicle location.~~

3. *What is the current baseline for this measure?*

~~The current baseline has not yet been established but will be captured as part of the project planning. Cost benefit of the time savings against future operating costs of the identified system will be evaluated.~~

4. *What is the target for this measure? (How much improvement will this project achieve?)*

~~A cost benefit analysis will be conducted with the preferred solution prior to completing a contract. A positive NPV will be required demonstrating that the benefits exceed the costs.~~

5. *When is the benefit likely to be achieved?*

~~When the complete project is implemented.~~

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

Vehicle dispatch software is used by Transit Vehicle Maintenance to locate coaches for pull-out, maintenance, fueling and servicing. The dispatch software currently in use is over 18 years old, outdated and no longer supported by the vendor. The current dispatch software, built on Power-Builder, is at the end of its life cycle. Power-Builder was discontinued in 2011 and support ended in 2012. Therefore, no software updates are available and the application is not able to operate with newer operating systems such as Windows 7 requiring workarounds.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The risk is currently occurring. While KCIT has been able to keep the system operating on current operating environments, there is risk that this may not be possible with future operating systems. If the system fails, we would be required to revert to manual yard mapping requiring staff that would continually identify coach location and provide information to Operations so that operators can be informed of location of their assigned coach. Failure to adequately identify locations, can result in buses being blocked in lanes and unable to leave the base at the intended time resulting in late trips.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the*

neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DOT/Transit
<b>Project Title</b>	Mobile Ticketing Pilot Project
<b>EBS Project Number</b>	#1116944 , A00650

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Liviu Prisecaru	IT Project Manager II, DOT Transit Division	Project Manager
Dan Overgaard	Supervisor, DOT Transit Division	Stakeholder
Kathleen McMurray	Supervisor, DOT Transit Division	Stakeholder
Jill Krecklow	Finance Manager, DOT Transit Division	Finance Manager

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	06/20/14	Liviu Prisecaru	New, initial draft	2 hours
Conceptual review	7/8/2014	Kathleen McMurray	Updated for Conceptual Review	5 hours
Annual Report	2/19/14	Liviu Prisecaru	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

If this project to perform an evaluation of mobile ticketing fare payment technologies is approved, customers will have the opportunity to test a new method for paying their transit fare. Currently, customers can pay for their bus fare using either an ORCA card or cash. This project will evaluate the feasibility of adding mobile ticketing to the list of fare payment methods.

The 2012 Metro Rider Non-rider Survey found that sixty percent of respondents used a smartphone. Of those smartphone users, twenty-three percent paid their bus fare with cash. This represents fourteen percent of all riders. It is expected that this group of riders will experience the greatest benefit from mobile ticketing. These benefits include:

- a. **Convenience.** By paying their transit fare from their smartphone, customers can avoid “fishing” around for cash and worrying about having exact change.
- b. **Faster boarding.** Riders who pay with a mobile ticket instead of cash will not need to wait in line as their change is accepted and processed by the farebox.

Other transit agencies who have implemented mobile ticketing have experienced significant user acceptance of the technology. According to an April 11, 2014 [article](#) in Mass Transit, over 80,000 TriMet (Portland, OR) riders downloaded their mobile ticketing application, and purchased over 1 million tickets in the first seven months of operation. MBTA (Boston, MA) [reported](#) that in the first 9 months after implementing their mobile ticketing system, over 1 million tickets were purchased (representing \$10 million in sales). Metro customers are expected to similarly find mobile ticketing to be a convenient way to pay their bus fare.

Reduced dwell times due to increased use of non-cash forms of payment will benefit riders during peak boarding times on trips through downtown Seattle. This is consistent with one of the lessons learned in the Data and Lessons Learned from Elimination of the Ride Free Area and Start-up of RapidRide C and D Lines [Report](#): *Continue to pursue strategies to speed boarding in downtown Seattle through off-board fare payment.*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The Mobile Ticketing Pilot Project will assess adoption patterns, complexity of the technology and its acceptance by the test participants. All test participants will be surveyed to obtain reactions to various aspects of the test, such as specific fare products, boarding times, the ease of using the particular application and the convenience of mobile ticketing in general. Survey findings will be included in the Mobile Ticketing Pilot Assessment Report. This report will address both the internal and external benefits of this project.

3. *What is the current baseline for this measure?*

No assessment exists of customer acceptance of mobile ticketing for King County Metro.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

It is expected that at least 75% of the test participants will find mobile ticketing to be a convenient way to pay their bus fare. It is expected that at least 75% of the test participants will find boarding faster with mobile ticketing, as compared to cash.

5. *When is the benefit likely to be achieved?*

Two months following the completion of the pilot test, the Mobile Ticketing Pilot Assessment Report will be delivered. This report will contain the test participants’ survey results.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

If this project to perform an evaluation of mobile ticketing fare payment technologies is approved, Metro will have the opportunity to assess whether or not it makes sense for the County to implement mobile ticketing. The pilot program model allows for proof of concept and study of consumer response, technology effectiveness, and other operational considerations prior to a full-scale investment.

**Background**

King County Metro currently collects cash fare payment on the bus. This process requires a farebox into which customers insert their fare. Maintaining the farebox system and cash handling costs the agency more than \$5 million a year. In addition, cash collection on the bus has been shown to increase the amount of time that a bus sits in a zone boarding passengers. Less cash collected on the bus would both reduce the costs of cash handling and reduce dwell times. As a result, King County Metro is looking at the possibility of migrating the transit system to cashless on-board payment at a point in the future. In order to reach a cashless on-board environment a number of functional and policy changes will need to be implemented. This Mobile Ticketing Pilot is one step towards removing cash collection, but it is not the only change that would be required, nor is it the sole reason for piloting new ways for customers to purchase fare media.

Taking cash collection off the bus would not mean that customer cannot use cash to purchase fare media, just that it would need to happen off the bus. Cash would still be collected off-board through ticket vending machines (TVMs), Metro customer service offices, or third party retail outlets. The goal would be to maximize electronic fare payment methods, including the existing ORCA card and emerging new technologies. By applying various strategies intended to move the penetration of electronic media close to 100%, Metro would then be in a place to consider eliminating the onboard cash fareboxes and avoid the cost to replace the equipment. The cost to replace this equipment is

estimated at over \$20 million (not including the on-going operations and maintenance costs for this equipment). Currently fareboxes are the leading source of trouble-calls requiring staff to make repairs while a bus is in service. The cost savings from eliminating cash collection on the bus cannot be fully realized until all cash is removed from the bus.

Whether or not cash is no longer collected on the bus, increasing the use of electronic fare payment media is expected to benefit transit travel times through downtown Seattle. Although the exact date has not been determined, the implementation of North Link will eventually require Metro to bring its bus routes out of the downtown Seattle transit tunnel. The added volumes through downtown Seattle surface streets will benefit from faster boarding (see the Data and Lessons Learned from Elimination of the Ride Free Area and Start-up of RapidRide C and D Lines [Report](#)).

One of the emerging electronic fare payment technologies is mobile ticketing, which provides customers the ability to pay their transit fares using their smartphones. This technology is currently implemented in numerous transit systems worldwide. Example agencies and vendors provided below:

<b>Transit System</b>	<b>Vendor</b>
Capital Metro (Austin, TX)	Bytemark (NYC)
Dallas Area Rapid Transit (DART) Fort Worth Transportation Authority Denton County Transportation Authority	Unwire (Denmark)
Massachusetts Bay Transportation Authority (MTBA)	Masabi (UK)
NJ Transit	Masabi (UK)
NY Waterway	Bytemark (NYC)
San Diego Metropolitan Transit System (MTS)	Masabi (UK)
South Shore Line, Northern Indiana and Chicago	Bytemark (NYC)
Telefonica O2 (Europe)	Masabi (UK)
TriMet (Portland, OR)	GlobeSherpa (Portland)
Virgin Trains (UK)	Masabi (UK)

### **Mobile Ticketing Pilot Program**

This pilot project will procure a system for test purposes and solicit test participants from the public to evaluate the value of mobile ticketing for King County Metro and its customers. Customer adoption patterns will be assessed to determine if current cash paying customers are likely to embrace this new technology and thereby increase the use of electronic fare payment media.

In talking with consultants and other agencies, Transit has learned that the cost for mobile ticketing systems range from 8% to 12% of the fare transaction (in other words, up to 12 cents per dollar collected). Since mobile ticketing systems are generally hosted services, these costs include management of the back-end system, revenue processing and management of the application. The pilot project will analyze the cost to operate, maintain and upgrade a mobile ticketing system to help determine if mobile ticketing is a cost effective fare payment option for the County.

If proven beneficial, a project to fully implement mobile ticketing technology for Metro could follow.

#### *2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The Mobile Ticketing Pilot Project will provide the opportunity to measure potential benefits of implementing mobile ticketing technology. Test participants will be surveyed to assess the likelihood of current transit customers switching from cash to mobile ticketing for fare payment. Additionally, the cost to operate, maintain and upgrade a mobile ticketing system will be gathered from vendor data. These findings will be included in the Mobile Ticketing Pilot Assessment Report.

3. *What is the current baseline for this measure?*
- a. Customers switching from cash.** No assessment exists of customers' likelihood of switching from cash to mobile ticketing at Metro.
- b. Cost to maintain system.** Metro will use cash collection costs as the baseline for this measure:
- Collection cost per cash boarding (approximate): \$0.14
- Collection cost as a % of cash collections (2013 estimate): 15%
- (Note: these are not measures that are routinely reported and the information provided here are estimates and do not include the longer term decision about replacing fareboxes.)
4. *What is the target for this measure? (How much improvement will this project achieve?)*
- a. Customers switching from cash.** Test participants who currently pay with cash report they would switch to mobile ticketing: 25%
- b. Cost to maintain system.** For the pilot, we will be evaluating the collection cost per transaction and evaluating if it is less than our current cost for cash collections. This analysis may be skewed based on the pricing that is proposed for the pilot; however moving forward the procurement process will help to ensure that transaction costs are as low as possible. It is also unlikely that the pilot will have a significant impact on overall system costs, however transaction level costs can be evaluated. Full recognition of savings won't be possible until and unless all cash collection costs are eliminated. The pilot will provide data upon which a goal can be developed and considered as part of the decision making to move forward with a full roll-out of mobile ticketing.
5. *When is the benefit likely to be achieved?*
- Two months following the completion of the pilot test, the Mobile Ticketing Pilot Assessment Report will be delivered. This report will contain the cost analysis and the results of the tester survey responses.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
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**Section 7. Benefit Achievement Summary**

**Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the*

benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

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**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	On-Board Systems/Communication Center System (OBS/CCS)
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Randy Boshart	IT Project Manager II, DOT Transit Division	Project Manager
Dan Overgaard	Systems Development and Operations Supervisor, DOT Transit Division	Steering Committee Member

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Annual Report	12/02/13	Randy Boshart	Converted plan from Benefit Realization Plan into Benefit Achievement Plan format	2 hours
Annual Report	3/20/14	Randy Boshart	Revised per feedback	1 hour
Annual Report	3/13/15	Randy Boshart	Review Only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The On-Board Systems/Communication Center System (OBS/CCS) Project combines upgrades to two separate, interrelated systems into one project. The OBS/CCS Project provides the user interfaces and controls required to implement the new Transit Radio System (TRS) on Transit's fixed route fleet, at the transit bases and in the Communication Center. Without OBS/CCS, the new radio system could not have been fully utilized as the legacy systems were incompatible with the TRS. The On-Board Systems portion of the project also replaces an obsolete vehicle tracking system with a modern GPS based system. The Communications Center System Project updates the Computer Aided Dispatch/Automatic Vehicle Location (CAD/AVL) system to one that provides more efficient call processing to an essential life-safety system.

**Interface to Transit Radio System (TRS)**

The TRS Project (a separate project from OBS/CCS) replaced Metro's obsolete 450MHz land mobile radio system with a 700MHz radio system mandated by the FCC. The existing radio spectrum was no longer available for use by King County at the end of 2013. This new radio system required the upgrade of both on-board equipment and at the Communication Center. Existing systems were not compatible with the new radio system.

**On-Board Systems (OBS) Project**

The On-Board Systems portion of the OBS/CCS project integrated with the new TRS to handle call processing between the vehicle and the Communications Center. The OBS Project also replaced the existing signpost based vehicle location system with a new GPS vehicle location system which provides more accurate and timely vehicle location updates thereby enhancing public and driver safety. Additional capabilities now available include: integrated automated passenger counting, automated stop announcements, automated destination sign changes, schedule adherence monitoring for Transit Signal Priority, and a new level of collected performance data not possible with the legacy signpost based system. Vehicle installations concluded in December of 2012. Tasks remaining include the resolution of significant functionality, documentation and training issues.

**Communication Center System (CCS) Project**

At the Communication Center, the CCS Project replaces Transit's Computer Aided Dispatch/Automatic Vehicle Location (CAD/AVL) system, which manages radio communications between Transit operators and Communication Center staff. This essential life-safety, security and service management system provides staff with the tools to manage transit service and respond to accidents, incidents, service disruptions, emergencies, customer service requests and employee requests for assistance. A key function of the CCS is efficient, prioritized radio call processing and the CCS system improves these capabilities. Physical installation of the CCS equipment is complete. Tasks remaining include the resolution of significant functionality, documentation and training issues.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The probability of recurrence for the risk that initiated this project is most likely in the medium to high range. The FCC regulatory change that mandated a phase-out of wide-band UHF licensing, and mandated a forced obsolescence of the hardware for wide-band operation, was driven by increased demand for more efficient use of radio spectrum, and the development of new technology that could provide more efficient operation. These two trends are likely to continue.

It is difficult to predict when these continuing trends will affect the new 700 MHz spectrum that is being used by the new Transit Radio System. The new system is already compliant with a similar spectrum efficiency regulation for 700 MHz, which will take effect in 2017. The level of spectrum efficiency in the new system is four times more efficient than that provided by the wide-band operation of the legacy radio system. The technology developments required to reach a higher level of spectrum efficiency will most likely require at least a decade of industry research, testing and regulatory development, before a new regulatory target is issued. Issuance of a new regulatory target is then followed by vendor product development, before agencies such as King County can issue specifications and proceed with the procurement and deployment of a replacement system.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing	Processing Time annual savings, and percentage of purchases receiving	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment</li> </ul>	2 day processing time 20 percent of purchases are receiving

	<i>us to take advantage of prompt payment discounts.</i>	<i>prompt payment discounts</i>	<i>discount</i> • <i>Savings of \$100,000</i>	<i>discounts</i> • <i>\$400,000 savings</i>	<i>prompt payment discounts</i> <i>\$200,000 savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

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<b>King County Department/Agency Name</b>	Department of Permitting and Environmental Review Department of Transportation/Roads Services Division Department of Natural Resources and Parks/Water and Land Resources Division & Parks and Recreation Division Public Health - Seattle & King County/Environmental Health Services Department of Executive Services/Real Estate Services Section & Finance and Business Operations Division
<b>Project Title</b>	Permit Integration
<b>Project Number</b>	377210

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

John Backman, Permit Integration Program Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jim Chan	Assistant Director DPER/Permitting	PI Management Committee Operational oversight and management (development permits, code enforcement and business licenses)
Marlys Davis	Program Manager DES/ Office of Emergency Management	PI Management Committee Operational management (addressing for e911 & permit system)
<del>Kevin Workman</del>	RES Supervisor	PI Management Committee
Michael Kulish	DES/ Real Estate Services	Operational oversight and management (franchise permitting)

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Chris Wierzbicki Jay Osborne	Deputy Director DOT/ Road Services	PI Management Committee Operational oversight and management (development & ROW permitting)
John Taylor	Assistant Division Director DNRP/Water and Land Resources	PI Management Committee Operational oversight and management (Water and Land Resources)
Monica Leers	Section Manager DNRP/Parks and Recreation	PI Management Committee Operational oversight and management (special use permits)
Stella Chao	Deputy Director Public Health Seattle – King County	PI Management Committee Operational oversight and management (development permits for septic, plumbing & gas piping)
George Horning	GIS Center Manager KCIT/Customer Services	PI Management Committee KCIT technical representative Operational oversight and management (GIS services)
Katherine Cortes Andrew Bauck	Budget Analyst DES/ Performance, Strategy and Budget	PI Management Committee FBOD representative
John Backman	Special Project Manager DPER/Permitting	PI Management Committee Program Manager (PI support services & chief bottle washer)
Warren Cheney	Chief Financial Officer DPER	PI Management Committee Operational oversight and management (fiscal modeling and shared services finance)

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

*The Permit Integration Project Charter was adopted on February 27, 2007.*

*As of February, 2014 all of the project funding has been released by the PRB.*

*The new permit system initially went live in March, 2012.*

*Project completion and contract close-out was scheduled for December 31, 2013. As of February, 2014, the County is in contract close-out negotiations with the vendor. No firm timeline for contract close-out has been established; however, remaining work items are relatively minor. Sticking points in the close-out negotiations involve future support for critical interfaces.*

*Update: Project formally closed out the implementation work on May 21, 2014.*

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

<b>Stage</b>	<b>Date</b>	<b>Revised By</b>	<b>Description</b>	<b>How long did it take?</b>
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Initial BAP draft	2/6/2014	John Backman	New, initial draft	2 hours
Review	2/10/2014	John Backman	Review and comment by the PI Management Committee	.5 hours
Further development of draft	2/11/2014	John Backman		3 hours
Revisions	3/10/2014	John Backman	Response to comments	1 hour
Final Revisions	3/24/2014	John Backman	Response to comments	1 hour
2015 Update	3/23/2015	John Backman	Project Updates	2 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

Although the Permit Integration (PI) project has been budgeted around the replacement of several legacy permitting systems, the PI project encompasses many other aspects of customer services. Implementation of the new permitting and licensing system, in conjunction with many other business process improvements, is to (PI Project Plan, February 2007):

**Improve Customer Service:**

- Support community outreach programs that provide training and materials to the citizens that promotes self service
- Support the electronic permit application and plan submittal
- Create transparent processes for the customer
- Reduce the burden of the process on the applicant through the co-location of interdepartmental resources.
  - 2015 Update: DPER/Public Health Septic proviso specifically requires the review of co-location services
- Support the alignment of customer expectations with verifiable timelines and milestones.
- Promote E Commerce
  - 2015 Update: DPER proviso for the PI project and online services requires a review of the system implementation and roadmap to implementing online permitting through MyBuildingPermit.com

**Increase Efficiency:**

- To the greatest extent possible and where it makes sound business sense, eliminate stand alone systems supporting the permitting processes
- Eliminate redundant data entry
- Eliminate process bottlenecks
- Better align the technology supporting the permitting processes with the current KC Strategic Technology Plan

**Increase Systems and Process Transparency:**

- Align the permit integration solution with other county initiatives
  - 2015 Update: The project is closely coordinating with the Electronic Payments Project
- Establish an environment that fosters a holistic understanding of the permit and licensing process.
- Bridge the gap between departments in both work-flow and data sharing.
- Standardize like processes
- Improve and standardize on the technology supporting remote access to data by King County field inspectors.
- Consider the benefits of a common land based data repository that could support Permit Integration as well as future Land Based system initiatives.
- Continue to improve the integration with GIS

**Reduce Risk:**

- Standardize on development and COTS product platforms in order to reduce support and maintenance costs and increase the county's potential to maintain its own systems without the reliance on outside consultants.
- Eliminate the reliance on IT staff to support day to day business operations. Example: Generate reports. Initiate batch processes.

- *Establish interdepartmental systems support and maintenance plans*
- *Minimize dependency on secondary systems for primary or critical business functions.*
- *Minimize the number of separate or stand alone systems*

Specific achievements to date include:

DPER Customer Service Center improvements:

- Improved application readiness for review through a pre-screening service (PSS)
- Customer wait times displayed in permit center
- 2015 Update; Single family permit review times for the previous 12 months displayed in the permit center beginning December 2014.

New online services:

- Permit and license status for all PI services and programs
- Permit inspection scheduling for building and fire permits (IVR access as well)
- Code enforcement requests
- 2015 Update: Building inspectors now enter all inspection results and comments in the field via wireless tablets

Service delivery:

- Faster and more predictable permit approvals through improved routing and review coordination of permit applications between several departments
- Improved public safety responses through tighter integration of addressing and parcel data with KCIT GIS and e911
- A new fixed fee structure has made permit fees much more predictable and easier to understand.
- Mobile field reporting has sped up access to online status for code enforcement and utility inspections.
- 2015 Update; Consolidated permit application intake and issuance through the permit coordinators to improve consistency and decrease turnaround time.

With the new permit platform in place, further enhancements and service delivery improvements will be rolled out as time and budget allow. The planned improvements include, but are not limited to;

- Online permitting, initially simple, no review permits and ultimately a fully digital process for all permit types.
- Online payments
  - 2015 Update; FBOD has approved the PI Electronic Payment Business Plan
- Integration of new technologies such as remote video inspections
- Elimination of paper plans and files, along with the associated storage and management
  - 2015 Update; DPER is now scanning many high volume permit applications at intake, thereby eliminating paper files

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Percentage of available online permit types are applied for and issued online.

Percentage of DPER permit fixed fees versus hourly fees.

3. What is the current baseline for this measure?

Direct measurement of available online permit types issued online in 20135.

Percentage of DPER permit fixed fees versus hourly fees in 2012.

4. What is the target for this measure? (How much improvement will this project achieve?)

The 20145 YE target percentage of online permits is 30%.

The 20145 beginning year target of permit fixed fees is 100%.

5. When is the benefit likely to be achieved?

Online permits - During or before the end of 20145.

Fixed permit fees – January 1, 20145 (fully achieved).

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

Foundational elements of the project's customer service improvement goals include the implementation of the vendor solutions for an integrated web transaction portal, IVR interface and mobile data connections. As part of this work some of the system enhancements will provide

opportunities to optimize some areas of the development review function. For example by enabling the inspection staff with wireless field reporting, it may be possible to optimize work schedules by dispatching the inspectors from home each morning.

**Comment [KN1]:** So how do these software features improve the internal services?

You stated below freeing up 30 minutes 4 times a week, does that mean more capacity or cost savings? Fewer hirings? What's happening with this new time?

**Comment [JB2]:** Karl, while there will be some internal benefits, the purpose of adding the new functionality is to improve customer service by provide new, additional service channels. The benefits noted below are a side benefit of our ability to update and get information to customers faster, as well as customer's ability to access information 24/7.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Ability implement to mobile field reporting services for use by field staff.

3. *What is the current baseline for this measure?*

The previous amalgamation of permit systems did not have a COTs solution for mobile field access.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Yet to be quantified time savings for permit field inspectors. An early estimation is 30 minutes per inspector, 4 work days per week.

5. *When is the benefit likely to be achieved?*

By the end of 2014.

2015 Update; All of the building inspectors began using field tablets in August, 2014. Site inspectors will be fully deployed with field tablets by the end of March, 2015

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

A single, vendor cloud solution replaces a number of legacy systems, some of which have reached the end of life (no longer vendor supported). The core vendor licensed software was first implemented in early 2012.

The life-cycle for the new web-enabled solution is expected to be 2020 or longer.

The new system supports five distinct program areas:

- Development permits
- Business licenses
- Code enforcement
- Franchise permits
- ROW permits
- Special use permits

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.***

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

**Section 7. Benefit Achievement Summary**

**Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

*Example: This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

*Example: This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>



DRAFT

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

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<b>King County Department/Agency Name</b>	Department of Transportation, Transit
<b>Project Title</b>	P&F Timekeeping via EAM
<b>Project Number</b>	TBD

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Kevin Desmond, General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jerry Rutledge	Manager, Transit Power & Facilities	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Stakeholder

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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Conceptual review	6/5/2014	Yan Zhang	New, initial draft	.5 hours
Conceptual review	9/25/2014	J. Krecklow	re Revised to address questions	1 hour
Annual Report	2/11/15	Kathleen McMurray	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).  
This project*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
Transit's Power & Facilities section (280 employees) currently uses a timekeeping system called ETTS which is an independent system that interfaces with our Asset Management system (EAM) and with PeopleSoft to provide time entry for payroll and reporting purposes. ETTS has been in use since 2001, was developed using Delphi, runs on the 32 bit platform, is no longer supported by the vendor, and is running with outdated operating systems.

Improvements to the existing ETTS system are not viewed to be cost effective given the current status of the system. Preliminary estimates are that it would also cost more to upgrade the ETTS system than it does to implement time & labor reporting in EAM (\$250k versus \$217k) The EAM system is a current generation system that provides work order functionality as well as the ability to collect and pass time records to Peoplesoft as EAM has the capability to capture employee time accurately with in

the EAM system itself. Using EAM and its work order data to generate time and labor entries would eliminate the need for the ETTS system, allowing it to be retired. This would result in one less system to maintain and would provide for increased return on the investment paid in the EAM system.

Generating time and labor entries directly from EAM would still require an interface to Peoplesoft. Such an interface would be similar to the one currently in place with ETTS or that used by the Vehicle Maintenance group which captures time and labor information in a vehicle work order system (M5) which interfaces directly to Peoplesoft.

Directly capturing time from the work order system eliminated redundant data entry and reduces the possibility for error. Employees will enter time once into EAM and the time and labor records for Peoplesoft will be generated by the system. Management and administrative time is currently spent reviewing the ETTS data (as well as the work order data in EAM) and resolving errors/issues. Having the time collected in one system would allow manager to approve the work order data once.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*  
We will track the number of time and labor corrections required as the data is approved in Peoplesoft.
3. *What is the current baseline for this measure?*  
We currently have not quantified the amount of time associated with redundant time entry and error correction. If each employee spends 30 minutes a week doing redundant data entry there would be about 6,500 hours spent on this activity each year.  $((250 \text{ hourly employees} \times 30 \text{ mins} \times 52 \text{ weeks}) / 60 = 6,500 \text{ hours})$ . Employees work 24/7 shifts. This is roughly equivalent to 3-4 FTEs worth of time each year. In addition management will no longer be required to review for and reconcile errors.
4. *What is the target for this measure? (How much improvement will this project achieve?)*  
The target for this measure will be zero redundant data entry as well as zero time spent by management reconciling errors as there will be reconciliation required.
5. *When is the benefit likely to be achieved?*  
This benefit should be achieved as soon as the system goes live.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

P&F currently uses a timekeeping system called ETTS which is an independent system that interfaces with our Asset Management system EAM and with PeopleSoft. ETTS has been in use since 2001, was

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
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4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## **Section 7. Benefit Achievement Summary**

## Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
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<b>King County Department/Agency Name</b>	Transportation/Transit
<b>Project Title</b>	Radio AVL Replacement (RAVL)
<b>EBS Project Number</b>	1028716

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jeff Wamsley	Superintendent – Transit Control Center	Operations User - Steering Committee Member
Felix Melendez	Chief – Radio Maintenance	TRS Technical Support
Ray De La Cruz	IT Project Manager	TRS Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Annual Report	11/15/13	Ray DeLaCruz	New, initial draft	2 hours
Annual Report	2/14/2014	Jill Krecklow	Modified benefits discussion	.50 hours
Annual Report	2/4/2015	Dan Overgaard	Updated to indicate this is the final report	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

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***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The Radio/AVL Replacement project provided a life cycle replacement of Metro Transit's existing, obsolete 450 MHz land mobile radio system. The new, 700 MHz radio system supports voice and data communications and integrates with other Transit business applications. The Project ensured the continuity of operational communications during the replacement period.

The older system was installed in 1990-1992 and was due for replacement, both because of its age and because of new FCC regulations affecting the spectrum used by the system. If the radio system was not replaced in a timely manner users would have experienced interference and other operational problems due to new licensees on new narrow-band frequencies adjacent to the transit radio channels. In addition, applicable FCC regulations required existing 450 Mhz system to stop operating in 2013.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The probability of recurrence for the risk that initiated this project is most likely in the medium to high range. The FCC regulatory change that mandated a phase-out of wide-band UHF licensing, and mandated a forced obsolescence of the hardware for wide-band operation, was driven by increased demand for more efficient use of radio spectrum, and the development of new technology that could provide more efficient operation. These two trends are likely to continue.

Update: 2/4/2015: It is difficult to predict when these continuing trends will affect the new 700 MHz spectrum that is being used by the new Transit Radio System. The new system is already compliant with a similar spectrum efficiency regulation for 700 MHz, ~~which will take effect in 2017~~ which had been expected to take effect in 2017, but which the FCC formally withdrew in 2014. The level of spectrum efficiency in the new system is four times more efficient than that provided by the wide-band operation of the legacy radio system. The technology developments required to reach a higher level of spectrum efficiency will most likely require at least a decade of industry research, testing and regulatory development, before a new regulatory target is issued. Issuance of a new regulatory target is then followed by vendor product development, before agencies such as King County can issue specifications and proceed with the procurement and deployment of a replacement system.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

#### **Section 7. Benefit Achievement Summary**

##### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

***Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

The Radio/AVL Replacement project was successfully completed in December, 2013. The largest benefit was a life-cycle replacement of a critical element of Transit's operation. Additional benefits were to meet new FCC requirements by 2013 and to avoid radio interference from FCC compliant users.

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<ul style="list-style-type: none"> <li><i>Compliance with all FCC regulations and requirements applicable to the new system</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Amount of Interference and other operational problems due to change in FCC regulations</i></li> </ul>	<ul style="list-style-type: none"> <li><i>No noticeable interference in the old system</i></li> </ul>	<ul style="list-style-type: none"> <li><i>No noticeable interference in the new system</i></li> </ul>	<ul style="list-style-type: none"> <li><i>No noticeable interference in the new system</i></li> </ul>
<ul style="list-style-type: none"> <li><i>Meet FCC compliance deadline by 2013</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Implement FCC requirements by 2013.</i></li> </ul>	<ul style="list-style-type: none"> <li><i>No baseline for this metric</i></li> </ul>	<ul style="list-style-type: none"> <li><i>System in place by 2013</i></li> </ul>	<ul style="list-style-type: none"> <li><i>System in place by 2013</i></li> </ul>

Update – 2/4/2015: This is the final report for this project. All benefits have been achieved.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation, Transit
<b>Project Title</b>	Real-Time Improvements Project
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Kevin Desmond, General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Dan Overgaard	Supervisor, Transit Systems Development	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Stakeholder

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	6/5/2014	Yan Zhang	New, initial draft	0.5 hours
Conceptual review	9/26/2014	Dan Overgaard	Address questions; clarify project scope and benefits	3 hours
Conceptual review	10/15/2014	Dan Overgaard	Address embedded comments	2 hours
Conceptual review	11/5/2014	Jill Krecklow	Finalize BAP for budget	30 minutes
Annual Report	2/11/2015	Kathleen McMurray	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Metro customers use a variety of information systems to check bus schedule and status information, including schedule pages in Metro Online, the Automated Trip Planner, Tracker, the Interactive Voice Response system, Real Time Information Signs, and third party applications such as OneBusAway. Many customers also receive automated Transit Alerts via email subscription, or follow Metro on Twitter and Facebook.

These systems do not provide consistent information about significant temporary changes that may affect the customers' trips, such as reroutes, stop closures and service cancellations. In these situations customers have to do additional work to research what is happening, and even then may not find the information they need in time to adjust their trip plans. For many events, Metro is simply not able to produce electronic updates, because the information has to be entered manually into each system, and resources are not available to keep up with the pace of the event or the volume of changes that should be announced. Some systems such as OneBusAway and Tracker cannot be updated manually, and Metro does not have the capability to distribute these updates electronically. So customers are often not provided with accurate or timely information about changes affecting their service.

Customer reliance on all electronic forms of information is expected to continue to increase, and we believe that this increased dependency will bring greater visibility to those products, as well as any gaps or inaccuracies in them.

The proposed IT investment will implement a new system and modified business processes to create, manage and distribute data about these changes. Customer-facing systems will be modified to receive and display this new information. **As a result, the primary external benefit is that customers will receive more timely and more accurate information about reroutes, stop closures and, to the extent possible, service cancellations.**

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

At present, the Automated Trip Planner, Tracker and OneBusAway do not display any information at all about reroutes, stop closures and service cancellations. They simply refer customers to the "Alerts and Updates" page in Metro Online, which is very cumbersome to use. After the project is implemented, these systems will be able to receive the updates and display them automatically. The number of reroutes, stop closures, and service cancellations where automated information is available to customers will provide a measure of intended project benefits. Post implementation Transit will measure the percentage of all reroutes, service cancellations and stop closures that are provided in an automated manner OneBusAway, the Automated Trip Planner and Tracker.

Additionally, the project will use customer research such as a focus group, in order to measure customers' satisfaction with the newly added information to ensure it is displayed in a way that it is easy for customers to understand. Customer research may also come from the work of partners agencies such as Sound Transit.

3. *What is the current baseline for this measure?*

The baseline measure is that none of these updates (zero) are provided to OneBusAway or to Metro's Automated Trip Planner and Tracker in an automated manner.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The target for this measure is to provide 80% of all reroutes and stop closures to OneBusAway, the Automated Trip Planner and Tracker, in an automated manner, up from the current level of 0% provided. The percentage of service cancellations that is provided will be determined as the project moves forward.

Prior to implementation, as part of our customer outreach and research, we will target a high level of customer satisfaction with information display.

5. *When is the benefit likely to be achieved?*

The benefit of new information for customers will be achieved immediately after the project is completed.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

In the current environment, information about reroutes and stop closures is entered and re-entered into multiple computer systems. Initially, Transit Control Center staff produces and distributes this information via PDF files, and then customer services staff has to load the files to Metro Online, as well as manually re-enter the same information into other systems. In the process of doing so, they often have to edit or summarize the information, which is very time-consuming. As an example, the detailed street-by-street information in a reroute is generally too long and too detailed for a quick email alert, and will not fit into a tweet. So each of these kinds of updates are customized into new text appropriate for each type of delivery system. There are too many reroutes and stop closures to distribute all of them to all of the customer-facing systems.

The proposed project will revise these methods so that information can be produced once in a centralized system and then distributed automatically to other receiving systems in a machine-readable format that is appropriate for their consumption. This process will reduce the amount of manual effort required to create and manage this information.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

As part of the project planning and during implementation, Transit will identify the level of staff resources that have been freed up by this project and how those resources will be redeployed,

3. *What is the current baseline for this measure?*

Transit will identify the baseline as part of project planning process describing the level of staff effort currently dedicated to activities and how those resources are able to be redeployed to additional activities.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

As part of the planning process, Transit will establish a target or targets associated with reducing the manual effort associated with communicating reroutes and stop closures.

5. *When is the benefit likely to be achieved?*

As part of the planning process, Transit will estimate when the benefit of redeploying staff to higher value activities will be achieved.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor*

support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

This project is being proposed because several of Metro's current customer-facing systems do not provide any information on reroutes, stop closures and service cancellations. Metro does provide some notification of these events via documents that are posted on the "Alerts and Updates" page of Metro Online. In addition, Metro sends out some Transit Alerts to email subscribers, and provides some updates to social media sites for some (but not all) of the Alerts and Updates.

Information about reroutes and stop closures is communicated internally by posting event-specific documents on internal web pages or SharePoint sites, and distributed externally by posting these same documents on the Alerts and Updates page on Metro Online. In addition some of the information for some of these events is manually re-entered into other systems such as GovDelivery, for distribution to subscribers of Transit Alerts, or sent out as updates to social media sites.

The overall complexity of the alert notification process and the level of effort required to enter and re-enter these updates into different systems inherently limit the number and type of advisories that can be created. As a result of these constraints, customers never hear about some events; some notifications are more general than they should be.

This project will implement a new system for managing these updates, and develop the necessary processes and interfaces to display this information in an automated manner. Metro Online's Alerts and Updates page will be modified to make the data more user-friendly, and eliminate the need to open up and read a separate document for each reroute or stop closure. The existing web pages and SharePoint sites will be decommissioned.

The issues identified above affect some customers daily to some extent; more customers during more significant events, such as bridge or street closures; and virtually all customers during major region-wide events such as Torchlight, adverse weather and so on. The improvements developed by this project are intended to be scalable solutions that reduce overall complexity, so that they provide benefits on a daily basis as well as help the organization communicate and respond more efficiently during major events.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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#### **Section 7. Benefit Achievement Summary**

##### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

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**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	Department of Transportation, Transit
<b>Project Title</b>	Replacement for 4.9 Wireless Network and Mobile Access Routers
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Kevin Desmond, General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

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Name	Title / Agency	Project Role
Dan Overgaard	Supervisor, Transit Systems Development and Operations	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Finance Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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Conceptual review	6/4/2014	Yan Zhang	New, initial draft	.5 hours
Conceptual review	7/1/2014	Kathleen McMurray	Update	.5 hours
Conceptual review	10/02/2014	Dan Overgaard	Updated in response to questions	2 hours
Annual Report	2/11/2015	Dan Overgaard	Minor update in Section 6	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The existing 4.9 GHz network provides data communications to support ORCA, On-Board Systems, Transit Signal Priority (TSP) and Real-Time Information Signs (RTIS). At a minimum, the replacement project must support the operation of those systems in their current state. In that sense, this project falls under Category 3, since it is **replacing or upgrading older technology, reducing the risk of system failures.**

Since this project will be a major investment in network technology, it should be expected to support the requirements of the next generation of systems that are planned to deploy during its useful life. (Since the replacement technology has not been selected, we not know for sure what useful life to expect, but the project team will be seeking a continued support period of seven or more years.) Chief among these new systems are the ORCA replacement, planned for implementation around 2020, and TSP replacement, planned for implementation around 2018.

This data communications network is an enabling technology. As such, customers are not aware they are using it, but they benefit from the operational functions that it supports, through the data communications it provides. In that sense, the project will provide direct improvements to the public if the replacement technology enables the next generation of those projects, which will provide **“improved quality of service, such as faster response times and better access to services.”** These potential external customer benefits can be summarized as follows:

- **Improved fare payment.** The ORCA strategic planning process has identified potential enhancements for the next generation, such as the use of open payments (e.g., account-based payments using various credit- and debit-card technologies). If implemented, these would directly benefit customers by providing more options for fare payment. In addition, credit- and debit-based technologies would not require customers to wait for 24 to 48 hours of processing to have the value loaded on their cards, as they must do with ORCA. This step could be eliminated. In order to implement an open payment system, the ORCA partners would need to implement a secure, always on connection to every bus, such as a cellular 4G/LTE connection. This is a candidate technology for the 4.9 replacement network, so if it is selected, it would enable the ORCA replacement project to deploy those new features and benefit customers by improving fare payment options, speed and access.
- **Expansion of TSP and RTIS.** The current 4.9 GHz wireless network is constrained from expansion due to scheduled system obsolescence and the fact that the vendor has withdrawn the product from the market. KCIT and Transit have limited spares which must be saved to maintain existing services. No more wireless access points and mobile access routers are available for purchase, which limits Metro’s ability to deploy TSP on additional corridors. Although several jurisdictions are interested in deploying more TSP (Seattle, Bellevue, Redmond and others), those plans are on hold pending Metro’s deployment of a replacement network that can support TSP. Assuming unlimited access to new equipment, the new network will allow continued expansion of TSP and RTIS on new corridors, which will directly benefit the public through improved speed and reliability, and greater access to bus arrival information along those corridors.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The benefits identified above will be measured when the replacement network is deployed, and the next generation systems that use the new network are deployed as well. In other words, the stated benefits should not be expected when the replacement network is merely supporting existing

systems and their existing levels of functionality.

3. *What is the current baseline for this measure?*

Current baseline for this measure is the existing ORCA system and its features (a card-based, closed loop system, with 24-48 hours of waiting time to load card revalues); and the existing corridors with TSP and RTIS deployed (RapidRide Lines A-F, plus Routes 44, currently being tested, and Route 120).

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The target for this measure will depend on the scoping, design and funding for the deployment of those replacement projects – ORCA and TSP – and any decisions to fund additional installations of Real Time Information Signs.

5. *When is the benefit likely to be achieved?*

As noted above, the benefit will be achieved when the future replacement systems are deployed. The timing for these deployments is subject to future project scoping and dependent on funding for implementation.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

Transit's 4.9 GHz wireless network was installed starting in 2009, as part of the installation of the On-Board System/Communication Center System (OBS/CCS). There is no industry standard life cycle for this type of equipment, but it generally falls in the IT commodity category, which generally means an expected life of five to seven years. However, equipment obsolescence can be affected by multiple factors, such as lack of market availability of processing chips and other hardware components; updates to operating system software or other software that runs on the hardware, making it obsolete; and other strategic business decisions. In this case, due to a slower than expected market up-take of the 4.9 product line, Cisco scheduled the end of support for the 4.9 GHz wireless network equipment that Transit uses to upload and download data from the bus fleet at the bases and on RapidRide lines. This network also provides network connectivity for ORCA readers and Real-Time Information Signs (RTIS) on the RapidRide corridors, and enables Transit Signal Priority communications on RapidRide and other routes.

Not doing this project will increase the risk of service interruptions and the eventual failure of data communications for the systems that use the 4.9 network. Such failures will impair Metro's fare collection, operations management, service analysis, transit signal priority and customer information services.

Transit and KCIT need to deploy a replacement system before the vendor's support ends in mid-2017. This end of support affects both hardware and software. Cisco has already stopped

manufacturing this line of equipment, and in 2017 will stop their software support. King County has asked about extending the support for this product, but Cisco has declined to offer this service. There is no alternate third party source for hardware parts since these are proprietary Cisco products. It is not possible for KCIT to assume the responsibility for software support since that would require access to Cisco's proprietary source code, as well as significant expertise in developing security patches for specialized network and communications software.

Update – 3/18/2015: Options that will be considered during alternatives analysis include new products that Cisco and other manufacturers are developing for the USDOT's "**Connected Vehicle**" initiative, which is expected to use wireless communications in the 5.9 GHz band, sometimes referred to as Dedicated Short Range Communications, or DSRC.

The system has already passed the "last buy" milestone for spare parts. This project is a necessary life cycle replacement to maintain a state of good repair, and ensure business continuity. The lack of security patches for potential operating system vulnerabilities will create a security risk for the King County network, and KCIT will require these devices to be disconnected. The lack of spare parts and the loss of software support means that it is not cost-effective to try to isolate this specialized network with additional firewalls or other network modifications. There is no other option to keep these services running, than to replace this obsolete equipment. This project needs to replace the following devices, and ensure integration and provide continuous operation for the systems connected them:

- 1,450 mobile routers installed on the transit fleet, and 140 on RapidRide corridors;
- 44 access points installed at transit bases; and
- 241 access points and along RapidRide and other Intelligent Transportation System corridors.

To maintain business continuity during the transition, Transit and KCIT will need to build and implement the new system as a parallel network at the bases and along the corridors, and then migrate the fleet by installing or modifying mobile routers in a coordinated, phased process.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

If this wireless network is not replaced, the probability of incremental network failure, and increasing business impacts, is not just high but certain. There will be partial communication gaps failures when individual hardware units fail and no replacement parts are available. There will be an increasing risk of systemic failures and network vulnerability after software support ends in 2017.

At the seven operating bases, this network provides wireless communications to connect the revenue fleet with back office systems to upload and download daily on-time performance data, passenger counts, fare transactions, ORCA card reloads, fare tables, daily on-board bus schedules, stop announcements and other on-board configuration data. It is critical to Transit operations that these data transmissions continue to occur in a timely manner. Over 60% of Transit's fare revenue is processed over this wireless network.

- The ORCA readers are updated daily with customer card reloads and card hotlists. ORCA transactions are offloaded at every pull-in. ORCA transaction data expires if it is not downloaded from the vehicle after seven days. Intermittent communication failures in the

network may result in fares being lost due to expired data.

- On-board systems are generally loaded with about 30 days of operational data. If this data is not updated before expiration, on-board data will expire and present operational issues, such as limiting the operators' ability to use the radio system (a critical life/safety requirement) and collect correct passenger fares (a critical financial requirement).
- The network provides connectivity to collect fares from ORCA readers at major stations, display bus arrivals on real-time information signs, and enables transit signal priority operation along the corridor, for improved speed and reliability.

King County is already experiencing maintenance and operations issues, due to the lack of spare parts and Cisco's delayed turnaround on warranty repairs. Some access points have failed due to unexpected loss of transmit power. Others fail to come back up when rebooted. It is expected that these kinds of issues will increase as the system ages, and this will put transit operations at a significant risk of more frequent and longer lasting outages. Incremental failures may require prioritization of certain functions, and moving limited spares around the system to fill in gaps. Some less critical functions such as Real-Time Information Signs and off-board ORCA readers could be temporarily decommissioned in order to keep the core ORCA system functional.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Regional Fare Coordination System (ORCA System) Enhancements
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Tom Friedman	IT Project Manager II/DOT Transit Division	Project Manager
Phil Branham	Supervisor of Fare Media Sales/DOT Transit Division	Fare Media Sales Information
Chuck Sawyer	Supervisor/DOT Transit Division	Market Research Information
Tom Randall	Chief/DOT Transit Division	Customer Services Information
Dave Dunneback	Planner/DOT Transit Division	King County Employee ORCA Usage
Rebecca Switaj	Project Program Manager/DOT Transit Division	Budget Analyst

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Annual Report	1/6/14	Tom Friedman	Converted plan from Benefit Realization Plan into Benefit Achievement Plan format	3 hours
Annual Report	03/20/14	Kathleen McMurray	Revised per feedback	1 hour
Annual Report	02/06/15	Kathleen McMurray	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

Background: There are 7 Elements (or sub-projects) within the RFCS Enhancements Project. Four of the seven elements are in this Benefit Category. The expected benefits for each of these will be described separately.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
  - a. **Streetcar Element.** The goal of this element is to install ORCA readers on the two streetcar lines: South Lake Union and First Hill. It is an extension of the current regional ORCA system to the streetcar mode. This will allow the public to use ORCA cards for fare payment on streetcars thereby providing better access to services for the public.
  - b. **Operations Enhancement Element.** The ORCA system went ‘live’ on April 20, 2009. This element is intended to address operational issues that have come to light since the implementation of the system. The primary benefits are expected to be customer and employee satisfaction related to the collection of fares on board buses.
  - c. **University of Washington Element.** The goal of this element was to convert the U Pass program to ORCA. This allows UW students, staff and faculty to use ORCA cards for fare payment thereby providing better access to services for the public.
  - d. **Regional Enhancements Element.** The specific enhancements included in this element are determined by the ORCA Regional Joint Board (made up of the General Managers of the 7 participating agencies). Overall, the goals are to improve customer satisfaction and increase operational efficiencies.
  
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
  - a. **Streetcar Element.** The benefit of this element will be measured by the number of passengers using ORCA for fare payment. The ORCA system automatically keeps track of the number of ORCA “taps” or “boardings”. ORCA Boardings reports can be generated easily for any time period.
  - b. **Operations Enhancement Element.** The enhancements planned for this element are relatively small and the impact will be difficult to measure without an expensive survey effort. It is proposed that a surrogate metric is the number of customer complaints recorded by the Metro Comment System (MCS).
  - c. **University of Washington Element.** Conversion to ORCA was not expected to change transit use at UW but the number of times the cards are used is an indicator of the usability of the extension of the regional ORCA system.
  - d. **Regional Enhancements Element.** The usage of ORCA since Full System Acceptance is the most relevance metric, specifically regional average weekday ORCA boardings as a percent of total average weekday boards.
  
3. *What is the current baseline for this measure?*
  - a. **Streetcar Element.** ORCA use on streetcars will be measured by looking at ORCA Boardings on Streetcar service as a percentage of total Streetcar boardings: Baseline is 0%
  - b. **Operations Enhancement Element.** Customer satisfaction will be measured by looking at ORCA complaints per calendar quarter as entered in MCS: Baseline is 73 (3<sup>rd</sup> Quarter 2012)
  - c. **University of Washington Element.** UW ORCA boarding will be measured by looking at Total ORCA Boardings by UW cardholders in October of each year: Baseline is 0
  - d. **Regional Enhancements Element.** ORCA Market Share will be measured by looking at Regional Average Weekday ORCA Boardings/Total Average Weekday Boardings: Baseline is 51% (End of 1<sup>st</sup> Quarter 2011)

4. *What is the target for this measure? (How much improvement will this project achieve?)*
  - a. **Streetcar Element.** ORCA use on streetcars will be measured by looking at ORCA Boardings on Streetcar service as a percentage of total Streetcar boardings: Target is 50%
  - b. **Operations Enhancement Element.** Customer satisfaction will be measured by looking at ORCA complaints per calendar quarter as entered in MCS: Target is decrease by 30%
  - c. **University of Washington Element.** UW ORCA boarding will be measured by looking at Total ORCA Boardings by UW cardholders in October of each year: Target is 1,422,677
  - d. **Regional Enhancements Element.** ORCA Market Share will be measured by looking at Regional Average Weekday ORCA Boardings/Total Average Weekday Boardings: Target is 65%
  
5. *When is the benefit likely to be achieved?*
  - a. **Streetcar Element.** Two years following implementation of ORCA fare payment on streetcars.
  - b. **Operations Enhancement Element.** Two years following implementation of the Operations Enhancement.
  - c. **University of Washington Element.** Benefit has been achieved. All UW transit trips were converted to ORCA with implementation of the UW Element. Total ORCA Boardings by UW cardholders in October 2012 was 1,422,677.
  - d. **Regional Enhancements Element.** Two years following implementation.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

Background: There are 7 Elements (or sub-projects) within the RFCS Enhancements Project. . Two of the seven elements are in this Benefit Category. The expected benefits for each of these will be described separately.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
  - a. **King County Employee Card Element.** This element implemented ORCA cards for King County employees. The cards provide building access and functionality in addition to ORCA functionality.
  - b. **Data Access Element.** The primary benefit of this element is to preserve the detailed ORCA transaction data that is currently stored as csv files on the ORCA Back Office Computer (BOC). This project element will make the transaction data available to a limited number of users but it will position Metro for future use of the data for operational analysis as part of a yet to be determined project. The ORCA vendor will be purging these data soon and it is important that they be saved elsewhere.
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
  - a. **King County Employee Card Element.** The benefit of this element can be measured by monitoring the usage of ORCA boardings generated by King County cards.
  - b. **Data Access Element.** Success will be measured by having a repository of detailed ORCA transaction data rather than having the data unavailable for future study.
3. *What is the current baseline for this measure?*
  - a. **King County Employee Card Element.** King County employee ORCA usage will be measured by looking at Total ORCA Boardings by King County employees for June to October of each Year: Baseline is 0
  - b. **Data Access Element.** Baseline for this element is having no database for BOC transaction data.
4. *What is the target for this measure? (How much improvement will this project achieve?)*
  - a. **King County Employee Card Element.** King County employee ORCA usage will be measured by looking at Total ORCA Boardings by King County employees for June to October of each Year: Target is 691,673
  - b. **Data Access Element.** Target for this element is having a database for BOC transaction data.
5. *When is the benefit likely to be achieved?*
  - a. **King County Employee Card Element.** Benefit has been achieved. All King County employee transit trips were converted to ORCA with implementation of the King County Employee Card Element. Total ORCA Boardings by King County employees for June to October 2012 was 691,673.
  - b. **Data Access Element.** Benefit has been achieved. Work on this element is complete with the implementation of a repository of detailed ORCA transaction data.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County*

to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

Background: There are 7 Elements (or sub-projects) within the RFCS Enhancements Project. One of the seven elements are in this Benefit Category. The expected benefits for each of these will be described separately.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

**Sales & Customer Services Element.** The ORCA system was implemented as a regional system that did not address all of the needs of the individual agencies. This project element's purpose is to extend the ORCA system in several ways with the goal of completing the replacement of Metro's legacy point of sale (POS) system. The legacy POS system is currently only used for a small number of sales transactions at the agency. With the completion of the project element, all sales transactions will be performed using the ORCA system and the legacy POS system will be retired.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

N/A

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example: Reduced cost to produce service.** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

Background: There are 7 Elements (or sub-projects) within the RFCS Enhancements Project. Three of the seven elements are in this Benefit Category. The expected benefits for each of these will be described separately.

1. *Describe why you expect the proposed IT investment to reduce costs?*
  - a. **University of Washington Element.** Surveys that are currently done every 2 years to determine UW transit usage will no longer be needed.
  - b. **Operations Enhancement Element.** Legacy POS system will no longer be needed.
  - c. **King County Employee Card Element.** Avoids support of multiple building access and ORCA cards for KC employees.
  
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
  - a. **University of Washington Element.** Surveys will no longer be needed. Cost savings.
  - b. **Operations Enhancement Element.** Legacy POS system will no longer be needed. Cost savings.
  - c. **King County Employee Card Element.** Separate building access card will not be needed.
  
3. *What is the current baseline?*
  - a. **University of Washington Element.** \$42,000 every 2 years
  - b. **Operations Enhancement Element.** \$18,000 per year
  - c. **King County Employee Card Element.** \$386,000 over 5 year life cycle.
  
4. *What is the target for this measure? (How much savings will this project achieve)*
  - a. **University of Washington Element.** \$42,000 every 2 years
  - b. **Operations Enhancement Element.** \$18,000 per year
  - c. **King County Employee Card Element.** \$386,000 over 5 year period
  
5. *When is the cost reduction likely to be achieved?*
  - a. **University of Washington Element.** June 2015.
  - b. **Operations Enhancement Element.** Estimated to be June 2016 (two years after implementation).
  - c. **King County Employee Card Element.** April 2017.

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

There are 7 Elements (or sub-projects) within the RFCS Enhancements Project. Benefits for each of these Elements will be realized at different times. The below list identifies those benefits realized to date. Additional benefits will be added over time.

Metric Description	Metrics	Baseline	Target	Actual
King County (KC) Employee ORCA Use	Total ORCA Boardings by KC Employees for June to October of each Year.	0	691,673	691,673 (all KC transit trips converted to ORCA with the King County Employee Card Element)
University of Washington (UW) ORCA Boardings	Total ORCA Boardings by UW Employees in October of each Year.	0	1,422,677	1,422,677 (all UW transit trips converted to ORCA with the University of Washington Card Element)
Installation of a repository of detailed ORCA transaction data rather than having the data unavailable for future study.	Installation of a repository of detailed ORCA transaction data.	No data repository exists.	Data repository is created and collecting data.	Data repository is created and collecting data

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Rider Information Systems (RIS) – Bus Tracker
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Mike Berman	IT Service Delivery Manager, Department of Information Technology	Sponsor
Darwin Campbell	Sales and Customer Services Manager, DOT Transit Division	Sponsor
Dan Overgaard	Systems Development and Operations Supervisor, DOT Transit Division	Sponsor

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual Report	11/15/13	Kathleen McMurray	Initial Report	2 hours
Budget Process Update	2/10/14	Kathleen McMurray	Updates per feedback from Council staff	1 hour
Annual Report	2/6/2015	Kathleen McMurray	Updated to indicate this is the final report	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The bus tracking application, Tracker (<http://metro.kingcounty.gov/oltools/tracker.html>), provides real-time bus information for a specific time point or geographic area allowing King County Metro (KCM) customers to see and track the status of their bus so that they know when it will arrive. Tracker was a ground breaking application in 1999 when the University of Washington (UW) developed it as a research project using existing KCM data. Based on the application's success, KCM purchased the rights to add the application onto the agency's web site.

The data feed to Tracker was from the existing (old) radio system. Changes to FCC regulations required that KCM update the radio system. A new radio system was purchased and implemented in conjunction with the On Board System (OBS/CCS) project. This update resulted in the loss of the old radio system data used by Tracker and a need to access location data from the new system.

The RIS – Bus Tracker project purchased an interface called SIRI Vehicle Monitoring (VM) from the OBS/CCS vendor and incorporated the data feed from the interface to maintain Tracker. Without this OBS/CCS data, this vehicle tracking application would have ceased functioning, as well as all 3<sup>rd</sup> party applications that consume KCM data (such as OneBusAway).

The OBS/CCS system was installed on the full KCM fleet December 2012. At that time, all Tracker real-time data was sourced from the SIRI VM interface.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

In the course of implementation, the project replaced some software that was roughly 15-20 years old and not compatible with current systems or supported by the original provider (UW). The legacy system was at risk of failure and could not be enhanced in any way since it was running outdated technology. It was also not compliant with current network security requirements.

The replacement system provides equivalent service in terms of customer information, so there is an operational improvement in that the replacement system can actually be maintained, and can safely be operated on the County network without creating a security risk to other systems and resources.

The scope of this project was to ensure that Tracker and other 3<sup>rd</sup> party applications (such as OneBusAway) remain operational with the implementation of OBS/CCS. Without the RIS – Bus Tracker project, it is 100% likely that these applications would no longer display real-time data.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

### **Section 7. Benefit Achievement Summary**

#### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

The purpose of RIS – Bus Tracker project was to ensure that Metro’s bus tracking application, Tracker, continued to provide real-time bus location information to the public as the new Transit Radio System and On Board System (OBS/CCS) were implemented. The project purchased an interface called SIRI Vehicle Monitoring (VM) from the OBS/CCS vendor and incorporated the data feed from the interface to maintain Tracker.

The benefits of the project were fully realized in December 2012 when the OBS/CCS systems were installed on the full KCM fleet. At that time, all Tracker real-time data was sourced from the SIRI VM interface.

Update – 2/6/2015: This is the final report for this project. All benefits have been achieved.

## IT Project Benefits Achievement Plan (Version 3)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Rider Information Systems (RIS) – Interactive Voice Response (IVR)
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Damon Berbert	IT PM II, DOT Transit Division	Project Manager
Terry White	Sales and Customer Services Supervisor, Customer Information Technology, DOT Transit Division	Sponsor – (in lieu of retiring Section Manager)

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual Report	11/15/13	Kathleen McMurray	Initial Report	2 hours
Annual Report	03/20/14	Damon Berbert	Revised per feedback	.25 hours
Benefit Achievement Summary	01/05/15	Damon Berbert	Completed Benefit Achievement Summary	1.5 hours
Annual Report	2/6/2015	Kathleen McMurray	Updated to indicate this is the final report	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
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5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

This project replaces King County Metro's legacy Interactive Voice Response system (IVR) with a supportable IVR system utilizing an off-the-shelf (OTS) software and non-proprietary hardware solution. In addition, we will have a standard service contract for ongoing maintenance and support of implemented software and hardware. The hosted replacement solution will be contracted for up to 5 years, after which time it will be re-evaluated.

The legacy IVR system's reliability was at risk due to the possibility of a single point of failure in the system containing the voice menu structures: a black-box proprietary system whose original vendor is out of business, and for which there were no backups or other contingency plans. The system was implemented in 1991 by a vendor utilizing proprietary technology, meaning the system only worked on the vendor supplied hardware. This meant that the vendor was the sole-source for application and hardware support. Since the vendor is no longer in business, any hardware failure meant there was no way to update or replace the hardware and maintain the system.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

Highly probable. Given the age of the legacy system, the hardware was always at risk of failure and matching replacement parts were becoming harder to find due to the advances in technology

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing*

time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

This project, to replace an aging black-box proprietary Interactive Voice Response (IVR) system that was no longer supportable, was successfully completed in January 2014. The primary benefit identified for the project was to replace the antiquated on-site system that was proving more difficult to sustain each year, with a contemporary solution hosted externally to King County. This benefit was achieved. The new hosted solution has eliminated the need for King County Metro to maintain and administer system hardware; that maintenance is now the responsibility of the vendor.

A secondary benefit of the investment in the new IVR system is the improved functionality provided, including the ability for customizable flood gate messaging, improved reporting, ease of configuration, and the automated route schedule lookup feature that provides callers with 24/7 access to all fixed route schedules.

The following metrics show usage stats over the first year since implementation of the new system. Although similar stats were not available from the previous system for comparison, these metrics do highlight benefits provided by the new system features. For example, 18.3% of all callers to 206-553-3000 went to the self-service automated schedule lookup feature “My Ride”, therefore not requiring any customer service representative resources.

The below table shows how customers selected options from the IVR main menu between 01/2014 and 12/2014:

<b>IVR Menu Option</b>	<b>Metric Description</b>	<b># of Interactions</b>	<b>% of TOTAL 2014 Interactions</b>
Customer Information	Callers selecting to speak with a customer service agent	378,636	71.8 %
My Ride	Callers selecting the automated schedule lookup feature “MyRide”	96,709	18.3 %
Accessible Services	Callers selecting to transfer to “Accessible Services”	31,200	5.9 %
Ride Share	Callers selecting to transfer to “Ride Share”	4,942	0.9 %
Interpreter	Callers selecting “Interpreter”	15,585	2.9 %
<b>2014 TOTAL</b>		<b>527,072</b>	

This table shows the number of unique information requests within the My Ride option. 96,709 (18.3%) callers utilized My Ride in 2014, making 154,196 unique information requests for route schedule information:

	<b>Metric Description</b>	<b>Date Range</b>	<b># of Information Requests</b>	<b>% of 2014 TOTAL Information Requests</b>
<b>MyRide (automated schedule lookup)</b>	<i>The total number of information requests, by month, from within the MyRide system during 2014.</i>	01/2014	11,263	7.3 %
		02/2014	10,534	6.8 %
		03/2014	11,014	7.1 %
		04/2014	11,663	7.5 %
		05/2014	13,969	9.0 %
		06/2014	14,353	9.3 %
		07/2014	15,577	10.1 %
		08/2014	14,036	9.1 %
		09/2014	14,372	9.3 %
		10/2014	13,251	8.6 %
		11/2014	11,426	7.4 %
		12/2014	12,738	8.3 %
		<b>2014 TOTAL</b>	<b>154,196</b>	

Update – 2/6/2015: This is the final report for this project. All benefits have been achieved.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Rider Information Systems (RIS) – TABS
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jill Krecklow	Finance Manager- Enterprise Operations, DOT Transit Division	Finance Manager – Overall Capital Program Development
Bob Virkelyst	Sales & Customer Services, Service Information, DOT Transit Division	Sponsor
Sharon Slebodnick	Service Development, Route Facilities Supervisor, DOT Transit Division	Sponsor

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual Report	2/14/2014	Jill Krecklow	Initial Report	1 hour
Annual Report	03/20/14	Kathleen McMurray	Revised per feedback	1 hour
Annual Report	02/19/15	Liviu Prisecaru	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The legacy Timetables and Bus Schedule Information System (TABS) was custom designed and implemented in 1992 for the production of paper timetable pamphlets and paper bus stop scheduled that are posted at bus stops. TABS is used to collect and reorganize data for use by PageMaker publishing software and to provide schedule information for use in Metro Online. TABS currently has two components (Automated Time Tables and Bus Stop Information) each of which is facing significant end-of-life issues. While TABS is working today, the continued complexity of data and changing business requirements will continue to require resources to modify and update the highly customized and non-vendor supported system.

This project will replace both components of TABS (Automated Time Tables and Bus Stop Information) with a modern technological solution that will be maintainable, adaptive and designed to minimize cycle time of production processes.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The TABS system is highly customized and non-vendor supported. As technology and business requirements change, the risk of being able to produce timetables and bus schedules in a consistent and timely manner will be at risk.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is*

*approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example:** Cost Avoidance. *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

- 1. Describe why you expect the proposed IT investment to reduce costs?*
- 2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
- 3. What is the current baseline?*
- 4. What is the target for this measure? (How much savings will this project achieve)*
- 5. When is the cost reduction likely to be achieved?*

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.*** *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in*

*less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• <i>10 days processing time</i></li> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>1 day processing time</i></li> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>2 day processing time</i></li> <li>• <i>20 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$200,000 savings</i></li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Real Time Information Signs
<b>EBS Project Number</b>	1028618

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Dan Overgaard	Systems Development and Operations, DOT Transit Division	Sponsor
Karen Rosenzweig	Service Development, DOT Transit Division	RapidRide Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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## Section 5. How long will it take to complete the benefit achievement plan?

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual Report	1/6/14	Kathleen McMurray	Initial Report	3 hours
Budget Process Update	2/10/14	Kathleen McMurray	Updates per feedback from Council staff	1 hour
Annual Report	2/10/15	Kathleen McMurray	Updates to Sections 6 and 7	2.5 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Under this project Transit is procuring and installing real time customer information signs at select high ridership stops along five RapidRide corridors (A Line through E Line). These signs display the estimated next bus arrival time as well as dynamic messaging to waiting customers.

Information exists about scheduled service in the form of timetables in both digital and paper formats, and posted at existing stops along the corridors. The static paper versions of these schedules by their very nature cannot take into account fluctuations in traffic patterns, inclement weather, minor schedule variations, and other impacts that alter the actual arrival of the bus at the stop.

The addition of real time information signs predicting next bus arrival time at selected Rapid Ride locations provides more accurate and dynamic bus time information, and improves the effectiveness of transportation services. It provides customers with an assurance that the bus is coming and the freedom to make choices on how to make the best use of their wait time for public transportation. The dynamic messaging allows important information, such as adverse weather reroutes, to be provided to riders. In all, these provide an enhanced customer experience that is part of the RapidRide brand.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

1. **Availability of real time information at the designated bus stops** – Success will be measured by having real time bus arrival estimates available at the designated bus stops.
2. **Improved effectiveness of transportation services** – Success will be measured using customer surveys. Customers of each RapidRide line will be asked how satisfied they are with the real time customer information signs.

3. *What is the current baseline for this measure?*

1. **Availability of real time information at the designated bus stops** – Baseline for this measure is having no real time bus arrival estimates available at the designated bus stops.
2. **Improved effectiveness of transportation services** – There is no baseline number for this measure because these are new amenities for our bus stops.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

1. **Availability of real time information at the designated bus stop** – Target for this element is having real time bus arrival estimates available at the designated bus stops.
2. **Improved effectiveness of transportation services** – Target is for the majority (over 50%) of the customers to be satisfied with the real time customer information signs.

5. *When is the benefit likely to be achieved?*

Upon implementation of the signs for each RapidRide line. Lines A – D E are currently complete and the benefits have been achieved. The E Line was completed in February 2014. Customer Surveys that will address customer satisfaction with the E Line signs will be conducted in Summer 2014.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

**Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

**Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.

**Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

**Section 7. Benefit Achievement Summary**

**Benefit Achievement Summary**

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

Update – 2/10/15

RapidRide lines A, B, C, and D and E have been implemented and the benefits of the real time customer information signs have been realized. RapidRide line E was implemented in February 2014. Customer surveys for the E Line will be conducted Summer 2014.

Metric Description	Metrics	Baseline	Target	Actual
Availability of real time information at the designated bus stops	Success will be measured by having real time bus arrival estimates available at these bus stops.	No real time bus arrival estimates available at stop.	Real time bus arrival estimates available at stop.	Lines A – E: Real time bus arrival estimates available at stop.
Improved effectiveness of	Success will be measured using	No baseline number	Over 50% of customers	Update – 2/10/15: Summary of customer

transportation services	customer surveys. Customers of each RapidRide line will be asked how satisfied they are with the signs.	available	are satisfied with the signs.	satisfaction (details below): Line A: 69% satisfied Line B: 73% 79% satisfied Line C: 70% 82% satisfied Line D: 67% 78% satisfied Line E: TBD <sup>4</sup> 81% satisfied
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Percent satisfied on most recent survey for each line:

RapidRide Line	Survey Date	Period of Operation <sup>2</sup>	Percent Satisfied <sup>3</sup>
A Line	10/2013	3 years	69%
B Line	12/2011	1 year	73%
C Line	4-5/2013	6 months	70%
D Line	4-5/2013	6 months	67%
E Line	TBD	TBD	TBD

Update – 2/10/2015:

Percent satisfied with real time signs on most recent survey for each line:

RapidRide Line	Survey Date	Period of Operation <sup>4</sup>	Percent Satisfied <sup>5</sup>
A Line	10/2013	3 years	69% No new survey
B Line	11/2014	3 years	79%
C Line	6/2014	18 months	82%
D Line	6/2014	18 months	78%
E Line (see Note below)	5/2014	2 months	81%

<sup>4</sup> Customer surveys for the E Line will be conducted Summer 2014.

<sup>2</sup> Period of Operation is the length of time the line was in operation when the survey took place

<sup>3</sup> Percent Satisfied includes those who responded either 'Very Satisfied' or 'Satisfied'

<sup>4</sup> Period of Operation is the length of time the line was in operation when the survey took place

<sup>5</sup> Percent Satisfied includes those who responded either 'Very Satisfied' or 'Satisfied'

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation/ Transit Division
<b>Project Title</b>	Vanpool Information System Modernization
<b>EBS Project Number</b>	1123913

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Karen Martin	Transit Rideshare Operations Chief/DOT	Project Business Lead

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies

(the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Initial PRB Funding Release	5/14/14	Catherine Boon	Draft for review	1 hour
Initial PRB Funding Release	5/21/14	Karen Martin	Review and edits for submittal	1 hour
Initial PRB Funding Release	6/23/14	Catherine Boon	Revisions following review	20 min
Annual Report	2/18/2014	Catherine Boon	Review only	.25 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

*1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

Metro Transit's Vanpool Program is the oldest and largest publicly operated program in the United States with nearly 1800 vehicles supporting over 1300 vanpool groups and over 10,000 participants. Staff in Transit's Rideshare Operations group use a suite of information system tools to manage all aspects of the Vanpool Program including setting up and managing vanpool groups, tracking vehicle mileage and scheduling maintenance, and collecting monthly payment from each vanpool group. Based on recent experience, Rideshare Operations projects that the Vanpool Program will grow by 15% by the end of 2016. Pending cuts of regular transit service can be expected to generate even more customer demand for transportation alternatives like vanpools.

This project will move two primary tools used by Rideshare Operations staff from an obsolete client-server architecture to a modern browser-based architecture. The legacy systems are the original Vanpool Information System (VIS), a contractor-developed desktop application custom built for Metro in 1995 using Visual Basic 6 (VB6) and an in-house developed desktop application known as Vanshare, implemented in 2004 using Visual Basic for Applications (VBA). Microsoft stopped supporting VB6 in 2008.

The VIS application is well past its useful life, risky to modify, difficult to maintain and 3rd party software is no longer supported. The Vanshare application was introduced 10 years ago to augment VIS and work around some of its technical constraints. It is highly integrated with VIS and combining the two will result in reduced duplicate entry of data.

The project is included in the Transit Information Systems Preservation budget which funds replacements and upgrades of systems that face failure due to their age and changes in business requirements.

This project is aligned with Goal 6 of King County Metro's Strategic Plan, Financial Stewardship, specifically the strategy to "provide and maintain capital assets to support efficient and effective service delivery." In addition, this project supports King County's Strategic Technology Plan objective of Technology Modernization of Applications to "enable business solutions that are flexible, timely and dependable by pro-actively evolving modern application technologies and processes."

*2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The legacy systems have been fairly stable and the risk of them failing is estimated to be between 25 and 40%. If either application fails, it could take weeks to fix the problem during which time there would be a significant customer and financial impact. The real risk is that as time goes on these applications will not be able to support the business in a practical way. For example, the applications will not be able to be moved into a Windows 8 environment and the SQL Server database will not be able to be kept current because the applications won't support the new version.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

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5. *When is the cost reduction likely to be achieved?*

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

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**Example:**

Metric Description	Metrics	Baseline	Target	Actual
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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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<b>King County Department/Agency Name</b>	Department of Transportation (DOT)/Transit Division
<b>Project Title</b>	Wireless Transit Signal Priority (TSP)
<b>EBS Project Number</b>	1028617

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
John Toone	IT Project Manager II, DOT Transit Division	Conceptual Design, ITS Architect, Project Manager
Brad Kittredge	IT Project Manager II, DOT Transit Division	Business Owner (System) System Operator
Irin Limargo	Supervisor, DOT Transit Division	Business Owner (Functional) Capital PM for new installations/deployments

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Funding Release	9/12/2013	John Toone	New, initial draft	5 hours
Annual Report	1/31/2014	Kathleen McMurray	Review only	.25 hours
Annual Report	2/14/2014	Jill Krecklow	Clarification of benefits as cost avoidance.	.75 hours
Annual Report	3/20/2014	Kathleen McMurray	Updates per PSB and Council feedback	1 hour
Annual Report	2/6/2015	Kathleen McMurray	Updated to indicate this is the final report	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

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5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*

This project installed software on the Metro bus fleet giving it the capability to communicate directly with the Signal Priority System using the On Board Systems wireless communications equipment at a cost of \$295,000. This eliminated the need for 84 Transit Signal Priority (TSP) tag readers across 21 TSP intersections on the RapidRide A-Line. At a cost of approximately \$35,000 per intersection, the estimated total cost to purchase and install tag readers would have been \$735,000, or \$440,000 more than the cost of the software.

This capability extends to all future new TSP intersections. To date, including the RapidRide A-Line, TSP has been installed on 107 intersections with an additional 93 under construction for a total of 200 intersections using direct wireless communications from the bus. Had the previous approach been used, additional costs and time would be required. Specifically, approximately \$7 million in costs have been avoided by using this new approach. Compared with the previous approach, additional applications of the Wireless TSP will allow TSP to be installed at more locations than may have been financially feasible. In fact, 23 additional TSP intersections are planned and another 10 have been proposed.

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

One measure of the project benefit assumes that installation would have occurred under the previous approach. It is not certain that these additional applications would have been determined to be financially feasible. For this method, project benefit can be measured by the number of new TSP intersections implemented using this capability times the estimated cost to use RF tag readers, minus the cost to install the software on the buses. This would be considered a cost avoidance rather than a cost reduction.

3. *What is the current baseline?*

Using the old technology, the cost for installing RF tag readers at 200 TSP intersections would be approximately \$7 million. As noted above, it is not certain that this would have been determined to be financially feasible.

4. *What is the target for this measure? (How much savings will this project achieve)*

The project will allow for broader use than may have been financially feasible under the previous approach. Under the old system, only 8 TSP intersections could have been installed for \$295,000 (project cost divided by estimated cost of purchasing and installing RF tag readers for an intersection). The costs avoided are about \$7 million if the original approach had been determined to be financially viable. The real benefit to the program is the increased number of TSP installations that are possible with this lower cost alternative.

5. *When is the cost reduction likely to be achieved?*

This project represents cost avoidance rather than cost reduction.

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>

This project, to install software on the Metro bus fleet allowing wireless communication between the bus and the Signal Priority System, has resulted in the ability to expand the number of TSP applications at a significantly lower cost than previous approaches. The investment in this project will continue to provide benefit as more TSP applications may be installed than would have been financially feasible under the previous approach.

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<p><b>Cost Avoidance.</b>  <i>This project allows Metro to install TSP technology at more intersections at considerably lower cost than would have been possible with the previous technology.</i></p>	<p><b>This Cost Avoidance</b>  <i>is measured by the number of new TSP intersections implemented times the estimated cost to use the old technology (RF tag readers), minus the cost to install the software on the buses.</i></p>	<p><i>The cost of purchasing and installing RF tag readers at 200 TSP intersections would have been approximately <u>\$7,000,000.</u></i></p>	<p><i>The cost of the Wireless TSP Project was <u>\$295,000.</u></i></p>	<p><b>Cost Avoidance.</b>  <i>The Wireless TSP solution was implemented for <u>\$295,000.</u> This represented a potential <b>Cost Avoidance</b> of <u>\$6,705,000</u> since RF tag readers are no longer required for buses to communicate with the Signal Priority System. This is a <b>Cost Avoidance</b>, not an actual cost savings because Transit likely would have installed fewer than 200 TSP intersections with the old technology.</i></p>

Update – 2/6/2015: This is the final report for this project. All benefits have been achieved.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Transportation, Transit
<b>Project Title</b>	Transit Signal Priority Equipment
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Kevin Desmond, General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Dan Overgaard	Supervisor, Transit Systems Development and Operations	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Finance Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	6/4/2014	Yan Zhang	New, initial draft	.5 hours
Conceptual review	7/2/2014	Kathleen McMurray	Update	.5 hours
Conceptual review	9/28/2014	Dan Overgaard	Update in response to questions	1 hour
Conceptual review	10/5/2014	Jill Krecklow	Final Changes with Budget	15 minutes
Annual Report	2/12/15	Kathleen McMurray	Minor updates	.5 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The scope of ~~the proposed~~ this project is to develop requirements and a design for a replacement Transit Signal Priority (TSP) system. As such, this phase of the project will not deliver the proposed benefits, but rather will provide more information on what benefits can be expected if the replacement

system is procured and implemented.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The ~~expected~~ benefits to be expected from the replacement system will be identified through a detailed analysis of the functional and technical characteristics of the replacement technology. This analysis phase will assess data management processes, system configuration requirements, maintenance requirements, and other features of the proposed replacement system in order to compare the level of effort required for its future maintenance and ongoing support.

During the planning stage the project will also identify any potential improvements in bus schedule reliability, on-time performance, and trip time savings from modernizing the Transit Signal Priority system.

3. *What is the current baseline for this measure?*

The current baseline for this measure is the level of effort required to maintain and support the current TSP system. Using the current TSP technology and supporting processes, each additional corridor equipped for Transit Signal Priority requires, on average, approximately 0.3 FTE Functional Analyst to perform ongoing system monitoring, data analysis, trouble-shooting, data production and coordination.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Any new technology will require some level of ongoing support and maintenance. It is not possible to assign a specific target for improvement without knowing more about the replacement technology and how it works – e.g., the overall complexity of the system, the interactions between devices, and the level of data management and analysis that is required to configure the system and keep it running at an optimal level. In developing requirements for the new system, Transit would be seeking to achieve improvements that would support greater productivity, so that more TSP corridors could be deployed without needing to increase support staff at the same rate as the current system.

During the planning stage, targets will be established for potential improvements in bus schedule reliability, on-time performance, and trip time savings resulting from modernizing the Transit Signal Priority system.

5. *When is the benefit likely to be achieved?*

The internal service benefits for this project are expected to be achieved after a new TSP system is deployed and the existing system has been decommissioned. The currently proposed phase of the project (2015/2016) is intended to produce requirements and a proposed design for a replacement system. As a result the benefits will not be realized in this phase. Assuming a follow-on project is submitted and funded, the operational benefits will be realized after implementation. The schedule for deployment of the replacement system has not been determined.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project**

**will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

Transit signal priority (TSP) is one of several branded elements of the King County Rapid Ride program. ~~By~~ At the end of 2014, there ~~will be more than 200~~ were 180 operating transit signal priority installations ~~across all six RapidRide lines, route 120 and several other projects under construction~~ with more than 20 in development. The system is designed to improve transit speed and reliability by requesting special treatment for buses at signal on TSP equipped corridors – either by holding a green light to allow a bus to pass, or by shortening its wait at a red light.

As discussed in greater length in section 9 of the Conceptual Review document, the TSP system was current technology at the time it was procured in the mid-1990s. Historically, the traffic control industry has tended to keep using its installed technology much longer than other technology-dependent markets, and has been extremely conservative (some might say reluctant) to adopt new technologies as they became available. So although the TSP equipment platform was updated within the past two years, the overall system design is based on 20 year old technologies and practices. The recent updates did not change the overall architecture or functionality within the system. The system has been difficult to deploy and has a history of reliability issues in large part due to the original design. The system has also been difficult to integrate with local traffic controllers because of their varied use of different controllers and traffic management strategies.

Several factors create the need to pursue a future replacement for the existing TSP system, including:

- Unavailability of wireless equipment to expand or maintain the current network,
- Age of the current TSP system platform and architecture,
- Insufficiently vehicle location accuracy from the on-board systems.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This

category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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<b>King County Department/Agency Name</b>	DOT/Transit
<b>Project Title</b>	ORCA Replacement Planning
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Dan Overgaard	Supervisor, DOT Transit Division	Stakeholder
Kathleen McMurray	Supervisor, DOT Transit Division	Stakeholder
Jill Krecklow	Finance Manager, DOT Transit Division	Finance Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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Conceptual review	9/4/2014	Kathleen McMurray	New, initial draft	6 hours
Annual Report	2/18/2015	Catherine Boon	Review only	.25 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

This project is to fund King County's participation in the detailed planning and scoping to replace the existing regional ORCA smart card fare collection system. The ORCA agencies have agreed to a number of strategic objectives for the ORCA replacement project of which the following are designed to improve the quality of services provided to the public.

- *Improve customer experience*
  - *Programs for unbanked/underbanked--create programs that make it easier for customers without banking relationships to use ORCA to purchase tickets, take advantage of ride discounts and participate fully in any services ORCA may offer.*
  - *Business and institutional programs--continue to provide programs that cater to the needs of local businesses and leverage the scale that their constituents provide*
  - *Instantaneous availability of loaded value--increase customer satisfaction by eliminating the waiting period for value added to the ORCA cards*
- *Increase ORCA usage*
  - *All modes--make ORCA easily usable on all modes of transport*
  - *Market penetration--make ORCA available through as many venues as possible in addition to the current retail network and ticket machines*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

This is a planning project, therefore the benefits to the public will not be fully realized at its completion. However, the scope of this project includes development of detailed requirements for the the new system. The benefits of this planning project will be measured by the inclusion of the following requirements in the planning project deliverables:

1. The system must address the needs of the customers with limited or no access to bank accounts.
2. The system must provide programs that support Metro's institutional customers (such as schools and local businesses).
3. The system must provide instantaneous availability of loaded value. Note: Currently, due to limitations in the technology, a customer must wait up to 48 hours for fare value purchased via the ORCA website to be available on their ORCA card.
4. ORCA must be easily available for use on all modes of transportation.
5. ORCA availability must be expanded beyond the current retail network and ticket vending machines.

3. *What is the current baseline for this measure?*

The current baseline for this measure is that there are no detailed requirements for a next generation ORCA system.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

This is a planning project, therefore the benefits to the public will not be fully realized at its completion. Therefore, the target baseline for this measure is a set of detailed requirements for a next generation ORCA system that include the strategies identified to improve the customer experience and to increase ORCA usage.

5. *When is the benefit likely to be achieved?*

These detailed requirements are likely to be finalized by the end of 2016.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

*1. Describe why you expect the proposed IT investment to produce the benefit(s).*

This project is to fund King County's participation in the detailed planning and scoping to replace the existing regional ORCA smart card fare collection system. The ORCA agencies have agreed to a number of strategic objectives for the ORCA replacement project of which the following are designed to improve internal operations.

- *Fiscal responsibility*
  - *Lower Total Cost of Ownership (TCO)--ensure that the new system is cost-effective to implement and efficient to operate.*
  - *Lower upgrade and improvement costs—increase the use of state-of-the-art technology to create efficiencies, and design a system that is modular enough to be easily upgraded as technology changes*
- *Operational efficiency*
  - *Roll out new functionality and upgrades faster--use technology and governance to enable the region to quickly assess and pilot new technology features and implement them efficiently.*
  - *Make data easier to access for agencies and public--allow agencies to find, analyze and report information easily.*

*2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

This is a planning project, therefore the benefits to King County will not be fully realized at its completion. However, the scope of this project includes development of detailed requirements for the the new system. The benefits of this planning project will be measured by the inclusion of the following requirements in the planning project deliverables:

1. The system must be cost effective to implement and efficient to operate.
2. The system must use state-of-the-art technology and be easily upgraded as technology changes.

3. The system must provide the ability to quickly and efficiently roll out new functionality and upgrades.
4. The system must provide easy access to data by allowing agencies to find, analyze and report information easily.

3. *What is the current baseline for this measure?*

The current baseline for this measure is that there are no detailed requirements for a next generation ORCA system.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

This is a planning project, therefore the benefits to the agency will not be fully realized at its completion. Therefore, the target baseline for this measure is a set of detailed requirements for a next generation ORCA system that include strategies that are fiscally responsible and improve operational efficiency

5. *When is the benefit likely to be achieved?*

These detailed requirements are likely to be finalized by the end of 2016.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

This project is to fund King County’s participation in the detailed planning and scoping to replace the existing regional ORCA smart card fare collection system. The ORCA system was deployed in 2009 and is now used for nearly 65% of all fares collected on King County Metro service. The system includes field devices (ORCA readers and other devices) that are operated by the 7 participating ORCA agencies (Community Transit, Everett Transit, Kitsap Transit, Pierce Transit, Sound Transit, Washington State Ferries and King County Metro). In addition, there is a central clearinghouse that stores ORCA data and distributes fare revenue based upon a complex set of business rules established by the ORCA agencies. This clearinghouse is hosted and operated by the ORCA contractor under an operating and maintenance agreement. This agreement ends in 2020.

King County and its partner agencies are starting to plan for the next generation of fare collection in the Puget Sound region. Since King County is the largest transit operator in the region and has significant interest in influencing the design and strategic direction for the new system, its participation in the planning and procurement for the new system is critical.

If this project to fund King County's participation in the detailed planning and scoping to replace the existing ORCA smart card fare collection system is approved, King County will be able to properly participate in the regional planning effort. The scope of this effort will be participation in the regional planning process, the development of detailed requirements, and the possible start of a procurement process for the replacement system.

Transit expects to submit a follow-on request with system procurement and implementation costs in the 2017/2018 budget cycle.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The ORCA clearinghouse collects, reconciles and apportions fare revenue between King County and the other six participating ORCA agencies. The ORCA vendor maintains and operates the ORCA clearinghouse under an operating agreement that expires in 2020. An extension of this agreement is extremely unlikely. Should the agreement end and the clearinghouse cease to operate without a replacement system in place, King County will be without its primary fare collection system. This is a significant risk to business continuity.

In addition, the ORCA equipment and clearinghouse systems are approaching end of life, from a technology perspective, and by 2020 will be obsolete.

For these reasons, the ORCA Joint Board (General Managers and CEOs of the participating agencies) has initiated a planning project to define a next generation ORCA system that will build on the success of the current system while also improving the experience for both the agencies and customers. If Metro is not able to fully participate in the planning and requirements definition phase of this effort, the risk is high that Metro will not be in a position to influence the strategic direction and that its needs will not be adequately met by the new system.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project	Processing Time annual	• 10 days processing	• 1 day processing time	2 day processing

<p><i>reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>savings, and percentage of purchases receiving prompt payment discounts</i></p>	<p><i>time</i></p> <ul style="list-style-type: none"> <li><i>• 10 percent of purchases are receiving discount</i></li> <li><i>• Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li><i>• 30 percent of purchases are receiving prompt payment discounts</i></li> <li><i>• \$400,000 savings</i></li> </ul>	<p><i>time</i></p> <p><i>20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i></p>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Television
<b>Project Title</b>	High Definition Upgrade
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Michael Woywod~~, Carolyn Busch, Chief of Staff to King County Council

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Carolyn Busch <del>Michael Woywod</del>	Chief of Staff	
James Burns	Station Manager	
Jenny Giambattista	Legislative Analyst	Review team for the BAP

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Funding release	12/9/13	Jenny Giambattista	Initial BAP	3 hours
Annual Review	3/13/2015	Cheryl Boudreau	Annual Review	20 minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

We will measure improved quality by whether we are broadcasting in high definition.

3. What is the current baseline for this measure?

We are currently broadcasting in standard definition

4. What is the target for this measure? (How much improvement will this project achieve?)

The target is broadcasting in high definition

5. When is the benefit likely to be achieved?

We expect to be broadcasting in high definition by April 14 2015. This is the date Comcast is required to provide the HD Channel.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The primary benefit of this project is the upgrade of outdated standard definition technology to the industry standard of high definition. Most of the current equipment is approximately 7-8 years old and will need replacing soon so it seems more prudent to replace the older equipment with high definition rather than standard definition.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

*Example: Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to*

upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to	Processing Time annual savings, and percentage of purchases	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving</li> </ul>	2 day processing time 20 percent of purchases

<i>less than one allowing us to take advantage of prompt payment discounts.</i>	<i>receiving prompt payment discounts</i>	<i>receiving discount</i> <ul style="list-style-type: none"> <li>• <i>Savings of \$100,000</i></li> </ul>	<i>prompt payment discounts</i> <ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<i>are receiving prompt payment discounts \$200,000 savings</i>

## IT Project Benefits Achievement Plan

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	District Court
<b>Project Title</b>	District Court Unified Case Management System
<b>Project Number</b>	1124157

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Othniel Palomino – Chief Administrative Officer, King County District Court (KCDC)

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Othniel Palomino	Chief Administrative Officer – KCDC	Business Owner, Steering Committee Member/Leader
Judge Corinna Harn	Chief Presiding Judge – KCDC	Steering Committee Member, Project Leader
Enrique Kuttemplon	IT Director – KCDC	Steering Committee Member, IT Liaison/Lead
Jill Dorsey	Deputy Chief Administrative Officer – KCDC	Steering Committee Member
Bob Dowd	East Division Director – KCDC	Steering Committee Member
Patti Kohler	South Division Director - KCDC	Steering Committee Member
James Kim	West Division Director - KCDC	Steering Committee Member
Keri She	Business Analyst - KCDC	Responsible for analysis from IT perspective in

		capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment.
Patrick Wells	Training Coordinator - KCDC	Steering Committee Member, Responsible for analysis from operations perspective in capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment, Facilitator for Process Experts and Process Mapping.
Ann Dahlgren	Training Coordinator - KCDC	Steering Committee Member, Responsible for analysis from operations perspective in capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment. Facilitator for Process Experts and Process Mapping.
Dee Hay	Training Coordinator - KCDC	Steering Committee Member, Responsible for analysis from operations perspective in capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment, Facilitator for Process Experts and Process Mapping.
Heather Dean	Budget Director - KCDC	Steering Committee Member, Responsible for Overseeing Financial Requirements and Funding Information
Judge Anne Harper	West Division Presiding Judge – KCDC	Process Experts and Requirement Identifiers
Judge Charles DeLaurenti	South Division Presiding Judge – KCDC	Process Experts and Requirement Identifiers
Judge Peter Nault	East Division Presiding Judge - KCDC	Process Experts and Requirement Identifiers
Judge Johanna Bender	Mental Health Court Judge - KCDC	Process Experts and Requirement Identifiers
Judge Arthur Chapman	West Division Judge – KCDC	Steering Committee Member and Case Cleanup
Judge Mark Eide	South Division Judge – KCDC	Steering Committee Member and Case Cleanup
Judge Donna Tucker	Assistant Chief Presiding Judge – KCDC	Steering Committee Member and Case Cleanup
Nina Davis	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Paul McDavid	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Kenneth Li	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Maggie Bradley	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Lisa Kissler	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Amy Turley	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Elizabeth Alexander	Court Clerk - KCDC	Process Experts and Requirement Identifiers

Sommer Peck	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Lisa Bitz	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Sorin Say	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Betsy Bosch	Regional Mental Health Court Manager - KCDC	Process Experts and Requirement Identifiers
Judy Garcia	Probation Director - KCDC	Process Experts and Requirement Identifiers
Catherine Thompson	Probation Manager - KCDC	Process Experts and Requirement Identifiers
Kathy Orozco	Redmond Court Manager – KCDC	Process Experts and Requirement Identifiers
Josie Jimenez	Bellevue Court Manager – KCDC	Process Experts and Requirement Identifiers
Brandon Billak	MRJC Court Coordinator – KCDC	Process Experts and Requirement Identifiers
Tracey Smith	Auburn Court Manager – KCDC	Process Experts and Requirement Identifiers
Josh Sattler	Seattle Court Manager - KCDC	Process Experts and Requirement Identifiers
Denise Michels	Court Clerk - KCDC	Process Experts and Requirement Identifiers
LeeAnna Young	MRJC Court Manager – KCDC	Process Experts and Requirement Identifiers
Damita Beleford	Burien Court Manager - KCDC	Process Experts and Requirement Identifiers
Lillian Hawkins	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Sadora Anderson	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Kate Olson	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Katy Nelson	Shoreline Court Manager - KCDC	Process Experts and Requirement Identifiers
Rambaldo Cardoza	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Jennifer Miller	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Christina Melby	Bellevue Coordinator – KCDC	Process Experts and Requirement Identifiers
LeeAnn Rissler	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Somphien Manivanh	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Sarah Jaynes	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Theresa Reddekopp	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Elizabeth Biehn	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Nicholas D' Angelo	Probation Officer - KCDC	Process Experts and Requirement Identifiers
David Sterner	Probation Officer - KCDC	Process Experts and Requirement Identifiers
Andrea Shao	Probation Clerk - KCDC	Process Experts and Requirement Identifiers
David Alber	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Christopher Allen	Probation Officer – KCDC	Process Experts and Requirement Identifiers

Nadine Wallace	Probation Officer	Process Experts and Requirement Identifiers
Enid McAdoo	Probation Officer	Process Experts and Requirement Identifiers
Jim Phoenix	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Elizabeth Owens	Probation Officer	Process Experts and Requirement Identifiers
Jerry Pettitz	Probation Officer	Process Experts and Requirement Identifiers
Susan Butler	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Jay Gorham	Probation Officer	Process Experts and Requirement Identifiers
Steven Wede	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Sue Bainton	Probation Clerk – KCDC	Process Experts and Requirement Identifiers
		Process Experts and Requirement Identifiers
Annette Pooley	Probation Officer	Process Experts and Requirement Identifiers
Kari Goode	Probation Officer	Process Experts and Requirement Identifiers
Rachel Brooks-Bailey	Probation Officer	Process Experts and Requirement Identifiers
Annalisa Mai	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Isabelle Isidro	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Regina White	Court Clerk - KCDC	Process Experts and Requirement Identifiers

#### **Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### **Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this*

*process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

<b>Stage</b>	<b>Date</b>	<b>Revised By</b>	<b>Description</b>	<b>How long did it take?</b>
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual Review	2/10/14-2/21/14	Steering Committee	New Initial Draft	240 hours
Conceptual Review	2/24/14-3/21/14	Steering Committee	Daily Revisions	360 hours
Benefits Achievement Plan	2/28/14-4/21/14	Steering Committee	New Initial Draft	444 hours
Benefits Achievement Plan	4/22/14-7/3/14	Steering Committee	Daily Revisions	1040 hours
Costs Benefits Analysis Workbook	5/26/14-6/13/14	Heather Dean and Enrique Kuttemplon	Draft and Revisions	78 hours
Process Mapping	2/18/14-4/15/14 (and intermittent days to present)	Subject Matter Experts, Functional Analysts, Business Analysts	Process Mapped all KCDC processes to identify the scope of the requirements and assess the Financial Needs of a new System	1568 hours
BAP Review	3/1/15	Steering Committee	Review Only of BAP for PSB Report Out	2 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

**\*\*Choosing only one category as the Primary Project Benefit was extremely difficult as all four choices are primary benefits of this project and limiting it to one benefit grossly underestimates the full benefits that will be realized from a new case management system.\*\***

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

### **External Service Benefits Executive Summary:**

King County District Court (KCDC) is using the outdated statewide JIS system with limited integration to internal standalone court systems and virtually no integration with systems of other law and justice agencies statewide (including our partner contract cities). While not selected as the primary benefit of a new case management system for the purpose of this proposal, the implementation of a new case management system will vastly improve both the quality and the quantity of services that King County District Court is able to offer the public and our criminal justice partners. Through new enhanced electronic access to court records, the court will be able to offer the following new or expanded benefits to the public:

- A. With the implementation of the new case management system, people will be able to file their court documents any day, any time and from anywhere.
- B. Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.
- C. Fewer people will be sent to collections.
- D. Information from Courtroom will be accessible to the public same day.

1) *Describe why you expect the proposed IT investment to produce the benefit(s).*

- A. With the implementation of the new case management system, people will be able to file their court documents any day, any time and from anywhere.**

eFiling will be a central requirement for a new Case Management System. eFiling will allow for access to District Court outside of regular business hours. With the implementation of eFiling, documents can be filed twenty-four hours a day, seven days a week from any computer with internet access. This transforms the current filing system from limiting the public and our criminal justice partners to eight filing locations, to a system where essentially any computer terminal becomes a portal to King County District Court.

- B. Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.**

A new case management system will not only allow parties to access services electronically from anywhere but it will also allow the court to reach defendants through modern means. Currently, notices for upcoming court hearings are delivered standard postal mail. While this meets the legal requirements it is an inadequate means of notification in the current technological environment. Given an atmosphere of frequently outdated addresses, defendants with unstable housing situations, and a culture highly reliant on smartphone technology, mailing paper notices is not dependable and often ineffective. The new case management system will have the technology for hearing notices to be delivered via text and/or email for those who opt-in. Individuals will get notices of future court hearings immediately, and the system can be programmed to send out multiple reminders to keep defendants up to date on the status of their hearing. While text and email will not replace standard mail as a means for notification at this time, they will help the Court reach individuals for whom postal mail was previously an unreliable noticing method thereby providing a supplemental service to the public.

- C. Fewer people will be sent to collections.**

Currently King County District Court contracts with NCO Financial in order to collect on unpaid court fines and traffic infractions. The new case management system would allow King County District Court

to take over the payment plan portion of the NCO contract, maintaining their services only for collections. With King County District Court in control of payment plans, the court could allow for time payments or different pay dates tailored to the defendant's economic situation; smaller monthly payments in response to the defendant's financial standing; or hold the debt if special circumstances arise if the defendant misses a payment. Reminder notifications can be generated by the system with minimal clerical labor to prevent lapses in payment. These notices can be configured to go out by mail and/or as text/email alerts if the defendant desires. If a debt obligation goes unpaid for a certain period of time, the Court may still contract with a third party to handle collection procedures which often require extensive staffing. Having a system in place to foster cooperation with the defendant will enable the court to offer the public payment plan arrangements to match their financial situations.<sup>1</sup>

**D. Information from Courtroom will be accessible to the public same day.**

Documents created in open court will be created within the system by the judge and clerk, signed by the parties electronically in open court, and uploaded in the system without the need for any clerical re-entry of data. The only paper copies will be those that are printed from the system as reference documents for the defendant. This will be a huge improvement from the current system where all documents are created as paper copies that need to be transcribed into the system and the originals then scanned and indexed, often resulting in a delay of four to five business days or more until the information is viewable in the system by the public will be eliminated. (Please see *King County District Court BAP Supplemental Details* Section VII for more detailed information).

2) *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- A. **With the implementation of the new case management system, people will be able to file their court documents any day, any time and from anywhere.** - We will measure the system's availability for after-hours access by parties remotely (with the exception of planned system downtime for planned maintenance).
- B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.** - We will measure the number of texts /email notices sent out and will know the benefit has been achieved through the number of parties opting in to electronic messaging.
- C. **Fewer people will be sent to collections.** - To determine if fewer people have been sent to collections we will measure: The number of people being assigned to full collect.
- D. **Same Day Access to Court Information** – We will measure the amount of time from court hearing until documents and records are available for public viewing.

3) *What is the current baseline for this measure*

- A. **With the implementation of the new case management system, people will be able to file their court documents any day, anytime, and from anywhere.** - We currently do not have this functionality and thus the baseline is zero.

<sup>1</sup> "Maximizing Recovery Rates in Consumer Debt." Timetric (2012): n. pag. Timetric, Apr. 2012. Web. 23 May 2014.

- B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute** - The current baseline for this is zero as we do not have this functionality on our current system.
- C. **Fewer people will be sent to collections.** The current baseline for this measure is approximately 166,484, which is the number of cases assigned to collections in 2013.
- D. **Same Day Access to Court Information** – The baseline is the current average of 4 to 5 days from hearing in open court to the time when the documents are available for public viewing.

4) *What is the target for this measure? (How much improvement will this project achieve?)*

- A. **With the implementation of the new case management system, people will be able to file their court documents any day, any-time, and from anywhere.** - The target is 99% uptime of the system with the exception of planned maintenance.
- B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.** – There is no explicit target as we currently do not have this functionality or metrics to measure it. By the end of the first year we will develop a set of metrics and targets for further years to assess the improvement from this functionality.
- C. **Fewer people will be sent to collections.** The target for collections is a 15% reduction in cases assigned to collections.
- D. **Same Day Access to Court Information** - The target for this measure is that orders, documents, and all case and hearing information would be accessible to the public within 24 hours of a hearing.

5) *When is the benefit likely to be achieved?*

- A. **With the implementation of the new case management system, people will be able to file their court documents any day, anytime, and from anywhere.** While the benefit itself will be achieved upon implementation, awareness of the benefit is likely to be achieved over the course of three years after implementation, with expectations of incremental growths beyond.
- B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.** - As we currently do not have this functionality or metrics to measure it. By the end of the first year we will develop a set of metrics and targets for further years.
- C. **Fewer people will be sent to collections** - We expect the benefit to be achieved by end of the first year in which it is implemented.
- D. **Same Day Access to Court Information** - We expect this benefit to be fully realized by the end of the first year in which it is implemented. Much of the information will be available immediately upon implementation but we recognize there may be a delay in full realization due to learning curve of new technology by staff.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

### **Executive Summary:**

As discussed in our previously submitted Conceptual Review, due to our current system's major insufficiencies, King County District Court faces daily challenges operating on multiple stand-alone systems requiring repetitive and duplicate data entry points. The following issues and challenges in King County District Court's current case management system create disjointed and challenging internal operations that require clerks to rework the same tasks. The result is increased errors and processing time which in turn increases the cost of the work and drastically reduces its reliability.

A new case management system will allow us to completely redesign our current work processes that are hampered by the old technology and limited ability to integrate with other County or City criminal justice agencies. We will be able to move to a streamlined and fully integrated workflow process that ensures:

- A. Better Utilization of Court Staff
- B. Complete Law and Justice Information Immediately Available to Judge and Clerk
- C. Accurately Determine Value of Court Programs
- D. Maximize System Uptime

Outlined below is an analysis of how a new case management system will address each of these needs:

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

**A. Better Utilization of Court Staff** – A new case management system will allow King County District Court to better utilize court clerk FTE time in several ways:

- **Reduce Volume of Documents Clerks Manually Scan into System** – As mentioned in category one, eFiling will be a central requirement for a new case management system. Attorneys will be mandated to eFile as they currently are in King County Superior Court. They will submit their documents electronically, eliminating the manual document upload process entirely, leaving the clerk to simply confirm that the attorney's inputs (such as case number and document type) are correct. Though pro se filers and defendants will have the option to file electronically or through traditional paper, the vast majority of the average 3,024,000 pages a year that are scanned into the system will be eliminated and the court's staff will be able to confirm that the documents were filed correctly thereby improving the overall accuracy of the filings. This will allow for both a reduction of some FTE's through

attrition, repurposing of some FTE's for supporting the new system, as well as a reallocation of some resources to increase quality control and customer service that KCDC does not currently have the resources for.

- **Reduction of Court Clerk Training Time** – Movement to a new case management system with only one program to train on and the elimination of hundreds of commands that must be learned to navigate JIS will drastically reduce onboarding time as well as reduce errors that necessitate continuous training of existing staff. This will allow new employees to become productive contributors more quickly, reducing the amount of time a court-location is down any employees. In turn this will allow the Training Coordinators more time to complete other trainings, develop and implement more training materials and continue to document KCDC's procedures as the system and statutes change. Much of in-court clerk training is focused on taking forms and orders generated in the courtroom and entering them into JIS via freehand docketing and command codes. Full integration of forms and orders that populate the data into the system will eliminate all of this training, allowing clerks to be trained on quality control of the data instead.
- **Timely Completion of Work** – Much of the time clerks spend processing case work is due to lack of automation and the redundant data entry in numerous standalone systems. Virtually all relevant case documents must be filed in paper form or converted to paper form and then manually scanned and indexed into District Court's outdated document management system. Due to the lack of an eFiling and case management system, King County District Court has required staff to manually input and manually manage cases. Each stand-alone subsystem exists independently and requires separate clerical data entry. The simple entry of a new case can require a clerk to enter the same data into as many as seven systems. With the implementation of a single integrated case management system with eFiling functionality, the time it takes to process a case will be reduced resulting in case work being completed in a consistently accurate and timely manner. This again, allows for both a reduction of some FTE's through attrition, repurposing of some FTE's for supporting the new system, as well as a reallocation of some resources to increase quality control and customer service that KCDC does not currently have the resources for.
- **Fewer Clerical Errors** – As mentioned above, clerks are required to manually manage cases. Data entry errors are caused by manually entering data (and often re-entering the same data multiple times). There are few safeguards to ensure data is accurate or necessary steps in the management of the case have been completed. Integration of all system components, eliminating redundant data entry requirements, as well as enhanced monitoring capabilities of the new case management system will be instrumental in helping reduce dismissals due to jurisdiction and speedy trial violations. Warning and milestone markers built into the system that are triggered throughout the life of a case are essential for case monitoring and alerting clerks and judges when action is needed.

**B. More Complete Law and Justice Information Immediately Available to Judge and Clerk -**

One of the major limitations within the current system is the lack of integration with the agencies with which District Court shares data, such as the Department of Licensing and King County law enforcement (including the Washington State Patrol, King County Sheriff, Municipal law enforcement and the jails within and outside King County who house defendants with cases in King County District Court). As a central part of this development process, King County District

Court is working with the other criminal justice agencies within King County to create a data sharing model. When the new case management system is implemented, it will conform to a data model that will allow for data transfer between all King County Criminal Justice Agencies such as Superior Court, Department of Public Defense, Sheriff's Office, Prosecutor's Office and DAJD. When a judge or a clerk is in the courtroom, the information from agencies across the county (such as King County Correctional Facility data to include other court holds, prior booking information, Court Information Services Interview data, and Personal Reference Information) will be immediately available through these data interfaces ensuring that the judge can make judicial rulings with a more complete picture of all factors, ensuring fairness and public safety.

**C. Accurately Determine Value of Court Programs** - One of the most valuable additions that the new case management system will bring to King County District Court is much improved metrics and reporting system for data tracking. King County District Court can use the data to make incremental decisions regarding those programs to better serve the public. Currently, JIS is limited in the reports that it can produce due to both the age of the database query system, non-standardized data entry and the fact that it simply was not designed for a court of our magnitude. To compound that fact, the data is queried from fields in JIS that often do not require standard entries. This means that for those reports we are able to run, the data it returns cannot be fully relied upon and thus cannot be used to accurately determine the value of court programs.

**D. Maximize System Uptime** – King County District Court faces intermittent outages of the systems causing interruptions in service and interfering with the Court's ability to carry out daily operations. Notification for system failures is often delayed, especially on systems that are not maintained by District Court such as JIS, and while repairs are being made the judicial process is halted. Additionally, the failings in our current outdated electronic document program often are only detected after the problem has occurred and requires substantial staff time to repair. A new case management system will be maintained in house, with onsite IT staff.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

**A. Better Utilization of Court Staff** – Better utilization of court staff through reduction of clerical time spent scanning documents, reduction of clerical training time, integration that will reduce time spent entering data or scanning in documents as well as increased accuracy and thus reduction of time fixing errors will allow King County District Court to return a total of 16 FTE positions to the County by means of attrition (see this information in Category 4 as well).

**B. More Complete Law and Justice Information Immediately Available to Judge and Clerk** – This benefit will be achieved upon implementation of a standard data model. Benefit realization will be achieved when judicial officers have access to information from other King County criminal justice agencies.

**C. Accurately Determine Value of Court Programs** – This benefit will have been achieved when we have the ability to input data elements, run reports, and gather statistical data about the use and performance of the programs. For example, the ability to query and measure who comes into a

program, the time span from entry to completion or recidivism, and the completion rate of participants.

**D. Maximize System Uptime** – Currently we have no mechanism to track system downtime other than anecdotally. With JIS, the state-run court database, we often find out about system errors and interface outages months later. Our new case management system will have system monitoring software that will allow for rapid notification of any error. This will allow us to measure whether our target has been achieved.

3. *What is the current baseline for this measure?*

**A. Better Utilization of Court Staff** – The current baseline is 162 number of staff.

**B. More Complete Law and Justice Information Immediately Available to Judge and Clerk** – At this time we have limited to no integration with any of the King County Law and Justice Agencies and while a committee has been formed to develop a data model, at this time there is no shared data model across the agencies. Our current baseline is that the judge has access data and information from JIS only. Any other information has to be manually researched by clerical staff such as through telephone calls, faxes, or access to other agencies systems in an often untimely process.

**C. Accurately Determine Value of Court Programs** – There is no current baseline for this measure. We lack metrics or reports to measure and evaluate program performance due to current system inflexibly and the limited and unreliable data.

**D. Maximize System Uptime** – We have no ability to measure a baseline for this measure as we currently cannot measure or monitor this for our systems and often find out about outages months after they have occurred and affected thousands of cases. The ability to monitor for these outages may be the most necessary benefits of a new case management system.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

**A. Better Utilization of Court Staff** – The target for this measure is a 10% reduction in staffing (a total of 16 positions) through attrition over a three year period of time. (See table below for details).

**B. More Complete Law and Justice Information Immediately Available to Judge and Clerk** – The target for this measure is development and adherence to a county-wide data model for all King County Law and Justice Agencies and the ability upon implementation of that data model to interface with those agencies that have that capability at that time. This will provide judicial access to more complete information.

**C. Accurately Determine Value of Court Programs** – The target for this measure is implementation of metrics and reports to evaluate the success of various court programs

**D. Maximize System Uptime** – The target for this measure is 99% uptime.

5. *When is the benefit likely to be achieved?*

**A. Better Utilization of Court Staff – The breakdown of the timeline of the benefit is detailed in the table below:**

	Year 1	Year 2	Year 3	TOTAL
Total # of FTE's eliminated by attrition through <b>ALL</b> efficiencies	8	5	5	18
Total # of FTE's Returned to County through attrition	6	5	5	16
Total Salary and Benefit Savings Returned to the County	\$467,184	\$856,504	\$1,245,824	\$ 2,569,512
KCIT workstation savings Returned to the County	\$ 9,600	\$ 15,600	\$ 21,600	\$ 46,800
Overhead Savings Returned to the County	\$ 3,764	\$ 6,899	\$ 10,034	\$ 20,697
<b>Total Staffing Savings Returned to the County</b>	<b>\$480,548</b>	<b>\$879,003</b>	<b>\$1,277,458</b>	<b>\$ 2,637,009</b>

\*Totals are year on year cumulative

**B. More Complete Law and Justice Information Immediately Available to Judge and Clerk -**

Target for this measure is not known at this time as a King County Criminal Justice Committee spanning numerous county criminal justice agencies is currently driving this process. King County District Court is committed to adhering to the timeline developed and decided upon by this committee.

**C. Accurately Determine Value of Court Programs –**

Upon implementation of this system we will have the reporting capabilities. As soon as the new system launches, reliable data will start to be collected for measurement. A year after launch of the new case management system, analysis will be done with trusted information accumulated over the previous year. With the data, measurements can be made and goals for subsequent years drafted along with evaluation of success and effectiveness of court programs.

**D. Maximize System Uptime -**

This benefit is likely to be achieved within 1 year of implementation as the unstable systems will be replaced in full and new integration with built in validation of data transfers and system monitoring software will be elements of the new system.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013,*

*advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

**Please see section XIII (Upgrade of Technology to Maintain and Increase Service to the Public) of King County District Court BAP Supplemental Details for information on this Category**

JIS fails to help King County District Court meet the mission of providing a forum that is fair, efficient and accessible. Instead the current case management system produces errors, inefficiencies, and service outages that stalls the judicial process. The new case management system will replace the Court's reliance on JIS and upgrade the secondary programs to be better integrated with the system as a whole and will provide both improved reporting and monitoring capabilities. An improved reporting and data collection system will enable King County District Court to provide quality control and meet its fiduciary responsibility to the public. The new case management system will have the capability to calculate speedy-trial and reconfigure the timeline whenever waivers are filed or warrants are issued. These automated calculations will provide an essential safeguard to ensure a timely resolution of all cases.

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

## **Executive Summary:**

District Court expects that eFiling and system-generated forms will reduce paper documents filed to, and produced by, the Court by 35% of the baseline total. From this reduction the Court will realize a savings of 4 FTE positions through attrition. The Court will reassign one staff position into a professional position. The professional position will be used to analyze and maintain data integrity and return 3 of those positions to the county (keeping the salary of and benefits necessary to fund the professional position).

District Court expects that the reduction in paper documents filed to, and produced by, the Court to be 50% from the baseline total, two years after launch. From this reduction, the Court will realize a time savings of an additional 2 FTE positions through attrition.

In the third year after launch, the expectation is that paper documents filed to, and produced by, the Court will be reduced 75% from the baseline total. From this additional reduction, the Court will realize a time savings of 3 more FTE positions through attrition.

The current system also requires a substantial amount of clerical time to be expended towards the manual processing of paper documents filed with the Court. Time must be spent preparing the documents for the scanning program as well as converting the documents into a readable electronic format. The launch of eFiling and system generated forms will vastly reduce clerical time spent uploading documents into the electronic court record.

The lack of integration between the District Court system (JIS) and the probation system (PCMS) has led to a substantial amount of clerical time being spent transferring data between the two systems. The new case management system will have a probation module included which will have full integration with the District Court component. This will greatly reduce the amount of clerical time spent manually entering redundant data. The Court expects that the efficiency savings will allow for the investment of a management position and return to King County 3 FTE positions through attrition. Within the first three years of implementation, King County District Court will return a total of 10% of its FTE clerical positions to the county through attrition. (See table in Question 5 for full breakdown of positions).

It is clear that a new case management system will allow us to completely redesign the way we do business and allow us to significantly reduce costs through a streamlined and fully integrated workflow process that will result in the following:

- A. A Six Year Payback of Project Costs
- B. 10% Efficiency in Staffing through Attrition
- C. Savings through Elimination of High Volume Scanners

*Describe why you expect the proposed IT investment to reduce costs?*

- A. Six Year Payback of Project Costs** - The benefits realized after the first five years of implementation will almost fully recover the project costs. By the end of the sixth year, benefits will have fully recovered the project costs.
- B. 10% Efficiency in Staffing through Attrition** - King County District Court estimates that the

efficiencies provided by launching a new case management system will allow the Court to return a total of 16 FTE positions to the County by means of attrition. Currently we experience a net attrition rate of approximately 15 FTE's on an annual basis and will return FTEs to the county per the chart below. Furthermore, the Court is committed to investing in one additional professional staff position to meet the complex challenges such as data analysis to ensure quality control and data integrity, and one additional management staff to facilitate the process. The Court will not seek additional funding for these positions, instead funding them through additional clerical savings done through attrition.

**C. Savings through Elimination of High Volume Scanners** - The court will also realize a cost saving transitioning from expensive high volume scanners to smaller desktop models with an expected decrease of \$44,000 annually in licensing fees alone. After taking into account maintenance contracts and other costs, the total savings of these high volume scanners will total \$110,000 annually.

1. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

**A. Six Year Payback of Project Costs** – We will know that this benefit has been achieved through the reduction in payroll through efficiencies, the reduction of certain costs due to the higher productivities of the system, and realization of new revenue sources. (Please see Cost Benefit Analysis Workbook for detailed figures)

**B. 10% of Efficiency through Attrition** - This will be measured through the decreasing staffing number through attrition over time (see question 5, section B for schedule of reduction).

**C. Savings through Elimination of High Volume Scanners** – This benefit will have been achieved when we are able to eliminate the high volume scanners and terminate any associated maintenance contracts resulting in full eradication of costs.

2. *What is the current baseline?*

**A. Six Year Payback of Project Costs** – The baseline is repayment of \$0 costs. By end of year six, full repayment of costs will have occurred.

**B. 10% of Efficiency through Attrition** - The current baseline is 162 number of staff.

**C. Savings through Elimination of High Volume Scanners** – The current baseline is the approximately \$110,000 in annual expenditures on the high volume scanners.

3. *What is the target for this measure? (How much savings will this project achieve)*

**A. Six Year Payback of Project Costs** – Target for this measure is full payback of project case. District Court is expecting to go live with the new Case Management System in 2017. Six years after go live, District Court will have paid back the project cash needed.

**B. 10% of Efficiency through Attrition** - The target for this measure is a 10% reduction in staffing (a total of 16 positions) through attrition over a three year period of time. (See table below for details).

**C. Savings through Elimination of High Volume Scanners** – The target for this measure is elimination of all high volume scanners resulting in a \$0 annual expenditure.

4. *When is the cost reduction likely to be achieved?*

**A. Six Year Payback of Project Costs** – The payback of costs will occur six years from implementation. Please see the Cost Benefit Analysis for detailed repayment information.

**B. 10% of Efficiency through Attrition** - The breakdown of the timeline of the benefit is detailed in the table below:

	Year 1	Year 2	Year 3	TOTAL
Total # of FTE's eliminated by attrition through <b>ALL</b> efficiencies	8	5	5	18
Total # of FTE's Returned to County through attrition	6	5	5	16
Total Salary and Benefit Savings Returned to the County	\$467,184	\$856,504	\$1,245,824	\$ 2,569,512
KCIT workstation savings Returned to the County	\$ 9,600	\$ 15,600	\$ 21,600	\$ 46,800
Overhead Savings Returned to the County	\$ 3,764	\$ 6,899	\$ 10,034	\$ 20,697
<b>Total Staffing Savings Returned to the County</b>	<b>\$480,548</b>	<b>\$879,003</b>	<b>\$1,277,458</b>	<b>\$ 2,637,009</b>

\*Totals are year on year cumulative

**C. Savings through Elimination of High Volume Scanners** – Cost reduction should be achieved by the end of year one. High Volume scanners will be eliminated upon implementation of the new case management system and all associated agreements and costs associated with the existing systems will be terminated.

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be*

assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Elections
<b>Project Title</b>	Election Management System (EMS) Replacement Project
<b>Project Number</b>	1039318

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Sherril Huff, Director

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Sonja Rowland	IT PM III	Project Manager
Colleen Kwan	Quality Assurance	Quality Assurance SME
Chris Raver	IT Systems Specialist	IT Systems SME
Jacob Lodge	Voter Services Supervisor	Voter Services SME
Kortney Kinzer	Election Operations Lead	Election Operations SME
Jerelyn Hampton	Ballot Processing Supervisor	Ballot Processing SME
Joe McCleve	Ballot Processing Lead	Ballot Processing SME
Gael Gilchrist	GIS Specialist	GIS Lead
Travis Elsom	Infrastructure Supervisor	Infrastructure SME

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Business Case Submittal	7/3/2014	Sonja Rowland	New, initial draft	1.5 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).* This project will procure and implement a new Election Management System. The current EMS was installed in 2004. Since that time many changes have occurred including Washington State becoming a vote by mail state. The current system has not kept pace with these changes as well as our required statistical and quality assurance tracking and reporting resulting in the need for approximately 135 in-house processes (queries and applications) being built and supported by KCE Tech Services. Elections staff expect that the new EMS product would eliminate the need for many of these modifications.

The project will include options analysis, recommendation, selection, procurement, and implementation of new hardware and software. It will also include extensive business process changes, training, and testing before the system is fully implemented.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)* In the elimination of internally built and supported work around applications and queries currently used in day to day operations. These items will be listed in an Excel database and as we are able to sunset them, we will have a good understanding of how many we were able to do away with. This, coupled with staff ability to do other work that has been on the backburner for some time, will be our basis for measuring success. This BAP will be updated to identify the additional work staff will be able to complete as a result of eliminating these workarounds.
3. *What is the current baseline for this measure?* There are currently approximately 35 applications that have been built and are supported by KCE Technical Services as a means to fill gaps in the current Election Management System. In addition to these applications, there are over 100 different queries that have been developed by KCE Technical Services that staff use on a regular basis to extract useful information out of the current system.
4. *What is the target for this measure? (How much improvement will this project achieve?)* 75% of the work around processes that have been developed will be sunset. This will allow Elections staff to be redeployed to projects and/or initiatives that have either been delayed or are included in the King County Elections Strategic Plan 2014-2018. This BAP will be updated to identify the additional work staff will be able to complete as a result of eliminating these workarounds.
5. *When is the benefit likely to be achieved?* Within the first year following implementation of the new system.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the*

neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

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<b>King County Department/Agency Name</b>	King County Elections
<b>Project Title</b>	Overseas & Service Voter Ballot Delivery System Enhancement
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Dale Hartman, KCE IT Service Delivery Manager

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
William Adams	KCE Finance Manager	Grant Administration Oversight
Travis Elsom	KCE Technical Services Lead	Project Manager
Dale Hartman	KCE IT Service Delivery Manager	Steering Committee
Janice Case	KCE Election Operations Supervisor	Steering Committee
Rene LeBeau	KCE Ballot Processing Manager	Steering Committee
Francis DelDuca	KCE Financial Analyst	Grant Administration
Anthony Harris	KCE Quality Improvement Manager	Quality Assurance

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<b>Funding Release</b>	11/21/13	Sonja Rowland	New, initial draft	2 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s). The new application will be able to serve over 60% of all Washington State UOCAVA voters.*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?) Election metrics following each election.*
3. *What is the current baseline for this measure? 57% of UOCAVA Voters.*
4. *What is the target for this measure? (How much improvement will this project achieve?) 60% of UOCAVA Voters.*
5. *When is the benefit likely to be achieved? November 2014 Election*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.
2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

*Example: Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Office of Performance, Strategy and Budget
<b>Project Title</b>	Budget System Project Information Center 2014 Modifications
<b>EBS Project Number</b>	1121753

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Jonathan Swift, Deputy Director, Office of Performance, Strategy and Budget

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
<del>Mike Morrison Sid Bender</del>	Capital <del>Manager Program Administrator</del> /PSB	Coordinator
<del>Sid Bender Mike Morrison</del>	Capital <del>Program Administrator Manager</del> /PSB	Advisory
Hans Erickson	Project Controls Manager/WTD/DNRP	DNRP Capital Data Integration Coordinator - Budgeting and Quarterly Reporting
Shon Hong	Project Controls Manager/FMD	FMD Capital Data Integration Coordinator – Budgeting and Quarterly Reporting
<del>David Hartwell Jim Walsh</del>	<del>Technology Group Manager/PSB</del> Project	<del>Roads Services Data Integration Coordinator – Budgeting and Quarterly Reporting PSB</del>

	<u>Manager/Roads Services</u>	<u>Technology System Coordination</u>
<u>Tina Rogers</u>	<u>Manager/Capital Oversight</u> <u>Manager/King County</u> <u>Auditor</u>	<u>(This portion of the work will be addressed at a later date) Requirements Advisory – Risk Scoring Migration – Access/Excel to SQL – Ord. 16764</u>
<u>Nori Catabay</u>	<u>Sustainability</u> <u>Manager/King County</u>	<u>(This portion of the work will be addressed at a later date) Requirements Advisory – Green Building Ordinance</u>
<u>Dennis Matthews Leslie</u> <u>Arai; Tracie Jacinto</u>	<u>Developer, KCIT Project</u> <u>Manager KCIT; Business</u> <u>Analyst KCIT</u>	<u>Advisory – SQL Programming Development</u> <u>Oversee project planning and completion</u>

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review</i>	<i>How long did it take to complete or revise the form at this</i>

			only”.	stage?
<b>Budget Process</b>	10/25/13	See Section 3	Revision required for new BAP format	4 hours draft/16 hours including participant review
<b><u>Project Implementation</u></b>	<u>3/20/15</u>	<u>Sid Bender</u>	<u>In addition to increased training for CIP agency staff, this version of the BAP expands the training beneficiaries to include PSB analysts. Updated the list of operations and management staff involved in work described in this benefit achievement plan update.</u>	<u>2 hours</u>

**Section 6. Description of Project Benefits**

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

**Secondary:** Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

*The investment in system architecture will improve the overall quality of oversight by PSB. PSB has limited resources available to devote to capital project oversight, while it is responsible for proposing and monitoring about 500 projects worth \$200 to \$300 million per year. The investment in the architecture of the Project Information Center (PIC) will free up approximately 25% of an FTE at PSB, that can be utilized **to do** capital project oversight and training for agencies **and PSB analysts**.*

Who will be able to reinvest their time? Primarily, the PSB capital program administrator, who has over 25 years **of** experience managing and administering capital projects and systems, will be able to make a significant shift in the use of time.

What will they be able to reinvest their time in?

- Provide 4 training sessions per year. The training will instruct agency finance representatives on how to create capital appropriation proposals using the PIC system, and how to create quarterly reports for baselined projects or for Mandatory Phased Appropriation Projects.
- Provide more oversight- and optimizing reporting processes: This time will be spent reviewing information on existing projects being reported, projects being proposed, following up on project issues or inconsistencies, working with the county auditor to address problems, assisting agencies with requests for help with problems, and training other PSB staff to do these same activities.
- This project will also improve **d** user satisfaction because more user friendly interface, better permissions, and a better interface with EBS data.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Once the architecture changes have been completed, two measures will be utilized:

- Number of training sessions completed per year
- To measure user satisfaction, we will sample users using the zzgroup e-mail list. In addition, we will survey Council and Auditor staff using the system

3. *What is the current baseline for this measure?*

- Number of training sessions completed per year: 0
- Percent of Users satisfied with system: The baseline will be established with a survey of

all users before the system changes have been completed.

4. What is the target for this measure? (How much improvement will this project achieve?)

- Number of training sessions completed per year: 4
- Percent of Users satisfied with system: At project completion the users will be surveyed to determine whether at least 75% of the users are satisfied. One year after project completion, our target will be 90 percent of users satisfied.

5. When is the benefit likely to be achieved?

- When project is completed, starting in 2016.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

The Project Information Center (PIC) is a SQL server based application providing the county's primary oversight tool for collecting and storing capital project data. PIC is coupled with SQL Reporting Services (SRS) for report distribution.. PIC is utilized by all nine county agencies that implement capital projects.

Implementation of this project will significantly improve the county's ability to maintain high quality project oversight by maintaining data in a stable, secure and supported software environment.

Currently, these essential functions are managed in the PIC system and SQL Reporting Services:

1. Create and maintain for future viewing and analysis 500 Capital Appropriation Proposals (CAPs) per biennial budget cycle
2. Omnibus submissions
2. Supply data to GIS based public website located at [kingcounty.gov/cip](http://kingcounty.gov/cip) for projects >\$1M.
3. Supply data to quarterly council report for projects over \$1M and Mandatory Phased Appropriation (MPA) reports.

Project 1121286, currently in progress, includes development of reports in the SRS environment:

1. Migrate the Mandatory Phased Appropriation Report (MPA) quarterly status report from Access to SRS (for all designated MPA projects in the implementation phase)
2. Migrate the CAP report from Excel to SRS (for all budget requests – provided to council for capital project budget requests)
3. Migrate the Category 1 status report (for all baselined projects over \$1M) from Excel to SRS
4. Migrate the Budget status report (Level 1 and Level 3) from Access to SRS

This new request will add these functions to the PIC system:

1. Automate actual cost and budget data transfer from the EBS financial system to the PIC database for CAP reports and quarterly reports.
2. Provide a methodology for efficient data transfer from Agency project management databases, where they exist.

Additionally, implementation of this project will move all of the components included in the system to a platform that the county can continue to support. In addition, it will improve data reliability, user experience, and ability of the county to share and administer project permissions to all county stakeholders without compromising data security. The current architecture of the SQL programming is not compatible with county architecture or security standards and cannot be improved or modified in any significant way without a KCIT-led re-architecture. The initial PIC database was developed in 2009.

The average life cycle for SQL databases is dependent on the ability to keep pace with developments in SQL programming database products provided by Microsoft. Provided that the database is supported by KCIT and updated to current versions of SQL, which is part of the annual maintenance done by KCIT, the life cycle of the replacement database is not impacted by the programming platform.

In addition, a number of existing tools that are required for capital budgeting, reporting and data management are not supported by the county in a way that is acceptable in the long term. This problem is primarily related to the tool's use of Access databases in combination with Excel reports. Neither PSB nor KCIT have resources dedicated to this type of data management or reporting methodology. Therefore, this project pursues the elimination of all such tools and moves them to the KCIT supported SQL database and SQL Reporting Services model.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The likelihood of risk to the data lies with poor quality data entry from the poor user interface that currently exists. The current application is not user-friendly and lacks basic features that will improve data quality and reliability.

#### Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

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2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

#### Section 7. Benefit Achievement Summary

##### Benefit Achievement Summary

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

***Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	800 MHz Trunked Radio System Sprint/Nextel Rebanding
<b>Project Number</b>	347302

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Bill Kehoe, CIO

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Tony Minor	Manager/KCIT	Technical O&M

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Annual Report	3/4/2014	Hai Phung	New, Initial	1 hour
Annual Report	3/19/2015	Tony Minor	Update	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

**Example:** *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

**Example:** *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

This project is to comply with Federal Communications Commission's mandate in reconfiguring the 800 MHz band that being used by King County Police, Fire and Public Works agencies. It involves replacing radio units that cannot be complied with the mandate, reprogramming all radios and the infrastructure equipment. The risk is if the work is not done, King County will be out of compliance of FCC regulations and lose the licenses to use the 800 MHz radio frequencies. 2014 milestone progress was delayed by sponsor Sprint/Nextel and access limitations due to winter condition. Assuming no further delays the project is expected to be completed by the end of 2015.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

This project is to mitigate the risk of losing the FCC 800 MHz licenses by completing the user radios replacement and reprogramming and infrastructure equipment reprogramming.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example:** *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were*

required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current	Processing Time annual savings, and percentage of	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are</li> </ul>	2 day processing time 20 percent of

<i>average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>purchases receiving prompt payment discounts</i>	<i>purchases are receiving discount</i> <ul style="list-style-type: none"> <li>• <i>Savings of \$100,000</i></li> </ul>	<i>receiving prompt payment discounts</i> <ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<i>purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>
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This project is to comply with Federal Communications Commission’s mandate on 800 MHz band reconfiguration and mitigate the risk of losing the 800 MHz licenses that police, fire and public works need to operate their radios.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Administration Building Re-Wire Project
<b>EBS Project Number</b>	1120919

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

**Business Owner Name and Title:** ~~Jayne Pendergast, Deputy Chief Information Officer~~  
Aaron Barak, Director of IT Operations

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jayne Pendergast	DCIO, KCIT	Sponsor
Lori Dickneite	Network Manager, KCIT	Steering Committee
Scott Peterson	Project Manager, KCIT	Project Manager

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	9/9/2013	Scott Peterson	New, initial draft	2 hours
Review and Update	9/12/2013	Lori Dickneite	Updated Category 2 and 3 answers	1 hour
New BAP Form	10/14/2013	Scott Peterson	Revised answers	1 hour
BAP Review	2/12/2015	Scott Peterson	No changes	30 min
Council comments addressed	3/18/2015	Scott Peterson/Lori Dickneite	See changes on pages 4 and 6	1 hour

## Section 6. Description of Project Benefits

Identify the category (ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).  

The project will replace aging wiring that limits bandwidth and application performance to 10Mb today with 100Mb/1Gb capacity. ~~In doing so, business efficiencies will be increased as more applications can be run through their local area network, current systems will run faster, and services will be enhanced. With poor network connectivity, there is an impact to customers who are unable to receive services they depend on from the county.~~  
Updated 3/20/2015  
This is especially crucial in supporting the business needs of the County. For example, the Prosecutors Attorney's Office utilizes the cloud and other hosted services that require a higher bandwidth to conduct daily business. The Licensing Office handles hundreds of thousands of transactions daily that require uninterrupted network service that demand a higher capacity. Lync required installation of the new cable before they could deploy to the Administration Building.
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

Documented completion of the installation of new wiring and appropriate vendor acceptance testing of that wiring, and capacity increase.

Updated 3/20/2015

The benefit will be achieved when Lync is deployed successfully in the Administration Building and when the business can deliver their services without network services interruptions

3. *What is the current baseline for this measure?*

The current cat3 wiring is documented at 10Mb maximum throughput

It will take about 10 minutes to download a 1 Gb video

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The target is 90% increase in network capacity.

Updated 03/20/2015

Currently the connection speed is 10Mb which would take a 1Gb video around 10 minutes to download. After the project is complete, the standard connection speed will be 100Mb, improving the download speed of a 1 Gb video to approximately 1 minute

5. *When is the benefit likely to be achieved?*

Immediately after the project has completed.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

**This project brings the IT Network Infrastructure up to KCIT and industry standards. (KCIT cable standards are cat 5e. Currently the Admin Bldg. has cat 3 and cat4) The cables in some areas are 10 – 15 years old.**

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is*

approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?

~~The cost to run new data cables will drop significantly because the cables will have new cable pathways installed in cable trays along the wall rather than within the wall. This will allow the cable installers to run new cables a lot faster bringing the cost down by 20-30%. (current cost is \$300, the estimated cost is \$150) The before cost per cable installed is \$300. The estimated cost because of the new cable tray design is \$150 per cable. In the Administration Building, departments constantly move from floor to floor requiring new cables in new locations costing an estimated \$18,000 annually. This cost will drop to an estimated \$9,000.~~

2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

~~The number of requests for additional jacks and/or repairs will decrease after the re-cable project. Once LYNC is deployed, there will be an additional free cable per location.~~

3. What is the current baseline?

~~The current cost is \$300 to install a new cable vs. the cost after project completion is estimated at \$150.~~

4. What is the target for this measure? (How much savings will this project achieve)

~~30-50% off the cost to run new cables.~~

5. When is the cost reduction likely to be achieved?

~~Immediately after the project completes.~~

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>

## IT Project Benefits Achievement Plan

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Business Empowerment & User Mobility (BEUM)
<b>Project Number</b>	1117291

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Bill Kehoe, CIO~~ Aaron Barak, Director of IT Operations

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jayne Pendergast	DCIO	Project Sponsor
Bob Micielli	IT Enterprise Manager III	Steering Committee Member
<del>John Storeh</del>	<del>Enterprise Manager III</del>	<del>Steering Committee Member</del>
Ralph Johnson	Chief Information Security/Privacy Officer	Steering Committee Member
Lori Dickneite	<del>Engineering Supervisor</del> Network Services Manager	Steering Committee Member

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Funding Release	08-30-13	Lloyd Jordan	New, initial draft	.5 hrs
Project Implementation	02-12-14	Lloyd Jordan	Review Only	.5 hrs
Project Implementation	03-20-2015	Lori Dickneite	Update	1 hr

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
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**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

~~The following is from the original approved BEUM project and nothing has changed.~~

~~This project will provide continued improvement to the King County Wide Area Network, to be able to meet the continually changing business needs, while providing a solid foundation for growth within a resilient and stable network~~

~~King County Wide Area Network (KCWAN) represents the infrastructure foundation for all utilization of technology in the County. Rapid changes in today's technology offer users more and more efficiencies and conveniences. This has continued to increase challenges for the infrastructure to keep up with these demands in a secure environment. County businesses expect technology to provide means for them to support their effort to make their business process more efficient and to improve their service deliveries. To respond responsibly to these growing needs, the County must continue to invest in its IT infrastructure.~~

**Update 03/20/2015**

The projects are to expand the existing network capacities in response to many business needs. The latest major network equipment upgrade was in 2006. Average life cycle normally five years but it depends on the speed of technology changes and the adoption level of new technology in the County to support the County strategy. The BEUM project is to replace technology in the following areas of King County Technology Strategies:

Mobility:

To support the growths area in the use of mobile devices, network capacity has to increase in order to allow users of mobile devices in County building. The wireless backbone and remote access was not built to respond to current level of mobility use. Wireless could only connect 750 access points without redundancy, whereas after the upgrade it can accommodate 4000 access points with redundancy. The Remote access system limit was 500 concurrent users without redundancy, and

now after the upgrade can carry 5000 concurrent users with redundancy, and is scalable if needed.

EGovernment:

To expand Internet IP addresses. With the exhaustion of IPv4 addresses, the industry has moved to IPv6 which provides an unlimited number of addressing and has been adopted worldwide on the Internet. King County will be able to support IPv6 connections to the internet, and enable communication to agencies and partners that are using IPv6 to ensure there is no lapse in communication. IPv6 also has advanced security features and enables more efficient routing and improved data transmissions speeds.

Service Maturity:

To increase site bandwidth. The Frame Relay/T1 network transport, provided by CenturyLink, connects 103 remote sites to the King County Network and reached end of support in 2014. In addition to replacing the network transport technology, these sites required bandwidth upgrades to move them from 1.54mb connection to 20Mb connection, enabling the sites to use today's tools and technologies such as remote imaging and unified communications, which require higher bandwidth. An example is a 1.54mb connection would take approximately 9 minutes to download a 100Mb video. After the upgrades, users would see an improvement and would be able to download a 100Mb video in less than 1 minute.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Without the upgrades, King County will not be able to support the growth in mobility or provide adequate bandwidth to sites. Remote access will be limited and unable to support the demand, and support staff will need to go to remote sites to perform work locally due to slow network connections. Without IPv6, King County is in a risk of not being able to communicate with other agencies and partners using the new IP addresses

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

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1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

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**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing	Processing Time annual savings, and	<ul style="list-style-type: none"> <li>• 10 days processing time</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of</li> </ul>	2 day processing time

	<p><i>time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>percentage of purchases receiving prompt payment discounts</i></p>	<ul style="list-style-type: none"> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<p><i>purchases are receiving prompt payment discounts</i></p> <ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<p><i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i></p>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Information Technology
<b>Project Title</b>	Business Continuity
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Bill Kehoe, Chief Information Officer

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Mark Van Horn	Data Center Manager/KCIT	Alternate Data Center Manager
Darryl Hunt	Customer Service Manager/KCIT	Operating Budget Manager
Fred Grannan	KC Communications Manager/KCIT	Network Manager
Bob Neddo	Enterprise Services Manager/KCIT	Active Directory & Exchange Manager
Diana Chism	Technical Services Manager/KCIT	Backup Solution
Cheryl Ann Gunderson	Enterprise Business Continuity Program Manager	
Gary Hocking	ITSDM/DNRP	Systems & Applications for DNRP
Diep Nguyen	ITSDM/DCHS	Systems & Applications for DCHS

Katie Moriarty	ITSDM/DES	Systems & Applications for DES
Lisa Hillman	ITSDM/DPH	Systems & Applications for DPH
Mike Holland	ITSDM/DAJD	Systems & Applications for DAJD
Lea Ennis	IT Director/SC	Systems & Applications for Superior Courts
Carol Bertapelle	IT Manager/DJA	Systems & Applications for Judicial Admin
Cathy Grindle	Director, Court Technology/DC	Systems & Applications for District Courts
Hoang Nguyen	IT Director	Systems & Applications for Assessments

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual Report	3/4/2014	Cheryl Ann		

		Gunderson		
Annual Report	3/13/2015	Cheryl Boudreau	Project continues to be On Hold. It was placed on hold in August 2012 No updates were made to this document.	10 minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

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1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
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4. *What is the target for this measure? (How much improvement will this project achieve?)*
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**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. ***Describe why you expect the proposed IT investment to produce the benefit(s).***

The purpose of this project is to establish a countywide information technology (IT) Business Continuity plan for county government, identify the technology requirements for this plan, and implement IT solutions to support the King County Emergency Management Plan and county essential business services. King County government is faced with significant exposure if a major disaster or other catastrophe affected the county's computing and communications infrastructure. This project will create a plan and solutions to mitigate the risk associated with the county's computing and communications infrastructure.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- The following products have been implemented:
- Alternate Data Center (ADC)
  - The Alternate Data Center is in place solely for business continuity and/or disaster recovery. It is not to be used as a development site nor is it used for daily operations outside of those necessary to ensure business continuity and/or disaster recovery.
    - **Business continuity** is the activity performed by an organization to ensure that **critical business functions** will be available to customers, suppliers, regulators, and other entities that must have access to those functions.
    - **Disaster recovery** is the process, policies and procedures related to preparing for recovery or continuation of **technology infrastructure critical to an organization** after a **natural** or **human-induced disaster**.
  - This facility will be used to run critical applications when the King County main data center has a failure during a disaster and the King County Emergency Management Plan is activated.
  - The ADC will provide vertical rack space that will house pre-configured Intel and Unix-based servers ready for immediate use and accommodate additional Quick-ship servers that will arrive within 24 hours of a disruptive event.
- Network Connectivity for the Alternate Data Center
  - Connectivity to the King County WAN and to the Mainframe hot site is provided via VPN utilizing backup Internet connectivity delivered via a path outside of downtown Seattle.
- Mainframe recovery services via SunGard
  - A fully equipped, operationally ready data center offering IBM enterprise level mainframe hardware that is already in place and ready for immediate use by King County when the recovery facility service provider is notified of a disaster. The recovery facility is equipped with redundant power, hardware, network infrastructure, and is staffed 24/7 by expert support staff.
- Quick-ship equipment via Agility
  - Delivery of a pre-determined list of equipment and configurations to the ADC within 24 hours of notification of disaster.
- Emergency Notification System (ENS)
  - A system that rapidly contacts individuals to provide them information and/or instructions via text or voice communications.
- Government Emergency Telecommunications Service (GETS)
  - Priority access to the public switched telephone network to assist in completing emergency calls.
- Wireless Priority Services (WPS)
  - Cellular complement to GETS. Provides priority access to the cellular networks.
- Information Technology Emergency Management Response Plan (EMRP)
  - A guideline for the management of the immediate actions and operations required to respond to an emergency or disaster.
- Networker Back Up and Recovery Services
  - Used to recover application data for ITS Legato client applications at the ADC and will also serve to provide ongoing backups after the applications have been recovered at the ADC.
- Active Directory and Exchange
  - Separate instances of Active Directory running in the production environment yet housed at the ADC.
  - Warm email site – no blackberry services; no historical data. Available via OWA and KCWAN, if available.
- Disaster Recovery Exercises
  - Annual exercises designed to test and refine the disaster recovery plans. This aides in determining and closing gaps as well as keeping documents and processes current on paper and in the minds of those responsible for various tasks in the event of a disaster.
- Individual Disaster Recovery Plans
  - Each of the business critical applications has a disaster recovery plan which outlines the steps to take before, during and after a disaster. These plans are created and maintained by the application owner and are included in the annual disaster recovery exercises.
- Operating Budget
  - The annual budget for the ongoing support, care and feeding of business continuity and disaster recovery in our organization.

- Countywide IT Business Continuity Policy and Guidelines
  - The purpose of the King County Information Technology Business Continuity Policy is to ensure effective service to the public of essential County business services that rely on the continuation of critical business functions and systems and the infrastructure that sustains those systems, that begins a long term and ongoing process implemented at various stages based on the policy guidelines.
  - Information technology business continuity programs adhering to this policy shall align their practices to the “Guidelines for Implementing an Information Technology Business Continuity Program for King County Organizations”.

### 3. *What is the current baseline for this measure?*

- Alternate Data Center (ADC)
  - KCIT did not have a mitigation strategy for the Data Center
- Network Connectivity for the Alternate Data Center
  - KCIT did not have a mitigation strategy for Network connectivity
- Mainframe recovery services via SunGard
  - KCIT did not have a mitigation strategy for the mainframe
- Quick-ship equipment via Agility
  - KCIT did not have a mitigation strategy for systems and applications
- Emergency Notification System (ENS)
  - KCIT did not have a mitigation strategy for emergency notification
- Government Emergency Telecommunications Service (GETS)
  - KCIT did not have a mitigation strategy for telecommunication priority services
- Wireless Priority Services (WPS)
  - KCIT did not have a mitigation strategy for wireless priority services
- Information Technology Emergency Management Response Plan (EMRP)
  - KCIT did not have a mitigation strategy for Emergency Management response
- Networker Back Up and Recovery Services
  - KCIT did not have a mitigation strategy for backup and recovery
- Active Directory and Exchange
  - KCIT did not have a mitigation strategy for Active Directory and Exchange
- Disaster Recovery Exercises
  - KCIT does not conduct disaster recovery exercises
- Individual Disaster Recovery Plans
  - KCIT does not have disaster recovery plans for Essential Services
- Operating Budget
  - KCIT did not have an operating budget to sustain Business Continuity or Disaster Recovery
- Countywide IT Business Continuity Policy and Guidelines
  - KCIT did not have a Countywide IT business Continuity Policy or Guidelines

### 4. *What is the target for this measure? (How much improvement will this project achieve?)*

- Alternate Data Center (ADC)
  - **Completed June 2008**
- Network Connectivity for the Alternate Data Center
  - **Completed June 2008**
- Mainframe recovery services via SunGard
  - **Completed March 2008**
- Quick-ship equipment via Agility
  - **Completed April 2008**
- Emergency Notification System (ENS)
  - **Completed April 2010**
- Government Emergency Telecommunications Service (GETS)
  - **Completed November 2007**
- Wireless Priority Services (WPS)
  - **Completed November 2007**
- Information Technology Emergency Management Response Plan (EMRP)
  - **Completed January 2010**
  - **Updated 2011**

- **Updated 2013**
- Networker Back Up and Recovery Services
  - **Completed June 2008**
  - **Updated 2012**
- Active Directory and Exchange
  - **Completed June 2008**
- Disaster Recovery Exercises
  - **One was conducted in September 2008**
    - ❖ **KCIT Enterprise Business Continuity Program will establish a Testing, Training & Exercise Program for KCIT.**
    - ❖ **As part of creating a comprehensive TT&E program, a TT&E plan should be developed that outlines the steps to be taken. The TT&E plan should define the organization's roadmap for ensuring a viable capability, and outline the organization's approach to maintaining plans, as well as enhancing and managing the capability. Enhancing emergency plans, policies, and procedures will promote more efficient utilization of capabilities in responding to cyber-attacks. In addition, the TT&E plan should identify resource and budget requirements that enable organizations to achieve an effective, proven capability, and provide a schedule for conducting various types of TT&E events. Creating the TT&E program should also involve several other steps, including developing a TT&E policy, identifying roles and responsibilities, and documenting a TT&E event methodology.**
- Individual Disaster Recovery Plans
  - **Unable to located all DR Plans, The DR plans which have been located are not adequate and do not conform to industry standards**
    - ❖ **KCIT Enterprise Business Continuity Program is in the process of creating Business Continuity Plans for all IT Components supporting the Department and Agencies Essential Services defined in the Continuity of Operations Plans. The plans will include; Service Continuity, Business Impact Analysis, Risk Analysis, Disaster Recovery Plans, checklist of what needs to be tested.**
    - ❖ **Business Continuity Plans will also need to include an evaluation for each system to determine the best option**
- Operating Budget
  - Established operating budget 432024
- Countywide IT Business Continuity Policy and Guidelines
  - **Completed**

5. *When is the benefit likely to be achieved?*

- ❖ **Benefits are being realized as portions of the project are being implemented and completed.**
- ❖ **KCIT Testing, Training & Exercise Program is currently scheduled for completion by December 2016**
- ❖ **Business Continuity Plans, which will also include individual Disaster Recovery plans is currently scheduled for completion by December 2016**

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*advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

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### Example:

Metric Description	Metrics	Baseline	Target	Actual
<ul style="list-style-type: none"> <li>Alternate Data Center (ADC)</li> </ul>	Establish and implement alternate facility	<ul style="list-style-type: none"> <li>No physical location is available</li> </ul>	<ul style="list-style-type: none"> <li>Facility established by September 2007</li> </ul>	Facility established June 2008 and turned over to operations June 2008
<ul style="list-style-type: none"> <li>Network Connectivity for the Alternate Data Center</li> </ul>	Establish network connection to alternate facility	<ul style="list-style-type: none"> <li>No physical facility</li> </ul>	<ul style="list-style-type: none"> <li>Establish connection by October 2007</li> </ul>	Facility had network connectivity in June 2008 and was turned over to operations June 2008
<ul style="list-style-type: none"> <li>Mainframe recovery services via SunGard</li> </ul>	Establish a contract with SunGard	<ul style="list-style-type: none"> <li>No current contract</li> </ul>	<ul style="list-style-type: none"> <li>Establish contract by August 2007</li> </ul>	Contract established in March 2008 and turned over to operations September 2008
<ul style="list-style-type: none"> <li>Quick-ship equipment via</li> </ul>	Establish a	<ul style="list-style-type: none"> <li>No current</li> </ul>	<ul style="list-style-type: none"> <li>Establish</li> </ul>	Contract

Agility	<i>Quick-ship contract with Agility Services</i>	<i>contract</i>	<i>contract by October 2007</i>	<i>established in April 2008 and turned over to operations September 2008</i>
<ul style="list-style-type: none"> <li>Emergency Notification System (ENS)</li> </ul>	<i>Application for use of service</i>	<ul style="list-style-type: none"> <li><i>Currently not registered to use service</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Establish registration, input information, and test for use by December 2006</i></li> </ul>	<i>Registration completed June 2007 Initial test completed August 2007 Turned over to operations April 2010</i>
<ul style="list-style-type: none"> <li>Government Emergency Telecommunications Service (GETS)</li> </ul>	<i>Application for use of service</i>	<ul style="list-style-type: none"> <li><i>Currently not registered to use service</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Establish registration September 2007</i></li> </ul>	<i>Registration complete June 2007 and turned over to operations November 2007</i>
<ul style="list-style-type: none"> <li>Wireless Priority Services (WPS)</li> </ul>	<i>Application for use of service</i>	<ul style="list-style-type: none"> <li><i>Currently not registered to use service</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Establish registration September 2007</i></li> </ul>	<i>Registration complete June 2007 and turned over to operations November 2007</i>
<ul style="list-style-type: none"> <li>Information Technology Emergency Management Response Plan (EMRP)</li> </ul>	<i>Create an Emergency Management Response Plan</i>	<ul style="list-style-type: none"> <li><i>Currently no plan exists</i></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<i>Plan was written and tested in August 2007 was turned over to operations in April 2010</i>
<ul style="list-style-type: none"> <li>Networker Back Up and Recovery Services</li> </ul>	<i>Establish a secondary backup system</i>	<ul style="list-style-type: none"> <li><i>No system exists</i></li> </ul>	<ul style="list-style-type: none"> <li><i>October 2007</i></li> </ul>	<i>Implemented June 2008 was turned over to operations June 2008</i>
<ul style="list-style-type: none"> <li>Active Directory and Exchange</li> </ul>	<i>Implement a secondary Exchange environment</i>	<ul style="list-style-type: none"> <li><i>No System exists</i></li> </ul>	<ul style="list-style-type: none"> <li><i>October 2007</i></li> </ul>	<i>Implemented December 2007 was turned over</i>

	<i>and extend the production Active Directory environment into the ADC</i>			<i>to operations August 2008</i>
❖ Disaster Recovery Exercises	<i>Conduct Disaster Recovery Exercises</i>	<ul style="list-style-type: none"> <li>• <i>Currently no exercises are being conducted</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>October 2007</i></li> </ul>	<i>A single exercise was conducted, in 2008; A Testing Training and Exercise Program is scheduled for completion December 2016</i>
❖ <b>KCIT Testing, Training &amp; Exercise Program</b>	<i>Create for KCIT an industry standard Testing, Training &amp; Exercise program (TT&amp;E)</i>	<ul style="list-style-type: none"> <li>• <i>Currently there is no TT&amp;E Program</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>December 2016</i></li> </ul>	
❖ Individual Disaster Recovery Plans	<i>Create Disaster Recovery Plans for the Essential IT Components</i>	<ul style="list-style-type: none"> <li>• <i>Currently no Disaster Recovery Plans Exist</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>October 2007</i></li> </ul>	<i>DR Plans are inadequate; Business Continuity Plans are scheduled for completion December 2016</i>
<ul style="list-style-type: none"> <li>• <b>Business Continuity Plans</b></li> </ul>	<i>Create Business Continuity Plans for IT Components in support of department and agency Essential Services defined in COOP</i>	<ul style="list-style-type: none"> <li>• <i>Currently there are minimal components of a Business Continuity Plans;</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>December 2016</i></li> </ul>	
<ul style="list-style-type: none"> <li>• Operating Budget</li> </ul>	<i>Establish a Business</i>	<ul style="list-style-type: none"> <li>• <i>There was no Business</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>October 2007</i></li> </ul>	<i>Budget established</i>

		<i>Continuity operating budget</i>	<i>Continuity Program</i>		432024
<ul style="list-style-type: none"> <li>Countywide IT Business Continuity Policy and Guidelines</li> </ul>		<i>Establish a policy</i>	<ul style="list-style-type: none"> <li><i>There was no Policy</i></li> </ul>	<ul style="list-style-type: none"> <li><i>October 2007</i></li> </ul>	<i>The current policy is not clear and concise;</i>
<ul style="list-style-type: none"> <li><b>King County IT Business Continuity Policy &amp; Guidelines</b></li> </ul>		<i>Current policy is not clear and concise on what department and agencies need to do</i>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li><i>December 2014</i></li> </ul>	
<ul style="list-style-type: none"> <li>CoCo Interoperable Communications System</li> </ul>		<i>Alternate communication system</i>	<ul style="list-style-type: none"> <li><i>No current system in place</i></li> </ul>	<ul style="list-style-type: none"> <li><i>December 2006</i></li> </ul>	<i>October 2007 pilot was terminated. Not a viable solution</i>
<ul style="list-style-type: none"> <li></li> </ul>			<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	
<ul style="list-style-type: none"> <li></li> </ul>			<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Information Technology
<b>Project Title</b>	Hosted Environment – Phase III Cloud Implementation
<b>EBS Project Number</b>	1111953

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Bill Kehoe, Chief Information Officer, KCIT

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Trever Esko	IT Project Director / KCIT	Oversight
Christine Chou	Chief Financial Officer / KCIT	Document review and input
Cheryl Boudreau	IT PM III / KCIT	Project Manager
Mike Fisher	IT PM II / KCIT	Project Manager

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Budget Process	10/18/13	Mike Fisher	New, initial draft	4 hours
1Q 2014 Supplemental	12/04/2013	Mike Fisher	Updated for Q1 2014 supplemental	8 hours
Post review updates	12/12/2013	Mike Fisher	Q1 2014 supplemental	1 hour
Include 2012 appropriation in project cost/benefit calculations	12/16/2013	Mike Fisher	Q1 2014 supplemental	2 hours
Pre-submittal final updates	01/02/2014	Mike Fisher	Q1 2014 supplemental	1 hour
Post-submittal updates	02/10/2014	Mike Fisher	Q1 2014 supplemental	2 hours
Incorporate management feedback	02/11/2014	Mike Fisher	Q1 2014 supplemental	1 hour
2015 yearly review	03/02/2015	Mike Fisher	2015 yearly review updates	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
 This project will improve internal services by streamlining delivery and improving the timeline for providing hosting services. This is accomplished by replacing the outdated IT infrastructure delivery model in the county. In the past IT groups procured, deployed, configured, maintained, and eventually replaced physical hardware for individual business applications. That model is inefficient and doesn't maximize county IT infrastructure, facility, or personnel investments.  
  
 By leveraging the power of server virtualization and automation the hosted environment allows for greater business agility by greatly reducing server deployment times. In addition, hardware is utilized in an efficient manner leading to better return on investment in IT resources.  
  
 With departmental and agency IT teams unencumbered by the procurement and deployment cycle they are free to focus on more strategic and higher business value functions.
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*  
 We will know benefits are being achieved when average deployment time for servers goes down.

This can be measured by reviewing helpdesk ticket closure times associated with the time expended to deploy a server in the cloud or SVE against physical server deployment times.

3. *What is the current baseline for this measure?*

Physical servers typically take 10 to 12 weeks to deploy into the King County data center.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Standard Virtual Environment server requests take 48 hours.

5. *When is the benefit likely to be achieved?*

The benefit is currently being achieved for the Standard Virtual Environment and the Virtual Private Cloud will begin showing benefits in 2014.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

Both the Standard Virtual Environment and the Virtual Private Cloud environments leverage the latest virtualization technology. Overall the industry is moving quickly to a virtual server strategy rather than the outdated one logical server to one physical server model.

By leveraging virtualization in these environments King County will see decreased time to deployment, reduced management complications, improved troubleshooting, and increased disaster recovery capabilities.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Server virtualization also reduces risks to mission critical applications. Since the application and logical server are no longer tied to an individual physical server, if there are problems the application is simply moved to a functional host server.

In the Virtual Private Cloud these risks can be even further reduced by leveraging the massive scale and redundancy of the physical environment. By employing best practices in architectural design, an application can withstand not only the loss of a physical host machine, but of an entire data center.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

*1. What is the target for this measure? (How much savings will this project achieve)*

This project will avoid costs for data center hosting and purchasing of physical servers by replacing them with virtual servers. The total hosting cost reductions are \$5,608,303 from 2012 to 2015 and the total server purchase cost reduction is \$2,170,960 over the same period. Below is a breakout of the savings and how they were estimated and derived.

Server Hosting Cost Avoidance

Server Hosting Cost Avoidance	Number of VMs	Cost Avoidance	VM Cost	Benefit
Hosted Environment VMs 2012	47	\$ 316,216	\$ 141,047	\$ 175,169
Hosted Environment VMs 2013	123	\$ 860,631	\$ 383,883	\$ 476,748
Hosted Environment VMs 2014	363	\$ 2,641,551	\$ 1,177,935	\$ 1,463,616
Hosted Environment VMs 2015	833	\$ 6,304,144	\$ 2,811,375	\$ 3,492,769

*\*Note: Hosting cost avoidance happens each year, so the cumulative total number of servers expected in the Standard Virtual Environment is calculated each year.*

Server Procurement/Hardware Purchase Cost Avoidance

Server Procurement Cost Avoidance	Number of VMs	Cost Avoidance	Per VM Project Cost	Benefit
Virtual rather than physical replacements 2012	47	\$ 376,000	\$ 260,051	\$ 115,949
Virtual rather than physical replacements 2013	123	\$ 984,000	\$ 680,559	\$ 303,441
Virtual rather than physical replacements 2014	240	\$ 1,920,000	\$ 1,327,920	\$ 592,080
Virtual rather than physical replacements 2015	470	\$ 3,760,000	\$ 2,600,510	\$1,159,490

*\*Note: Procurement costs are only calculated in the year they are projected to happen, so the*

number of servers expected to move to the Standard Virtual environment each year are calculated.

The cost avoidance calculations above do not include potential savings from the Virtual Private Cloud which will be an option in situations where it is cheaper to utilize compared to a virtual machine in the Standard Virtual Environment. This will be reviewed on a case by case basis since not all applications are suitable for, or cost effective to host in, the Virtual Private Cloud environment.

2. *When is the cost reduction likely to be achieved?*

Benefits should be realized in each year of the project – 2013 to 2015.

For 2013 the actual number of servers in the Standard Virtual Environment was 211 as of this writing. This led to the following realized benefits:

Update – 3/2/2015

For 2014 the actual number of servers in the Standard Virtual environment was 545, this led to the following realized benefits:

Server Hosting Cost Avoidance

<b>Server Hosting Cost Avoidance</b>	<b>Number of VMs</b>	<b>Cost Avoidance</b>	<b>VM Cost</b>	<b>Benefit</b>
Updated – 3/2/2015				
Actual Hosted Environment VMs 2014	334	\$2,430,518	\$1,083,830	\$1,346,688
Actual Hosted Environment VMs 2013	211	\$1,476,367	\$ 658,531	\$ 817,836
<b>Updated – 3/2/2015</b>				
<b>Totals</b>	<b>545</b>	<b>\$3,906,885</b>	<b>\$1,742,361</b>	<b>\$2,164,524</b>

Server Procurement/Hardware Cost Avoidance

<b>Server Procurement Cost Avoidance</b>	<b>Number of VMs</b>	<b>Cost Avoidance</b>	<b>Per VM Project Cost</b>	<b>Benefit</b>
Updated – 3/2/2015				
Actual Hosted Environment VMs 2014	334	\$2,672,000	\$1,848,022	\$823,978
Actual Hosted Environment VMs 2013	211	\$1,688,000	\$1,167,463	\$520,537
<b>Updated – 3/2/2015</b>				
<b>Totals</b>	<b>554</b>	<b>\$4,360,000</b>	<b>\$3,015,485</b>	<b>\$1,344,515</b>

3. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

Server Hosting Cost Avoidance:

As a result of leveraging virtual servers in the hosted environment rather than physical servers, departments and agencies will realize the on-going cost avoidance listed above. These calculations include reduction in rack unit charges and in operating system licenses as those are included with a hosted environment virtual machine. The migration planning project will track conversion efforts over the planned time period listed in question 4 below. The cost of hosting physical servers will be calculated against the cost of the virtual servers used in their place and the difference is the benefit.

Server Procurement/Purchase Cost Avoidance:

As a result of replacing end of life physical server hardware with virtual servers in the hosted environment the difference between the cost of physical server replacements and the total project cost is the benefit. Overall server hardware costs will be reduced by deploying virtual servers in the

Standard Virtual Environment or Virtual Private Cloud rather than physical servers. The cost to have individual physical server and storage devices at the Sabey Data Center will be compared to the cost of virtual servers in the Standard Virtual Environment and Virtual Private Cloud.

4. *What is the current baseline?*

Server Hosting Cost Avoidance:

- 2012 cost to host a fully managed physical server = \$6,728
- 2013 cost to host a fully managed physical server = \$6,997
- 2014 cost to host a fully managed physical server = \$7,277
- 2015 cost to host a fully managed physical server = \$7,568
  
- 2012 cost of a fully managed virtual server = \$3,001
- 2013 cost of a fully managed virtual server = \$3,121
- 2014 cost of a fully managed virtual server = \$3,245
- 2015 cost of a fully managed virtual server = \$3,375

Per the King County Cloud Computing Services Development Report (Ordinance 17232, Section 115, Proviso P3) the following quantity of servers should be hosted in the Standard Virtual Environment:

- 2012 expected virtual machines in the Standard Virtual Environment = 47
- 2013 expected virtual machines in the Standard Virtual Environment = 123
- 2014 expected virtual machines in the Standard Virtual Environment = 363
- 2015 expected virtual machines in the Standard Virtual Environment = 833

Server Procurement/Purchase Cost Avoidance:

- Physical Server: Based on a typical physical server currently at the Sabey Data Center, CDW, a server hardware retailer, suggests a typical physical server currently costs ~ \$8,000.

([http://www.cdw.com/shop/products/HP-SB-DL560-GEN8-E5-4617-US-SVR/2807086.aspx?RecommendedForEDC=2806515&RecoType=RP&cm\\_sp=Product-\\_-Session&ProgramIdentifier=3](http://www.cdw.com/shop/products/HP-SB-DL560-GEN8-E5-4617-US-SVR/2807086.aspx?RecommendedForEDC=2806515&RecoType=RP&cm_sp=Product-_-Session&ProgramIdentifier=3))

- Hosted environment cost per server = \$5,533  
(total project cost before contingency (\$4,609,243)/# of VMs expected at end of 2015 (833))

5. *Describe why you expect the proposed IT investment to reduce costs?*

The hosted environment strategy helps to solidify and strengthen one of our foundational components of becoming a service focused organization. The King County Hosted Environment, which will leverage both internal and external virtual server and storage infrastructures, will give county business and IT customers:

- Inexpensive, flexible, scalable, and standardized computing solutions to complex IT requirements;
- Enhanced productivity and increased efficiency by enabling agile response to changing business requirements;
- Secure and reliable infrastructure that adheres to the most rigorous industry certifications and principles;
- Centrally managed, high performance, services based environments that support an enterprise IT model.

Cloud service providers utilize a pay-as-you-go, or metered, charge-back model. This allows limited and specific usage environments, like development and test, to be deployed quickly, fully leveraged while required, and then turned off when not in use. This model removes the county from the cycle of

purchasing hardware based on peak usage projections, only to see that hardware sit idle during usage valleys.

It is estimated that servers in a physical server to application model are less than 20% utilized, where physical server hosts in a virtualized model are utilized at rates well over 60%. The increase in server utilization leads to hardware cost savings as well as maintenance, power, HVAC, and licensing cost savings.

The Hosted Environment – Phase III Cloud Implementation project will leverage the planning that has been started in the Enterprise Server Optimization Project (ESOP). The Migration Planning sub-project will leverage KCIT maintained server inventory lists and department maintained servers inventory lists as a basis for outreach to King County Executive and Separately Elected agencies. A proviso response report was submitted to Council that identified a 3 year plan for migrating county servers to the hosted environment.

As of this writing the Standard Virtual Environment contains ~~211~~ 545 virtual servers, due to these migrations King County has saved not only on physical hardware, but on power and cooling costs as well. In addition, the free space created in the Sabey Data Center has allowed King County to begin sub-leasing rack space to other entities further reducing overall server infrastructure costs.

The hosted environment is inherently more secure than stand-alone environments as best practices can be implemented and adherence to security principles can be guaranteed. Security and reliability are further enhanced by placing the underlying infrastructure in either the state-of-the-art Sabey Data Center in Tukwila, or in the Amazon Web Services data centers that have been certified to abide by the most stringent industry standards.

In addition, this project is aligned with the King County Strategic Plan goals and priorities including setting "standards and expectation for the immediate improvement of customer service and excellence," for "empowering our workforce and our work together as One King County," and improving "financial stewardship."

The Virtual Private Cloud will allow for agencies and departments to leverage a pay-as-you-go cost model. Under this model you are only charged for the time you use the service, for example, if you create a virtual machine in the VPC and use it for two days and then turn the virtual machine off you will only be charged for those two days of usage. This allows for development and testing environments to be created for only the times they will be used, eliminating the cost of purchasing hardware to sit idle just in case it is needed.

As it is stated in the 2013 Technology Business Plan: "Cloud computing is viewed as the next wave of information technology for individuals, companies, and governments. This project will develop an IT infrastructure model to increase dependability and reliability of application platforms; increase agility and responsiveness in IT service delivery, reduce costs and increase efficiency, positioning the county for the IT of the future. In addition to reducing operational costs, cloud technologies have become the basis for business innovation and new business models and for significant improvements in the effectiveness of anyone using information technology."

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both*

quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

**IT Project Benefits Achievement Plan (Version 2)**

**Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?**

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Countywide Telephony System Replacement/Unified Communications
<b>Project Number</b>	1111962

**Section 2. Business Owner Accountability**

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Bill Kehoe, Chief Information Officer

**Section 3. Who is involved in developing the Benefit Achievement Plan?**

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Christine Chou	KCIT	Finance Officer
Trever Esko	KCIT	Project Director
Bill Kehoe	KCIT	CIO

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Project Implementation</b>	3/4/2014	Christine Chou	New, initial draft	2 hours
<u>Annual BAP Reporting</u>	<u>3/20/2015</u>	<u>Zita Pryor</u>	<u>No Changes, benefits still on target</u>	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

This project is to replace the functionality of the existing County voice PBX technology that is 20 years old. Average life cycle of this type of technology should be 5 years

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

The current PBX system is out of vendor support/maintenance. Countywide voice outage will significantly interrupt County business operations; which is likely to occur due to lack of maintenance.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*

The Unified Communication (UC) project is expected to not only replacing the older technology to a newer more robust technology, but also providing more functionality at much less cost. The savings from this newer technology will enable the County to payback the investment. The standard video conferencing solution that is a key component of Unified Communications / Lync is a technology that did not exist in the county before 2011 when Lync was rolled out to county employees. To purchase and implement and maintain a standalone video conferencing solution for the county would cost the county millions in project and on-going maintenance cost that is included in the cost of Lync licenses under the Microsoft Enterprise Agreement. In addition the on-going efficiency savings to staff are realized every time a video meeting occurs and staff do not have to travel to an external location to attend a meeting. Savings are also realized with Instant Messaging and Presence and the integration of voice mail to email that provide an overall more efficient integrated communication experience for county employees and external customers that will utilize Lync to engage with county services such as video hearings and customer service inquiries. This purchase cost avoidance and the value of the efficient integrated communication were not included in the updated CBA. The cost avoidance was removed from the original CBA.

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

The 2015/2016 rates will reflect savings from current status quo voice charges that will be used to repay the bond that is due annually until 2019. Starting in 2020, agencies will see a significant drop in their rates.

3. *What is the current baseline?*

Current baseline is the 2015 PSQ Countywide voice charges: 6,680,037 (excluding agency specific needs)

4. *What is the target for this measure? (How much savings will this project achieve)*

*Tangible benefits (excluding cost avoidance):*

This project will produce \$3M annual savings that will be used for bond repayment until 2019

5. *When is the cost reduction likely to be achieved?*

Tangible savings of \$3M will start in 2016 upon completion of the project

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>



## King County

### King County Information Technology

King County Executive Office

CNK-EX-0600

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Seattle, WA 98104

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TTY Relay: 711

June 19, 2015

To: Jennifer Giambattista, Senior Legislative Analyst  
King County Council

From: John Arthur Wilson, Special Projects Manager  
King County Information Technology

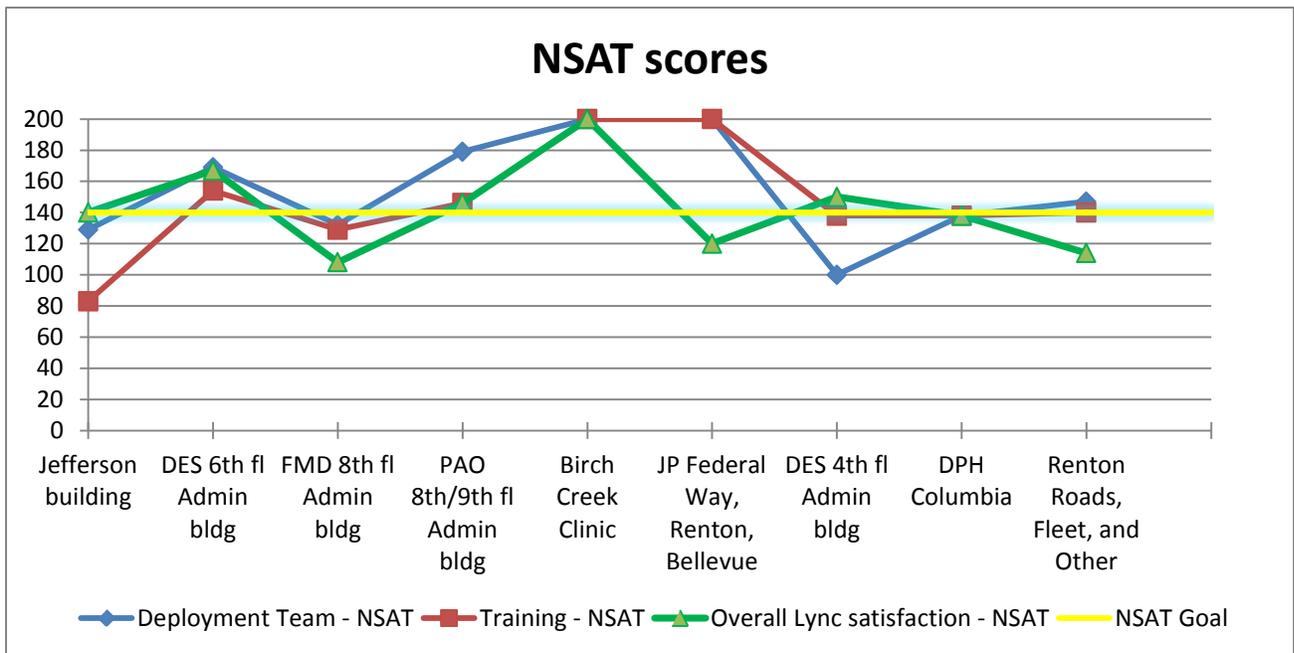
Re: 2015 BAP Addendum on UC/Lync Customer Satisfaction

As the Unified Communication/Lync service has rolled out over the past year, customer satisfaction surveys have shown steady improvement, especially when compared to the March 31 2014 results.

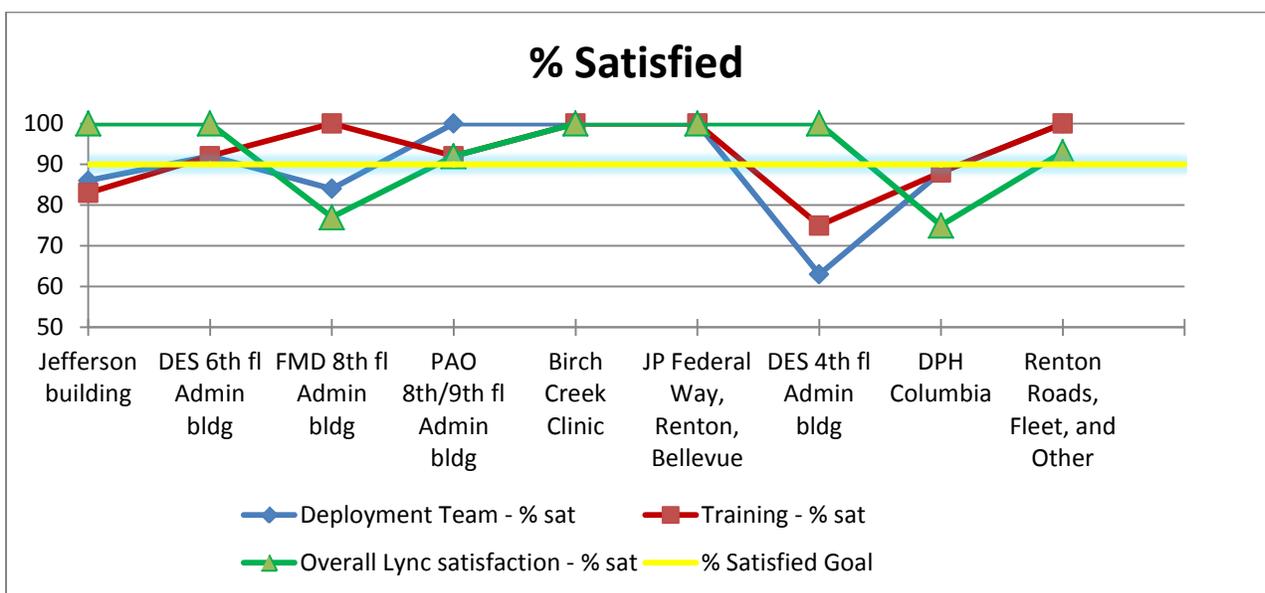
On the advice of our outside deployment consultant Unify<sup>2</sup>, we used their NSAT (net satisfaction) scoring methodology to measure satisfaction within two weeks of deployment. The NSAT scoring system gives us a consistent way to compare from deployment to deployment over time. Here's the score scale:

NSAT Score Range	
150 +	World Class
140 – 149	Very Good
130 – 139	Good
120 – 129	Needs Analysis
Below 120	Requires Review and Action

Our previous NSAT score was about 125. As you can see from the charts below, it has significantly improved since Spring 2014.



The key line to follow above is the green Overall Lync satisfaction NSAT. Note that the Renton roads facility is inherently difficult to serve by UC/Lync because so many of the staff, such as mechanics, don't have a dedicated computer or regular access to one. The Juvenile Probation offices have a skewed score the NSAT methodology that eliminates the "somewhat satisfied" ranking from the overall score. Nevertheless, as the second chart shows, Juvenile Probation's percentage "very satisfied" and "somewhat satisfied" score combined for 100%.



As the two charts show, customer satisfaction is running fairly high now that we refined and perfected our deployment approach. The NSAT score, for example, runs in the range of good to very good. In several cases, the percentage satisfied is hitting 100%. The DES deployment on the 4<sup>th</sup> Floor of the Administration Building ran into some design issues related to response groups and that these employees have both King County and State computers that they work on simultaneously. The UC/Lync team fine tuned solutions and followed up with employees having troubles to fix those, too. Those issues have now been resolved.

### **Conclusion**

As our ongoing surveys demonstrate, customer satisfaction has significantly grown over the past 15 months as we have perfected deployment practices, provided solid training, and refined design and hardware alignment for user groups. This puts us on solid footing to wrap up deployments later this year.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Information Technology Department
<b>Project Title</b>	Enterprise Customer Relations Management (CRM) Expansion
<b>EBS Project Number</b>	748977825

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Natasha Jones, Customer Service Director, and Bill Kehoe, Chief Information Officer

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Natasha Jones	Customer Service Director, King County Executive	Project Sponsor
Bill Kehoe	Chief Information Officer, KCIT	Project Sponsor
Dale Hartman	SDM, Elections	Pending customer
Steve Larsen	Chief Administrator, DAJD	Pending customer
John Bodoia	Chief Financial Officer, DNRP	Customer
Phillip Sit	Communications/Outreach Coordinator, DOA	Pending customer

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies

(the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
2014 Budget Process	8/12/13	Natasha Jones	New, initial draft	4 hours
2014 Supplemental	12/11/13	KCIT/Customer Service CRM Development team	Updated to provide more detail based on 2013 post-budget decisions.	2 hours
Review of 2014 proviso	1/27/15	Jennifer Giambattista	Updated external service benefits section	30 minutes
Review of 2014 annual report	6/16/15	Council and Exec staff	Updated external service benefits to add a sentence from Exec staff	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Expanding CRM to other Executive departments and Separately Elected offices will reduce turn-around time on customer responses, improve King County's ability to provide a seamless, coordinated customer experience when customer inquiries involve multiple departments, and reduce staff time tracking responses to inquires and providing consistent responses to resident or customer requests.

This will improve the customer and employee experience overall and possibly free up employee time for more value-added work. Benefits will also likely vary due to the flexibility of the system, which will be used differently by some departments, based on business needs. But in most cases, benefits will relate to tracking customer inquiries for follow up or closure.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

By a reduction in repeat calls for information, a reduction in staff time spent on duplicative responses, a reduction in resident calls to multiple departments, a reduction in complaints related to delayed or inconsistent information from county departments.

We will use data from the CRM system to better track complaints, responses, and time to closure of new requests or incidents.

Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CRM implementation group will work to gather such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. With each rollout of a CRM application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum, response time and time to closure of new request.

3. *What is the current baseline for this measure?*

There is no current baseline because departments are currently siloed and using disparate systems for customer tracking. We can use the bi-annual resident survey for some measure of baseline on resident perceptions of county customer service in a general sense. In the last survey, residents ranked our service level between 2-3 on a five point scale. Post-CRM implementation, we expect to see this increase.

Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CRM implementation group will work to gather such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. Additionally, with each rollout of a CRM application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum, response time and time to closure of new request.

If baseline data does not exist, the project may establish the initial implementation period as the baseline and target improvements from that baseline.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

This will vary by department and will need to be quantified by increased efficiencies in work groups using CRM. Each department will take a baseline of response time, complaints, etc. before implementation of CRM.

We are working on setting countywide standards or baselines for customer response times.

We expect to see the bi-annual resident survey customer satisfaction results increase.

Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CRM implementation group will work to gather such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. With each rollout of a CRM application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum, response time and time to closure of new request.

5. *When is the benefit likely to be achieved?*

Benefits such as improved customer experience are likely to be achieved within three to six months of CRM implementation, assuming that business processes are aligned with the system, rather than current, possibly inefficient processes being simply dropped into CRM for implementation in a new tool.

Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CRM implementation group will work to gather

such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. With each rollout of a CRM application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum, response time and time to closure of new request.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. ***Describe why you expect the proposed IT investment to produce the benefit(s).*** *Wider deployment of Microsoft Dynamics CRM will improve customer service by creating a central hub to serve as a clearinghouse for constituent requests – making sure we get back to people in a timely manner, get them the correct information from the first contact, and create more efficient workflow so we handle requests effectively.*
2. ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*** *We should measure the benefits on the turn-around time for responding, a lower number of people handling each inquiry, and comparison of before and after implementation staff time to handle the average inquiry.*
3. ***What is the current baseline for this measure?***  
*In most cases, there is currently is no baseline and one will need to be set prior to implementation.*
4. ***What is the target for this measure? (How much improvement will this project achieve?)***  
*It is expected to save several hours per week per staff member currently assigned to respond and track customer issues. This total will vary by department or division implementing CRM.*
5. ***When is the benefit likely to be achieved?***  
*This is likely to be achieved within six month of implementation and training.*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

1. ***Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.***
2. ***If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.***

#### Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

#### Section 7. Benefit Achievement Summary

##### Benefit Achievement Summary

***To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

***Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the*

neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	DES/ FMD – project owner KCIT – IT project support
<b>Project Title</b>	Data Center Relocation 2008
<b>Project Number</b>	377219/377220

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Adding Facility Management Division's (Business Owner and Project Owner) Cost Savings document on their behalf.

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Cheryl Boudreau	IT PM III/KCIT	IT Project manager. Point of Contact for FMD's Sabey Data Center construction project.

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Benefits Achievement	3/4/2014	Cheryl Boudreau	Adding the Facilities Management Division’s “Savings Achieved by Relocating Servers to King County Data Center” document.	1 hour
BAP Reporting	3/20/2015	Christine Chou	Final BAP	



## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

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1. Describe why you expect the proposed IT investment to reduce costs?
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## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

Adding Facility Management Division's (Business Owner and Project Owner) Cost Savings document on their behalf.



Facilities\_Management\_Division\_Savings\_

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	KCIT – Business Applications
<b>Project Title</b>	Enterprise Document Management System
<b>Project Number</b>	1116592

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

~~This project is closed, but the PM was assigned the task of completing the BAP.~~  
Business Solution Service Owners; Diep Nguyen, Stephen Heard, Brent Veenstra

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Donna Frisk	IT PM III/KCIT	IT Project Manager
Diep Nguyen	IT SDM - DCHS	Customers liaison

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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Benefits Achievement	3/5/2014	Donna Frisk	This is the first draft, since BAPS were not in place when the project began.	1 hour
Project Completion	3/20/2015	Christine Chou	Final BAP. Changed based on updated customer info.	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
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**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s). ~~This investment established an enterprise wide document management system which makes it unnecessary for Departments/Agencies to implement stand-alone systems. This reduces the cost (e.g., purchasing different software, hardware and support—both internal and vendor support) to the county and provide the benefit of hosting an enterprise solution.~~
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?) ~~Based on additional customers using the enterprise system rather than implementing their own solution.~~
3. What is the current baseline for this measure? ~~Two customers ... which was implemented by the project.~~
4. What is the target for this measure? (How much improvement will this project achieve?) ~~There~~

~~wasn't a specific target on the number of customers, but an additional three customers have already been on-boarded in addition to the two customers that the project on-boarded. Operations continues to meet with potential new customers.~~

5. ~~When is the benefit likely to be achieved? Benefits have already been achieved since Assessors, DCHS and Superior Court do not have standalone systems, which were either previously being used or were being planned to be implemented.~~

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

*Example: Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to*

upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

Updated 3/20/2015

1. Describe why you expect the proposed IT investment to reduce costs?

This investment allowed consolidation of IT system in scanning and storing documents countywide that avoid redundant costs that would have occurred if each agency had obtained the system separately

2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

By started having agencies using the system and paying much lower cost that maintaining their own separate system

3. What is the current baseline?

The annual fixed cost to maintain each system is as follow:

Fixed Costs	
Hardware/Software	92,000
Servers	40,500
Labor support (0.25 FTE)	45,000
Total	177,500

Variable costs (backup and storage): \$15,000

Currently we have four agencies using the system (Assessors, DCHS, KCIT, and Superior Court)  
If each agencies acquire their own system, the total maintenance cost would have been at least \$710,000

4. What is the target for this measure? (How much savings will this project achieve)

There was over \$500K/annually avoided maintenance cost by sharing the system

5. When is the cost reduction likely to be achieved?

Has been achieved

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014.

The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

**Updated 03/20/2015 – Final BAP**

Metric Description	Metrics	Baseline	Target	Actual
Reduce maintenance cost to scan and store scanned images	Annual maintenance savings	Annual maintenance times number of agencies on board (four agencies) 4 * 177,500 = \$710,000	Annual shared maintenance \$177,500 fixed cost to be shared among agencies	Cost avoidance \$532,500

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Intranet Redesign – Migration to SharePoint
<b>Project Number</b>	1111965

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Bill Kehoe, Chief Information Officer, KCIT

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Nick Smith	eGovernment Manager/KCIT	Sponsor
Latasha Battle	PM/KCIT	Project Manager
Jason Argo	Employee Communications Manager /DES	Employee Portal Manager

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	3/3/14	Nick Smith	New, initial draft	1 hour
Project Implementation	2/18/15	Nick Smith	Project Update	.5 hour
Project Implementation	2/27/15	Nick Smith	Project Update	1 hour
Project Implementation	3/5/15	Nick Smith	Project Update	.5 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

*1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The Intranet Redesign Project will establish an enterprise intranet portal designed, to increase access and enhance collaborations among King County employees. This project will consolidate the various county intranet environments and update from 1998 web technologies to a website design portal on a SharePoint 2013 platform. The old 1998 technology consists of multiple platform and no longer supported by the vendor. The new core platform will continue to be our portal during updates to the core SharePoint functionality, when Microsoft upgrades their product. The new intranet, along with the entire SharePoint 2013 platform will be migrated in to the G-Cloud, a government secure environment. The redesigned Intranet will feature a central location where employees can access County communications, business resources, and applications needed to work collaboratively. They will also access and use agency and department portals and landing pages feature specific work information and news relating to their location and job area. The enterprise intranet will be accessible to all King County employees and will become the platform for executive communications and collaboration across departments.

Update 2/18/2015: The Intranet Redesign Project supports several goals outlined in the King County Strategic Plan 2010 – 2014. Support and improve the work environment for the County's quality workforce including reducing multiple intranet environments to a more collaborative environments. Improve ability to effectively communicate decisions, important issues and goals with employees. Empower employees to work more efficiently by simplifying access to their communications, business tools and resources from a central point. Improve internal collaboration which assists in building a One King County culture and increasing employee engagement by providing an internal communication channel where interaction with leadership, management and peer contacts will foster grow development of ideas and real-time feedback

Update 2/27/2015: The new King county intranet was launched on 2/26/2015. KCWeb includes an employee portal homepage – a central hub for the tools, news and resources - plus department, agency and division intranet sites including Human Resources Division, Department of Information Technology, Elections, the Executive's Office, Department of Permitting and Environmental Review, Department of Judicial Administration, Department of Assessments, Department of Natural Resources, Department of Executive Services, Department of Public Health, Department of Transportation, Department of Adult & Juvenile Detention, and Department of Community & Human Services. The Department of Public Defense has

launched an internal department version for their employees only due to the nature of the content.

Update 3/2/2015: The Sheriff's Office and Metro Transit Intranet will be launching their sites on 3/25/2015. Council's intranet site development and launch is pending with currently no date for completion.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example: Reduced cost to produce service.** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

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5. *When is the cost reduction likely to be achieved?*

### **Section 7. Benefit Achievement Summary**

**Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

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		•	•	



## IT Project Benefits Achievement Plan (Version 2)

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<b>King County Department/Agency Name</b>	KCIT-IT Operations and Business Solutions
<b>Project Title</b>	IP Fax Service Project
<b>Project Number</b>	1123972

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

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Name	Title / Agency	Project Role
Molly Cherkin	KCIT	IT Business Analyst

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Business Case	5/28/14	Molly Cherkin and Trever Esko	New, initial draft	30 minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

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- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

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*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

As a result of many changes to communication technology in King County, residents and the County government now have multiple methods for sharing documents. These changes include:

- E-mail, which was the first system to support sharing of digital documents independent of faxing
- Court eFiling, which requires parties to upload digital documents to the court instead of faxing paper
- Secure FTP, which provides secured infrastructure for uploading and emailing critical documents including medical records
- Integrated Document Exchange (IDX), which enables law enforcement to submit digital criminal case files to the PAO without faxing documents
- Unified Communications initiative, which has replaced the majority of analog communication systems throughout the County

One major component that was not included in the scope of the UC project is fax machine service. Fax machines require that some component of land-line based telephony service remain in every building, on every floor, and often in many locations on a floor throughout the County. Countywide, there will be 1,470 fax lines remaining in the County at the conclusion of the UC project.

Machine-based faxing is an outdated technology originally invented in 1843. Almost all organizations have chosen to replace fax machines over the past 25 years. Modern technology enables online (IP) fax services, which both transmit and receive documents in a digital format. This will reduce the risk of having confidential hard copy documents exposed to unauthorized access. Inbound documents are routed to a recipient's workstation, where they can be saved, archived, and/or printed. Outbound documents can be sent digitally from a workstation, or scanned and sent from a printer/scanner. Adopting such technology would enhance user operations and capabilities, enable a more mobile workforce, reduce environmental impact, and allow the County to reduce the fax telephony infrastructure, hardware and associated maintenance costs. The average life -cycle replacement for fax machines is 5-7 years.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*

This project will involve business analysis on agencies needs for fax services. As a result, agencies will revisit their business processes and may eliminate and reduce the number of countywide faxes

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

There is about 1470 faxes countywide that cost the County approximately \$441K/year just for the phone line cost. The County may be able to reduce those by at least 50% that will bring about \$220K annual savings

3. *What is the current baseline?*

1470 faxes costing about \$441K/year countywide

4. *What is the target for this measure? (How much savings will this project achieve)*

Reduce to at least 735 faxes, savings of about \$220K/year countywide

5. *When is the cost reduction likely to be achieved?*

1<sup>st</sup> Quarter 2016

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

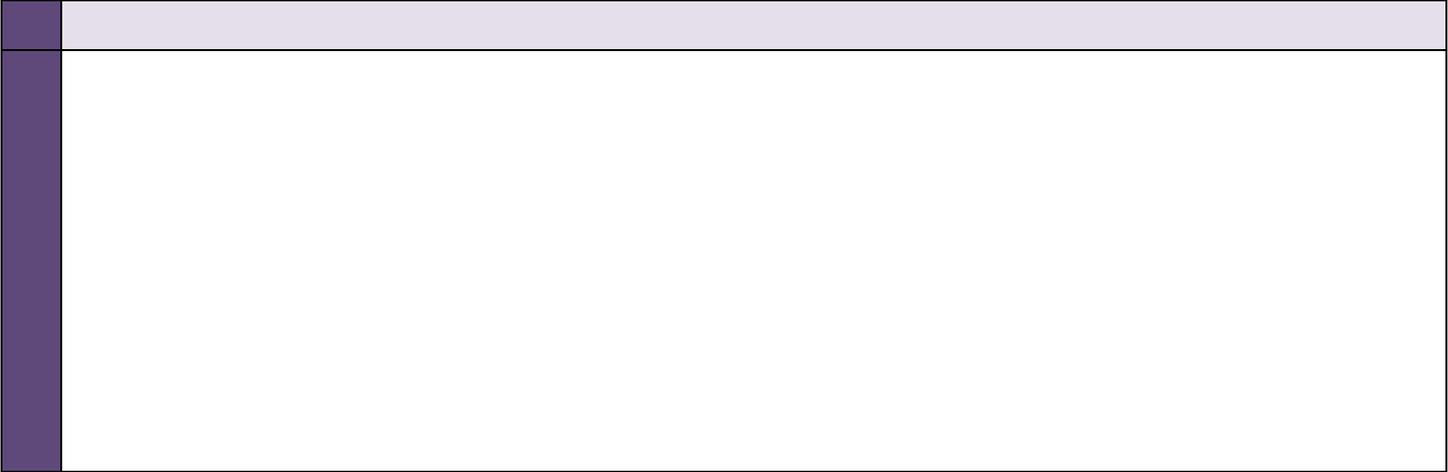
**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

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**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings



## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Department of Information Technology
<b>Project Title</b>	IA Infrastructure Improvement Program
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Ralph Johnson	Chief Information Security and Privacy Officer	Project Manager/Business Owner

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual Report	2-14-14	Ralph Johnson	Created initial BAP	2 hours
Annual Update	3-6-15	Ralph Johnson	Annual update	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

*1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

This program has six (6) sub-projects most of which are unrelated to one another. The six (6) sub projects are:

- **Log Management and Security Information Monitoring (SIEM)** - Log Management and SIEM are both managed services under contract with Dell SecureWorks. These services are essential in achieving Payment Card Industry (PCI) compliance. This project provides staff funding to, in cooperation with the vendor, optimally configure and tune these systems.
- **ePolicy Orchestrator (ePO) Upgrade and Migration to SVE/Replacement Hardware** - ePO is the management console for the county-wide endpoint protections system (anti-virus, and other components to protect workstations and servers). This project upgraded servers to Windows 2008 and the latest version of ePO and migrated them to the SVE. One server was upgraded and migrated to new hardware running on Windows 2008 and SQL 2010.
- **ePO Health Check** - Once upgraded the health check and policy cleanup optimized and improved the efficiencies of ePO by eliminating redundant policies and improving operations.
- **Vulnerability Management Improvements** – McAfee Vulnerability Management was replaced with Rapid7 Nexpose. This system works to scan vulnerability in workstations and servers environment. The replacement consolidated three (3) physical servers and six (6) physical scanning engines down to two (2) systems in the SVE.
- **Intrusion Detection/Prevention System (IDPS) Implementation and Tuning** - This project will implement multiple border and core IDPS devices. The systems are used to monitor traffic flow through the network. The systems involved by this component project would be all IDPS devices during the tuning phase.
- **Mobile Device Management (MDM) Implementation** - MDM will implement a cloud based solution to protect King County information on mobile devices (mobile phones, tablets, etc.).

~~The major components of this project include upgrades to existing systems (McAfee ePolicy Orchestrator) and a replacement of McAfee Vulnerability Manager (MVM) with Rapid 7 Nexpose. Other aspects are the augmentation of staff time to complete other work that was provided for under other projects which did not include sufficient staff time to properly implement. In addition this program has purchased a system to institute security controls for mobile devices.~~

~~As for upgrading ePolicy Orchestrator (ePO). This upgrade is required to migrate from physical to virtual systems, where possible, and upgrade the supporting infrastructure (Windows 2003 to Windows 2012 R2), provide additional functionality and maintain the platform on vendor supported versions.~~

~~The original plan was to upgrade the MVM. During the course of the project an evaluation was conducted into the effectiveness of MVM as currently deployed and operating. It was determined that a more efficient and effective vulnerability management solution was in order to achieve compliance with certain regulation. Rapid 7's Nexpose was selected for this replacement~~

*2. If the primary reason for the project is risk reduction project, please estimate the probability of the*

*risk or describe how likely it is to occur.*

As with all projects in information security there is always a goal of risk minimization. The MDM product was acquired to minimize exposure of sensitive information on mobile devices becoming compromised.

Completion of the implementation of the Log/SIEM Management and IDS/IPS systems is also a risk reduction activity. By optimizing these systems IA will have a more thorough picture of activity on the KC network and a greater ability to capture and stop malicious traffic and activities before they become major issues.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

- 1. Describe why you expect the proposed IT investment to reduce costs?*
- 2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
- 3. What is the current baseline?*
- 4. What is the target for this measure? (How much savings will this project achieve)*
- 5. When is the cost reduction likely to be achieved?*

### **Section 7. Benefit Achievement Summary**

#### **Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both*

quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
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Update 3-6-2015:

These projects are all intended to reduce the risks to King County information.

**Upgrade of ePolicy Orchestrator:**

This project was completed on time and within budget parameters. Risks have been mitigated by upgrading aging hardware with updated hardware and migrating as much as possible to virtual environments. This upgrade increases the stability and capacity of the system and keeps King County in line with future upgrade paths.

**Replacement of McAfee Vulnerability Manager (MVM) with Rapid 7 Nexpose:**

This replacement is also complete. Risks have been mitigated by replacing aging hardware with virtual machines within the SVE. This has the added benefit of reducing hardware costs. This project was completed within budget but did take a longer than expected to fully configure the vulnerability scanner to our environment. Benefits have been achieved by providing a more consistent vulnerability picture across all county infrastructure.

**Mobile Device Management (MDM):**

This included implementation of a hosted solution. King County is currently approximately 23% deployed to all mobile devices (mobile phones and tablets) with an expected completion date of July 2015. Benefits include improved management of mobile devices and the data they contain.

**Staff Augmentation:**

Benefits received in this aspect was the ability to actually achieve the goals of this project. Without the staff augmentation none of these other benefits would have been possible.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Executive Branch IT Reorganization
<b>Project Number</b>	377191

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Bill Kehoe, Chief Information Officer

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Christine Chou	KCIT	Finance Officer
Trever Esko	KCIT	Project Director
Bill Kehoe	KCIT	CIO

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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<b>Project Completion</b>	3/4/2014	Christine Chou	New, initial draft	2 hours
BAP Reporting	3/20/2015	Christine Chou	Final BAP	0.5 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
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**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

**This project is almost completed, please see benefit summary**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)  
Tangible benefits (excluding cost avoidance):
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

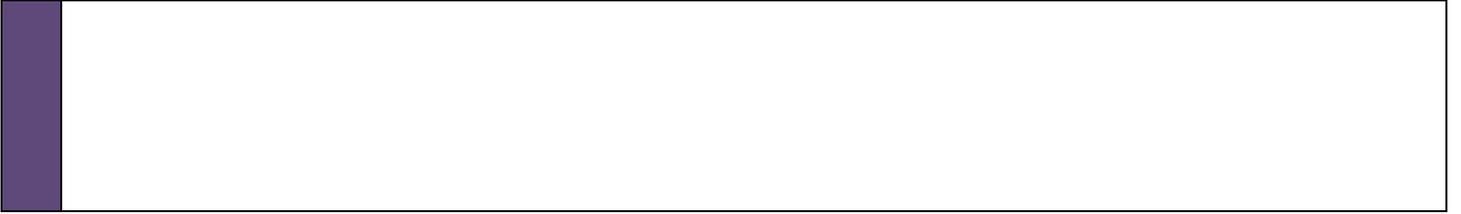
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**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage	Processing Time annual savings, and percentage of purchases receiving prompt	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt

<i>of prompt payment discounts.</i>	<i>payment discounts</i>	<ul style="list-style-type: none"> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<i>payment discounts \$200,000 savings</i>
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<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Provide an organizational structure that will allow standardization, cost transparency, and efficiency in delivering IT services in the Executive branch</i>	<ul style="list-style-type: none"> <li>• <i>Completion of IT consolidation</i></li> <li>• <i>Establishment of IT Service Center</i></li> <li>• <i>Establishment of server standardization</i></li> <li>• <i>Establishment of workstation standardization</i></li> <li>• <i>Standardized IT rates for services provided by Executive branch IT</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Decentralized IT organization</i></li> <li>• <i>Sporadic IT help desk</i></li> <li>• <i>Various servers platforms</i></li> <li>• <i>Various workstations platforms</i></li> <li>• <i>Prior to KCIT reorg, only part of IT had rates</i></li> <li>• <i>Total IT cost in the Executive branch were not known</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>One IT organization in Executive branch</i></li> <li>• <i>Servers consolidation and standardization</i></li> <li>• <i>Centralized IT service center</i></li> <li>• <i>Standardized workstation platform</i></li> <li>• <i>Produce one set of IT rates for services provided by the Executive branch IT</i></li> <li>• <i>Produce efficiency in delivering IT services</i></li> <li>• <i>Established IT rates and methodology in the Executive branch</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Efficiency achieved in 2007 – 2010, <b><u>resulting in \$8.5M savings and 22 positions reduction (please see attached 2010 savings document)</u></b></i></li> <li>• <i>IT consolidation in June 2011</i></li> <li>• <i>KCIT started with rates by services in the 2013/2014 budget based on demands</i></li> <li>• <i>Moving to standard virtual environment as part of servers standardization effort <b><u>produces \$7.6M in cost avoidance savings from 2012 - 2015</u></b></i></li> </ul>



## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Information Technology
<b>Project Title</b>	Mainframe Application Migration
<b>Project Number</b>	1113997

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Bill Kehoe, Chief Information Officer, KCIT

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Lisa Reinitz	IT Manager/ Department of Information Technology	AnT Phase Lead
Glenn Evans	IT Manager/ Department of Information Technology	LSJ Subject Matter Expert
Lilia Wong	IT Project Manager/ Department of Executive Services	AnT Subject Matter Expert
Mike Holland	IT Service Delivery Manager/ Department of Information Technology	LSJ Phase Lead

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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Stage	Date	Revised By	Description	How long did it take?
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Project Implementation	3/5/14	Andy Hill	New, initial draft	2 hours
Project Implementation	3/9/15	Andy Hill	Update	1 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The mainframe project is to move all applications and data currently residing on the mainframe (MF) to the County's Windows Server based Standard Virtual Environment (SVE). The environment will be C#.net and SQL Server, current and prevalent technologies in place in the market used for applications and databases.

The current mainframe was purchased as a replacement for \$89,634 to facilitate an easy transition into the Sabey Data Center in December of 2009. The new Mainframe allowed a simplified transition of all hosted applications to be copied over from the old Mainframe. It was acquired from the IBM Reseller Division to bridge the gap until the county could modernize all of their applications into a virtual server environment. The total operational costs for this burning platform are 3.3 million dollars a year. By porting over the applications onto a virtual server environment the operational costs will be a fraction of existing mainframe operational expenses. The Mainframe is an aging technology inhibiting business process reengineering and costing the County millions of dollars each year to operate. The code is written in archaic programming languages and the skillset needed to manage the code is no longer readily available in the workforce. By upgrading the hardware and software to virtual servers, modern relational database and new era programming language, the hardware and support costs will be drastically reduced. Having the applications hosted in a modern computing environment will allow for greater access to data and programming enhancements. The data was originally stored in formats that required custom reports to be written by Analysts at KCIT. With the data modernized, this data can be made accessible to end users by building data warehouses, ad hoc report generators and pivot tables allowing users to do real time analysis of data without custom development for each request for data. The code generated will be in C#, a standard programming language that is the de facto standard at King County and across many organizations in the area. This will allow for a broader pool of resources available to be able to make code changes and ensure stability with the current systems and reengineering in the future as seen fit by evolving business demands.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

There are 3 main risks to not doing this project.

First the cost of operating this archaic technology will continue to go up as fewer and fewer resources are available to support this. The hardware required to run the mainframe is increasingly becoming

scarce and therefore harder to find and more expensive. The price tag for operating the Mainframe is fixed and does not scale up or down based on business/technical needs unlike the virtual server environment the project will move to.

Support for this technology, both in vendor and King County FTEs are rare. Vendor support is scarce and expensive because of the dwindling number of mainframes being used in organizations. This will jeopardize key County functions like property assessments, property tax collection and the management of inmates at King County detention facilities. There is less and less workforce that is readily available to maintain, operate or program on the Mainframe environment with the exception of current staff providing on the job training.

Finally, businesses have been severely constrained in their ability to reengineer their business process and reacting to legislative changes to their operations. Not doing this project will not allow business to adopt a more dynamic approach to delivering on their mission, and reduce their effectiveness to the citizens of King County.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*  
By moving the application to the more modern platform, the ongoing platform cost will be at least 2/3<sup>rd</sup> less than the current mainframe operating cost (\$3.3M vs. \$1M)
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*  
Starting in ~~2015~~ 2016 budget, the new platform cost charge would be \$1M to replace the prior year mainframe on-going cost of \$3.3M. This will be validated after year end ~~2015~~2016
3. *What is the current baseline?*  
\$3.3M
4. *What is the target for this measure? (How much savings will this project achieve)*  
Savings will be \$2.3M
5. *When is the cost reduction likely to be achieved?* ~~2015~~-2016

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

#### **Example:**

Metric Description	Metrics	Baseline	Target	Actual
<i>Reduce cost to deliver service. This project reduced processing time from the current</i>	<i>Processing Time annual savings, and percentage of</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are</li> </ul>	<i>2 day processing time 20 percent of</i>

<p><i>average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>purchases receiving prompt payment discounts</i></p>	<p><i>purchases are receiving discount</i></p> <ul style="list-style-type: none"> <li>• <i>Savings of \$100,000</i></li> </ul>	<p><i>receiving prompt payment discounts</i></p> <ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<p><i>purchases are receiving prompt payment discounts</i></p> <p><i>\$200,000 savings</i></p>

**IT Project Benefits Achievement Plan (Version 2)**

**Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?**

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	PSERN (Puget Sound Emergency Radio Network) Project
<b>EBS Project Number</b>	1115920

**Section 2. Business Owner Accountability**

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Bill Kehoe, CIO

**Section 3. Who is involved in developing the Benefit Achievement Plan?**

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Tony Minor	Manager/KCIT	Technical Input (O&M)
Sean Douglas	Electronic Communications Specialist /KCIT	Technical Input (O&M)

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Funding Request – Phase 2	07/15/13	Amy Martin	New, Initial Draft	3 hours
Funding Request – Phase 2	10/09/13	Amy Martin	Updated Initial Draft	1 hour
Annual Reporting	12/12/13	Amy Martin	No Changes Required	N/A
Annual Reporting	2/18/15	Hai Phung	No changes required	N/A
Update	6/19/15	Hai Phung	Add benefit description to Category 2	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
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- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

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**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The criteria for the system design calls for a more stringent level of radio signal throughout the radio service areas. Because of this the system vendor has been asked to design a network that will increase the amount of signal present in any given location within the service area. The service area is also defined in a new and enhanced manner which also equates to a greater probability that signal will be present at locations within the service areas. Rather than having a single large area of coverage, the county was divided into 43 separate areas (39 Cities, 3 major highways in the mountains, plus a large portion of unincorporated county) with each of these areas having specified coverage requirements.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Extensive coverage testing will be completed over several months after all infrastructure operational and functional testing is complete and before users are placed on the system. During this testing teams of testers will conduct several types of tests in “test tiles” that are 1/10th of one mile by 1/10th of one mile square. Each test tile accessible by automobile or boat will be tested by measuring the radio signal strength (for informational purposes only), by measuring the data accuracy (called a Bit error rate, or BER test) and lastly in a subjective “can you hear me now” test (known as a delivered audio quality, or DAQ test). For each accessible test tile both the BER and DAQ tests must both pass to pass the tile. 97% of all tiles must pass the testing to be considered a pass. This compares today with approximately 94% coverage of the county where there is a single coverage area is specified. With a single coverage area coverage holes can be very large and yet still meet the standards. By splitting the county into 43 coverage areas, this will ensure not only increased coverage but that these coverage holes are much smaller.

3. *What is the current baseline for this measure?*

The current baseline is 94% coverage.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

97 % Coverage of the Primary Bounded Coverage area, which is the area of the county west of a line at 1250’ above sea level. Also, the 3 highways heading to the east (US-2, I-90, and SR-410) will have 95% coverage requirements.

*When is the benefit likely to be achieved?*

The benefit will be achieved when the infrastructure is completely built, all radio sites have been proven to be operating according to specifications, system optimization has been completed and testing has been satisfactorily completed.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three*

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The benefit will be achieved when the infrastructure is completely built, all radio sites have been proven to be operating according to specifications, system optimization has been completed and testing has been satisfactorily completed.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The current emergency radio system (ERS) contains electronic components that are eighteen (18) years old. Typically emergency radio systems have a life cycle of approximately twenty (20) years. The likelihood and frequency of component failures is increasing as the system ages and Motorola no longer sells or supports some of the system's critical components and plans to discontinue the sale and repair of all components in phases over the next few years. Components are still available on the secondary market; however, reliance upon the secondary market equipment is risky because the needed version of a critical component may not be available and the condition and service history of the components is unknown. In addition, certain geographic areas within the service region require improved radio coverage to meet the needs of a growing population within King County to include boundary limits that were not considered when the initial ERS was built eighteen years ago. At this time, radio sites cannot be added to expand coverage because Motorola no longer sells the necessary new equipment.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Radio System technology is extremely complicated. There are layers of operability, failure modes and redundancy that are purposely built into the system to ensure that it will meet end user needs. Today, when something breaks, it often does so without indication to the end users because of the requirements for 99.999% reliability. Single components in the radio system fail nearly every

day. This could mean that one radio channel in one location is no longer available, but 22 other channels are available. It could also mean that a device called a “system controller” fails, but a redundant device takes over operations for the failed component. Again, these could go unnoticed by end users in nearly all “normal” use scenarios today. What is clear is that as time advances, the risk of failures increase due to system component age. Simultaneously, the ability to repair parts and get new parts is decreasing. The ability of the County to get parts on any secondary market is fraught with problems such as incompatibility, parts unavailability, and lack of functionality of the parts with our system. It is therefore probable that at some point after the secession of parts support from the vendor, the system will begin to suffer failures that will decrease capacity, reliability and/or coverage if something is not done to address this. It is not a sudden “event” that will occur on a certain date, but rather is likely to be a gradual chain of events that will impact the radio system over a period of time. By implementing a new more reliable system with new components, the potential for the risk of equipment and software failures, service outages and system interruptions will be reduced. The need for replacement parts will no longer be a concern and the risk of using secondary parts will be eliminated.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
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				<i>savings</i>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	KCIT / King County GIS Center
<b>Project Title</b>	2015 Regional Aerials Project
<b>Project Number</b>	1124187 Award 115936

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Bill Kehoe, CIO

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Gary Hocking	ITSDM / KCIT-DNRP	Process guidance
George Horning	KCGIS Center Manager / KCIT-Regional Services	Project sponsor
Scott Lackey	Project Manager / KCIT-BMO	Project management
Mike Leathers	KCGIS Center Data Coordinator / KCIT-Regional Services	Technical guidance

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Conceptual review	3/12/14	George Horning	Initial draft	7 hours
Budget process	6/27/14	George Horning	Changed primary project benefit to Category 3, updated and added benefit descriptions	1 hour
Budget process	7/29/14	George Horning, Mike Leathers	Updated based on feedback from Council staff.	1.5 hour

	Standard BAP periodic updates	3/6/15	Scott Lackey	Standard regular updates as requested by Karl Nygard	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

**There is a vital need to replace the county's 2012 aerial imagery (vertical photos taken from aircraft which are geometrically corrected to create an accurate representation of the earth's surface). These photos have aged beyond the desired two year replacement cycle established by the King County Geographic Information System Technical and Oversight committees. It will be a full three year interval when the proposed 2015 aerial imagery is finally captured. There has been significant development activity in King County since 2012 and the new imagery will provide a detailed view of up-to-date ground conditions enabling county agencies to make better informed decisions to serve the public. Aerial imagery is a key data component for agencies in performing mapping, query, analysis and decision-making in support of their business functions such as facilities management, natural resource conservation, property assessment, building permit and land development review, and situational awareness during emergency operations. For example, King County Assessments depends heavily on aerial imagery to determine changes to real property, and the Road Services Division uses the imagery to map maintained infrastructure increasing the accuracy of their asset inventory and reducing the need for field visits.**

2. *Updated 2015-03-06*

*If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**The primary risk in not obtaining new aerial imagery is a continuing degradation in the county's ability to understand conditions on the ground. As the accuracy of the 2012 imagery diminishes, land use decision making will suffer, emergency situational awareness will decline, needless site visits will be scheduled, asset management will suffer, property appraisal will become more difficult, etc. **The degradation is currently already impacting some groups due to rapid urban development changes impacting various infrastructure areas include utilities (due to asset relocation, impacting their maintenance and disaster response costs); planning and permitting; tax assessments; storm water runoff calculations; etc.****

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay,

has the capacity and intent to pay, but will be avoided due to the project.

**Example: Reduced cost to produce service.** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. **Updated 2015-03-06**

*Describe why you expect the proposed IT investment to reduce costs?*

**The project will reduce cost for the County to acquire aerial imagery through a cost share arrangement with our partner agencies (mainly cities and utility districts). The 2012 Regional Aerials Project, with over 50 participants, generated cost avoidance of 57% for the County, and we expect a similar or better result for the 2015 project, where we may have as many as ~~70 to 80~~ **85 to 100** participants. In addition, through cost sharing the county is able to acquire imagery of higher resolution and quality. More detail can be seen in higher resolution imagery, thereby supporting a wider range of county business needs and increasing the return on investment in the imagery.**

2. **Updated 2015-03-06**

*How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

**The measure for cost savings will be based on the county's share of the unit cost for the imagery versus the total unit cost. For example, if the total unit cost is \$210 for imagery covering a given square mile, and the county shares the cost for that square mile of imagery with two partner agencies, then the county's share of the cost is \$70. This represents a cost avoidance of \$140 **per square mile**, a 67% reduction from the total cost.**

3. *What is the current baseline?*

**The current baseline is the 2012 Regional Aerials Project. We expect to match or exceed the cost avoidance 57% for that project.**

4. *What is the target for this measure? (How much savings will this project achieve)*

**The target is to save 60% through our cost sharing arrangement with the participating agencies.**

5. **Updated 2015-03-06**

*When is the cost reduction likely to be achieved?*

**It is Now. County contribution to this project is lower than the 2012 Regional Aerial project.**

**There is also possible cost savings for the 2017 project (due to re-usability of RFP, specifications, project management and Quality Assurance documentation) that will be presented as shorter project initiation and time reduction in RFP development.**

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

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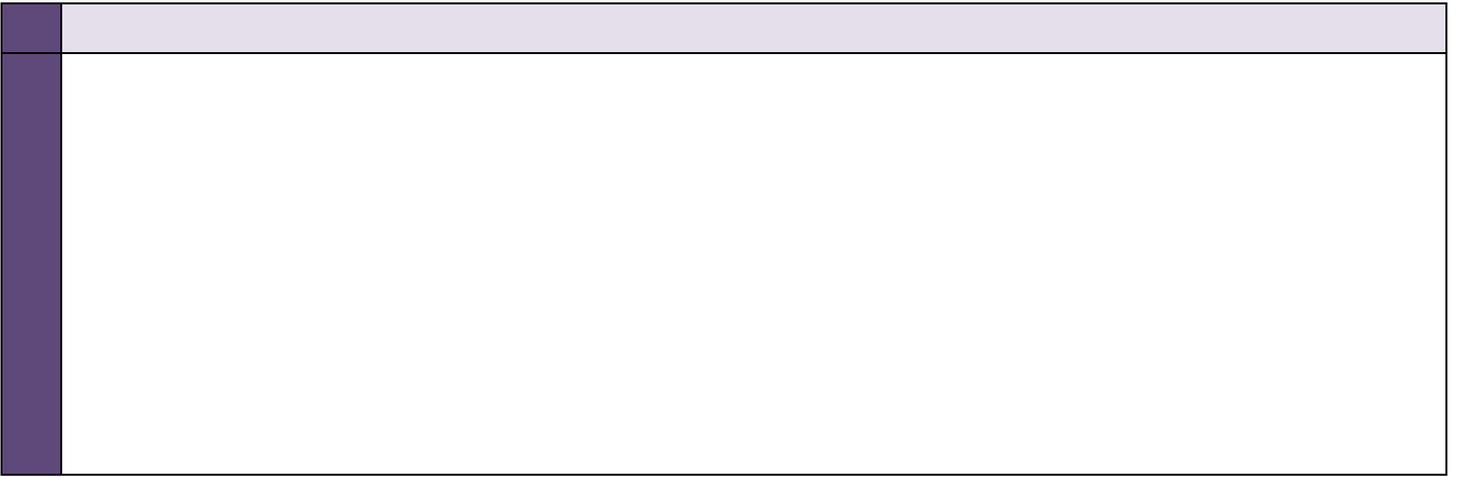
**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

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**Example:**

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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Secure Government Cloud Migration/ Single Sign-On Access (SSO)
<b>EBS Project Number</b>	1122187

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Jayne Pendergast, King County Deputy Chief Information Officer

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Bob Micielli	IT Enterprise Manager III / KCIT	Project Point of Contact
Temujin Baker	Technology Products Manager	Service Owner
Molly Cherkin	IT Business Analyst/KCIT	BA assigned to Business Case revision
Nick Smith	eGovernment Manager/KCIT	Sponsor
Latasha Battle	PM/KCIT	Project Manager

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Conceptual review	8/12/13	Molly Cherkin	Initial submission	2 hours
Conceptual review	10/8/13	Molly Cherkin	Update based on scope change	20 minutes
Conceptual review	11/26/13	Molly Cherkin	Update based on change in project cost and into new BAP form	1.5 hours
Conceptual review	1/3/2014	Molly Cherkin	Update based on changes to Business Case and project cost	1.5 hours
Project Completion	3/2/2015	Nick Smith	<u>Final BAP</u> - Update based on implementation and closing	1.5 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
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- 4) Reduced cost to produce services (internal or external)

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***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

Microsoft is mandating that governments move out of the E-cloud by September 2014. Failing to migrate to the G-Cloud will require King County to terminate its cloud-based SharePoint environment. However, migrating to the G-cloud allows us to continue our existing service in an enhanced environment compliant with government regulatory requirements like CJIS and HIPPA. This enhancement allows all agencies to maximize their utilization of the cost-effective environment.

Update: 2/24/2015 – The SharePoint 2013 migration from the E-Cloud to the G-Cloud was completed in September 2014. The migration to the G-Cloud environment benefited all County agencies and departments who now have the ability to place and access their work documents in the secure cloud platform. The County’s new Intranet site: KCWeb, is hosted on the G-Cloud platform allowing for secure, mobile access.

Update: 3/3/2015 – The migration of the county’s SharePoint content from the Enterprise (public) cloud to the secure G-Cloud provided the opportunity to develop and implement a Single-Sign On (SSO) functionality, allowing for one point of access for employees to SharePoint. The efficiency of the SSO now offers employees one access point (one password) to SharePoint, MyDrive, KCweb Intranet, local department and project collaboration sites from their work PC, mobile devices and from their homes. SSO breaks down the barriers to access information and collaborate in a secure environment.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

It is certain that Microsoft will require King County to leave the E-Cloud.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay,

has the capacity and intent to pay, but will be avoided due to the project.

**Example: Reduced cost to produce service.** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** *Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

***To be completed when benefits have been achieved or no further benefits are expected.*** *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings
		•	•	

Update: 2/24/2015 – The SharePoint 2013 migration from the E-Cloud to the G-Cloud was completed in September 2014. The migration to the G-Cloud environment benefited all County agencies and departments who now have the ability to place and access their work documents in the secure cloud platform. The County’s new Intranet site: KCWeb, is hosted on the G-Cloud platform allowing for secure, mobile access.

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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Sobieski Mountain Tower Repair
<b>Project Number</b>	1116591

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Tony Minor	Manager/KCIT	

#### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

#### Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual Report	3/4/2014	Hai Phung	Initial	1 hour
Annual Report	3/12/2015	Hai Phung	Final	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

*This project, to repair an emergency radio tower, was successfully completed in September 2013. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and is expected to stay at that level at least for the next five years. ~~and will report annually for the next five years on up-time levels.~~*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

*If the tower fail physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were*

required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current	Processing Time annual savings, and percentage of	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are</li> </ul>	2 day processing time 20 percent of

<i>average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>purchases receiving prompt payment discounts</i>	<i>purchases are receiving discount</i> <ul style="list-style-type: none"> <li>• <i>Savings of \$100,000</i></li> </ul>	<i>receiving prompt payment discounts</i> <ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<i>purchases are receiving prompt payment discounts</i> <ul style="list-style-type: none"> <li>• <i>\$200,000 savings</i></li> </ul>
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*This project, to repair an emergency radio tower, was successfully completed in September 2013. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and is expected to stay at that level at least for the next five years ~~and will report annually for the next five years on up-time levels.~~*

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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	KCIT / Radio Communications Services
<b>Project Title</b>	South Loop Microwave Replacement
<b>Project Number</b>	347305

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Jayne Pendergast, KCIT Deputy CIO

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Anthony Minor	Manager / Radio Communications Services	Stakeholder / PM

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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Project is complete	3/4/2014	Tony Minor	Project completed over 2 years ago however, vendor contract close-out is pending.	1.5 hours
Project is complete	3/11/2015	Tony Minor	Vendor contract close does not appear to be possible due to several changes of vendor ownership, vendor’s inability to produce project records, and recent bankruptcy filing by vendor. Recommend remaining project funding be transferred to an escrow account and held in the event	1.5 hours

			vendor is able to close the project contract and receive owed retainage in the future. Once the remaining funds are placed into escrow the project can be closed.	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
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- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

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**benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The microwave backhaul equipment used to network the King County 800 MHz Emergency Radio System was comprised of 17 year old equipment, no longer supported by the manufacturer, and significantly limited in capacity. The average life cycle of this equipment is 10 to 15 years. The equipment had a high failure rate which increased the number, and risk of 800 MHz radio service impairments; and the risk of simultaneous failures could cause significant service impairments that would affect the operations of First Responders serving the citizens of King County.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

This project replaced aging, no longer supported microwave equipment that failed at an ever increasing rate. Equipment failures occurred at a high rate and risked the 99.999% designed service availability of the King County 800 MHz Emergency Radio System.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were*

required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current	Processing Time annual savings, and percentage of	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are</li> </ul>	2 day processing time 20 percent of

<i>average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>purchases receiving prompt payment discounts</i>	<i>purchases are receiving discount</i> <ul style="list-style-type: none"> <li>• <i>Savings of \$100,000</i></li> </ul>	<i>receiving prompt payment discounts</i> <ul style="list-style-type: none"> <li>• <i>\$400,000 savings</i></li> </ul>	<i>purchases are receiving prompt payment discounts</i> <ul style="list-style-type: none"> <li>• <i>\$200,000 savings</i></li> </ul>
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This project, to replace the King County 800 MHz Emergency Radio System backhaul was successfully completed in May 2011. The anticipated benefit is to maintain current service levels at 99.999% service availability for an additional ten years. The microwave backhaul is currently performing at better than 99.999% up-time and is expected to continue performing at this level for the next seven years.

## IT Project Benefits Achievement Plan (Q1 2015 Version 1)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	KCIT
<b>Project Title</b>	Systems Management
<b>EBS Project Number</b>	749016061

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Jayne Pendergast , King County Deputy Chief Information Officer

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Bob Micielli	Technical Services Manager	Project Point of Contact
Krista Bautista	IT Service Center Manager / KCIT	IT Service Center Manager
Kristin Colburn	ITSM Strategy and Process Manager	Development of ITSM strategy and implementation of processes

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Conceptual Review	7/22/13	Marivic Kokorowski	New, initial draft	3 hours
Update to new BAP V2	10/24/13	Jayne Pendergast	Update for new format	1 hour
Update to new BAP V3	10/29/13	Christine Chou	Update baseline	1 hour
Update for 2/14/2014	2/13/14	Jayne Pendergast	Update for 2/14/14 reporting	.5 hour
Update – 3/9/2015: Annual report	3/9/15	Kristin Colburn	Changes to Category 2 Benefits 1a, 1b, 1d, 2 and 5. Section 7.	2 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services**

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s). This project is to implement Information Technology Infrastructure Library (ITIL) recommended industry best practices and its supporting tools, the following benefits relate to increased quality of service:*

*a. Update – 3/9/2015:*

*Reduced number of high-impact technology outages. Implementation of best practices for problem management and change management and the tools that support these practices will allow for more proactive solutions to prevent technology outages rather than reactively dealing with these major incidents after they have affected business operations. Implementing the change management tool in LANDESK will enable automated and consistent tracking and reporting of change-related incidents. The improved change management process will support a more disciplined approach to assessing risk associated with making changes, resulting in higher volumes of successful changes. Implementing the problem management tool in*

*LANDESK will enable higher visibility into the types of recurring issues that require long-term solutions and provide information to help reduce the duration and frequency of service outages. In addition, a shared best practice vocabulary will result in more meaningful conversations and more accurate reporting associated with “incidents”, “problems” and “changes” across agencies and support groups.*

~~*Reduced number of major incidents causing technology outages—Implementation of best practices for problem management and tools that support these practices will allow for more visibility of technology allowing for more proactive rather than reactive resolution of major incidents before they occur. Implementing the Change Management tool in LanDesk will enable tracking of major incidents caused by controlled changes; and implementing the Problem Management tool in LanDesk will enable better and more consistent problem management to prevent more major outages. Meanwhile, the problem caused by the use of various definitions of “major incident” across agencies and support groups and inconsistency of reporting process will be resolved by following best business practices and common terminology that will result in a more accurate counts and comparison.*~~

*b. Update – 3/9/2015:*

*The application of ITIL best practices and improved tools will result in quicker and more effective response and resolution of incidents related to unplanned technology outages. The addition of the problem management module in LANDESK supports the separation of incident records from problem records, which is impossible today, enabling us to identify and invest in the permanent resolution of issues that are chronic and continue to interrupt business operations. Adopting and implementing standard and consistent problem management practices will reduce the frequency and duration of service outages. Currently, the average time it takes to resolve a major incident is 3.4 hours. By applying new problem and incident management techniques, we expect to reduce this by 30% in the short term.*

~~*Reduced meantime to resolution (MTR) of technology outages during major incidents—Applying ITIL best practices and enhancing existing tools will allow for more visibility of technology, allowing for quicker response and resolution of major incidents. The Problem Management tool in LanDesk will allow for incidents and problems to be separated into groups, which is not done today. Better incident organization along with best practices will enable better and more consistent problem management to resolve issues more quickly and prevent more major outages. At this time, the average MTR to fix a major incident is about 3.4 hours. The goal is to reduce this by 30% by the close of the project.*~~

*c. Better customer satisfaction through reduced hold time with the Service Center. Implementing standards and improving LanDesk LANDESK will ensure better visibility on the status of incidents and problems and accessibility for both Service Center agents and customers. This resolves a problem of high number of calls related to same incidents, creating long hold times for customers. Because there is no standard process for responding to incidents or problems, there are customers that are left on hold for long periods of time while Service Center agents attempt to respond to similar calls. This can create a backlog of customers on hold. We are anticipating that by putting out a system that actually will identify the incident early and communicate that, we will prevent or decrease the calls that will be made due to that incident. The goal is to reduce the number of calls during major incidents by 30% after implementation.*

*d. Update – 3/9/2015:*

*Reduction in change-related incidents. By providing change management process automation in LANDESK and applying change management best practices, incidents related to authorized changes will be reduced. There will be a single focal point for changes to supported services, minimizing the probability of conflicting changes and potential disruption. Standard methods and procedures will be used for efficient and prompt handling of all changes in order to minimize the impact of change-related incidents on business continuity, service quality and re-*

work. The impact and information related to these types of incidents will now be tracked, measured and analyzed for improvement. An improvement goal will be determined after a reliable baseline is identified.

~~Reduced issues related to scheduled changes—By implementing the Change Management tool in LanDesk and applying ITIL Change Management best practices, issues related to planned changes will be reduced. At this time, there is no ability to count the number of incidents that are related to scheduled changes. By implementing the Change Management tool, we can begin tracking and monitoring those issues. Also by using the LanDesk Problem Management tool and ITIL best practices, those issues can be resolved and prevented. After implementation of the Change Management tool, we can create a baseline and count the number of change related issues reported. The goal would be determined after the baseline is identified.~~

e. Each of the above benefits can provide avoidance of employee time spent waiting for technology outages to be resolved.

2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

- Update – 3/9/2015:  
Reduced number of technology outages resulting in major service interruptions
- ~~Reduced number of major incidents causing technology outages,~~
- Reduced time to restore service during a major incident
- Reduced number of Customer calls during major incidents
- Tracked and reduced number of issues related to scheduled changes

3. What is the current baseline for this measure?

Update – 3/9/2015:

We will use current Metrics as captured in ~~the LanDesk~~ LANDESK (our incident ticket tracking system) and manually from 2013. We also have a Root Cause Analysis process that we do after every major incident that we manually capture as a metric. We will use this as a baseline to see a decreased # of major incidents and amount of time to resolution.

4. What is the target for this measure? (How much improvement will this project achieve?)

- Major Incidents reduced by 30%, currently at 42 major incidents per year
- Reduce the meantime to resolve major incidents by 30%, current average is 3.4 hours
- Reduce number of customer calls during major incidents by 30%, currently at 5,013 per year
- We will start measuring, tracking issues, and setting improvement target related to scheduled changes after the implementation of the project that will enable this effort.

4. Update - 3/9/2015:

When is the benefit likely to be achieved? We expect to start seeing some benefits in the middle of ~~2014~~ 2015 once we have the training and some processes in place for Major Incident ~~Reduction~~ resolution. The metrics will really show the results after a process has been in place for a year (mid ~~2015~~ 2016).

Note: Timelines for benefit realization have been changed. When the BAP was written the project was expected to start at the beginning of 2014, but didn't kick-off until April of 2014. In addition, the implementation of the tool to enable the improved processes will not be complete until April of this year (2015). Due to these changes the described benefits will not be reported until 2016.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older**

**technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Update – 3/9/2015: Reduce technology outages causing major incidents. <del>Reduce major incident causing technology outages.</del></i>	<i>Number of incidents per year</i>	<ul style="list-style-type: none"> <li><i>Update – 3/9/2015: 42 major incidents per year <del>42 incidents per year</del></i></li> </ul>	<ul style="list-style-type: none"> <li><i>Update – 3/9/2015: 29 major incidents per year <del>29 incidents per year</del></i></li> </ul>	
<i>Reduced time to restore service during a major incident</i>	<i>Meantime to resolve (MTR) a major incident</i>	<ul style="list-style-type: none"> <li><i>3.4 hours</i></li> </ul>	<ul style="list-style-type: none"> <li><i>2.4 hours</i></li> </ul>	
<i>Reduce number of customer calls during major incidents</i>	<i>Number of calls during major incidents per year</i>	<ul style="list-style-type: none"> <li><i>5,013 calls per year</i></li> </ul>	<ul style="list-style-type: none"> <li><i>3,509 calls per year</i></li> </ul>	
<i>Ability to track issues related to planned changes</i>	<i>Availability of metrics</i>	<ul style="list-style-type: none"> <li><i>N/A</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Reporting metrics one year after project implementation</i></li> </ul>	

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Information Technology Department (KCIT)
<b>Project Title</b>	Westin Network Connection Upgrade
<b>Project Number</b>	1124191

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Jayne Pendergast, Deputy Chief Information Officer~~ **Aaron Barack, Director of IT Operations**

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Bill Kehoe	Chief Information Officer, KCIT	
Jayne Pendergast	Deputy Chief Information Officer, KCIT	
John Storch	Regional Services Manager, KCIT	
Lori Dickneite	Network Services Manager, KCIT	
Behzad Shirinzadeh	Network Services Manager, KCIT	

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
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5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review and Business Case	5/29/2014	John Storch, Lori Dickneite	New, initial draft	1 hour
Conceptual review and Business Case	6/28/2014	Lori Dickneite	Updated final document	1.5 hours
<b>Annual BAP Reporting</b>	<b>3/20/2015</b>	<b>Lori Dickneite</b>	<b>No Changes; project has not yet started</b>	

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
 This project will allow the County full immediate access to its critical telecommunications hub and have full control to fix and upgrade equipment without having to obtain a third party review and permission. Equipment upgrade must occur more frequently due to the County's expansion in technology (mobility and modernization); thus the County's immediate access to its communication hub and equipment is critical. In addition to space consolidation, this project will also allow equipment upgrade to handle a rapid volume increase in internet routes. This project benefits will prevent long outages due to waiting period for site access and upgraded equipment

Currently, the County must request and wait for a third party to review and grant access to the site and to obtain approval for any equipment changes; increasing the County's risk of equipment failure. As an example, in October 2012, MCI/Verizon denied schedule work to upgrade power for the County to be able to make necessary design changes, including an Uninterruptable Power Supply (UPS)

equipment installation. King County spent several weeks trying to work with MCI/Verizon to get the work approved and they required us to modify/create another contract before they would authorize.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

- Immediate access to the County's communications hub preventing delays in troubleshooting and maintenance of county's equipment; supporting the continuation of 99.99% of network uptime target
- County will have full control of its communication hub design and equipment upgrade and there will be no waiting period for third party approval; reducing deployment time
- The project will include equipment upgrade to speed up internet connections which currently experience frequent slowness due increase traffic

3. *What is the current baseline for this measure?*

- County currently has the secondary priority access; increasing the risk of network outages due to troubleshooting delays. This risk is growing with the expansion of network needs (mobility, cloud, modernization, egovernment, social media). If continues, the 99.9% network uptime may no longer be maintained
- County currently must have third party approval for telecommunications hub design and equipment deployment
- Users frequently experience slowness in internet traffic. From Jan 2013 to Oct 2014, there were 237 service tickets related to overall network slowness. Although, the service tickets did not indicate specific causes of network slowness; the current hub state and arrangement could have be the drivers of some of them.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- Immediate access to the communication hub and maintain 99.99% network performance
- Full control of equipment design and deployment
- Reduce service tickets related to internet slowness by 30%

5. *When is the benefit likely to be achieved?*

End of 2015

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The Westin Building Exchange is the premier telecommunications hub and primary connection point (POP) for telecommunications and specifically high speed Internet for the Pacific Northwest. Currently, King County site is co-located with Frontier Communications (commercial communication company) and has critical fiber cable connections to several disparate floors in the Westin facility. King County access, expansion, changes, and outage notification must be authorized by Frontier. This arrangement has been in place for more than 12 years. This project will:

- Consolidate all of our fiber cable termination points (also known as demarcation point - dmark) to a single floor and allow for standardization and expansion. These fiber connections are critical to the County as they provide network connections to multiple Internet peers, such as Software as a Service (SaaS) providers that host applications like those used by the King County Prosecutors Office, King County Council, and Public Health applications. The function of the demarcation points become more and more crucial as technology is advancing to support County's strategy in mobility, modernization, and moving more toward cloud utilization that is depending on the Internet connectivity provided by this facility
- Allow King County to have direct controlled access 24x7, which will ensure we are meeting the new and future requirements for Criminal Justice Information System (CJIS) data requiring a separate area for this connection point.
- Provide direct contact with the building regarding security changes and outage notifications and eliminate dependency from external organization to ensure King County is aware of planned work, and unplanned incidents in the facility, and have control over decision of type of equipment to reside in the building.
- Upgrade our network equipment to next-generation Internet class equipment that can support the increase in the demand for Internet access to support SaaS applications and the cloud strategy, which rely heavily on the network equipment and connections to our Internet peers.

Overall, this project gives us the ability to respond to growing rates in internet connections demanded by the needs of future technologies, such as the cloud, mobility, and application modernization which performance are depending on network quality. We have to have ability to grow the network presence and capacity to meet the business needs. The project will reduce the probability of network outages, provide faster response time during outages, and improve connection time; which is crucial with the growing business needs in mobility and cloud utilization.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

King County has not experienced extended downtime to date, however, with the advancement of technology, expansion of mobility, and implementation cloud strategy, the role of this demarcation system become very significant for network performance as the infrastructure of IT. Without the upgrade, quality of IT will eventually deteriorate as cloud services and SaaS applications expand, and access to application will slow down. This project will also avoid an important audit risk by complying with the new and future physical security requirements of Health Insurance Portability and Accountability Act (HIPAA) and Criminal Justice Information System (CJIS) network security that call for a specific King County secured space.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

*If one of these towers failed physically, the cost to the county would be enormous, generally in the*

neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Information Technology Department
<b>Project Title</b>	Enhance Wireless Connectivity
<b>Project Number</b>	1124574

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Jayne Pendergast, Deputy Chief Information Officer~~ Aaron Barack, Director of IT Operations

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Bill Kehoe	Chief Information Officer, KCIT	
Jayne Pendergast	Deputy Chief Information Officer, KCIT	
John Storch	Regional Communication Manager, KCIT	
Lori Dickneite	Network Services Manager, KCIT	
Behzad Shirinzadeh	Network Services Manager, KCIT	
Aaron Barak	Operations Director	Project Sponsor

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	5/29/2014	John Storch, Lori Dickneite	New, initial draft	1 hours
Conceptual review	6/28/201	Lori Dickneite	Updated final document	1.5 hours
Project Planning	3/20/2015	Aaron Barack	Review	.5 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).  
How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*  
This investment will expand wireless experience for users in the county's facilities and will double the number of users from the current capacity with increase capabilities. The upgrade will support video, audio, and file downloads. Security access will also increase by leveraging virtual network logic to improve administration of access, security, and logical partitioning of public and business environment.

Current wireless environment (about 1Meg per user) allows average user ability to do only email, chat, phone text, but not large downloads, video, and most audio

2. *What is the current baseline for this measure?*

- 10-25 users per wireless access point at 1 Meg per user. Allow only for email, chat, phone text, but not large downloads, video, and most audio
- Lync is not available via wireless
- Connection/response time for email is about 3-5 seconds

3. *What is the target for this measure? (How much improvement will this project achieve?)*

- 50 users per wireless access point at 10 Meg per user. 10 Meg will support video, audio, and file downloads
- Lync will be available for conference calls or general communications throughout the building
- Average connection/response time for Email and Web access will be about 2-4 seconds. This is also depending on end user's device and other non-wireless factors such as email server load

4. *When is the benefit likely to be achieved?*

Benefit will be achieved upon deployment and installation of equipment throughout the project. The project has an estimated end date of 3/31/20156

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The current wireless access points system serving King County high occupancy were installed in years 2007/2010/2011 and have passed end of life. Some equipment is no longer supported by vendor. The current system provides an average of 1 MB per user for up to 1950 concurrent users in a high user density building (eg. Chinook). Any additional users reduce the wireless speed/bandwidth for everyone. The wireless industry rapidly upgrading the standard in response to demand in consumers' mobility and vast growing mobile devices that require more and more bandwidth to keep up with consumers' demand of high speed connections. The latest industry standard that will be available 4<sup>th</sup> quarter 2014, provides a potential up to 100 MB per user. Average life of equipment replacement would be five years, but business demands for higher speed over time may dictate a shorter

replacement cycle.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The current wireless system is more than five year old and must be replaced. Not upgrading the system will lead to degradation of wireless performance as more users (King County employees and visitors to County's facilities) deploy their mobile devices and depend on them. Not providing an optimum wireless performance will contradict the County's mobility strategy and discourage users to use their wireless device.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

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### Benefit Achievement Summary

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**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
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<b>King County Department/Agency Name</b>	<b>KCIT</b>
<b>Project Title</b>	<b>Workstation Standardization Project</b>
<b>EBS Project Number</b>	<b>1122018</b>

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: **Primary: ~~Belinda Rose, Customer Service Director~~ Aaron Barak, IT Operations Director**  
**Service Owners: Mike Berman ITDSM-DOT, Sue Delaat ITDESM-DNRP, James Marsh ITDSM-DES**

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
<del>Belinda Rose</del>	<del>Customer Service Director, KCIT</del>	<del>Sponsor/Business Owner</del>
Aaron Barak	CSS Owner	Business Owner
Mike Berman	ITDSM, DOT-KCIT	Steering Committee Member/Service Owner
Sue Delaat	ITDSM, DNRP-KCIT	Steering Committee Member/Service Owner
James Marsh	ITDSM, DES-KCIT	Steering Committee Member/Service Owner
Scott Peterson	Project Manager, KCIT	Project Manager

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	9/12/13	Scott Peterson	New, initial draft	2 hours
Conceptual review	10/30/13	Scott Peterson	New From	30 min
Conceptual review	11/5/2013	Mike Berman	Added answers	30 min
BAP Review	3/20/2015	Mike Berman/Scott Peterson	Council’s questions answered	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

Category #1: External service benefits: Improving the quality or quantity of services provided to the public

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).

~~Each agency in the Executive Branch currently spends time and resources maintaining their own image process and images. By creating a standard image process and baseline standard image, each agency will have more time and resources to concentrate on other support needs.~~

Updated 3/20/2015

**Each agency in the Executive Branch currently spends time and resources maintaining their own image process and images. By creating a standard image process and baseline standard image, a wide range of computer build automation can eventually be achieved, reducing actual core system build time and increasing quality of the finished product. These efficiencies will give each agency more time and resources to concentrate on other support needs and ensuring the same high quality with other manual portions of the build process.**

2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

**We will compare the average time it takes to build a computer from scratch today and compare**

it to the time it takes after the project and following the new process.

3. What is the current baseline for this measure?

~~County-wide the measured number of incident tickets for a six-month period was 16,350. Extrapolated to one year would equal 32,700 incident tickets. The conservative projection is that we can impact 10% of all incidents = 3,270 incidents at 30 minutes each incident =  $3270 * 30 \text{ minutes} / 60 = 1,635$  support hours of end-user time saved. The current time it takes to build a computer from scratch is \_\_\_\_\_.~~

Updated 3/20/2015

Currently the build time takes an average 1.5 hours. The new image takes an average 1 hour. We eliminated the measurement based on the number of tickets since the tickets may represent other causes not related to image standardization.

4. What is the target for this measure? (How much improvement will this project achieve?)

~~The target is 10% or if we average the typical labor cost of a KC employee at \$65/hr., then this would result in a  $1635 * 50$  cost savings of \$106,275. Subtract the time it takes after the new image is complete from the time it takes today with the new image.~~

Updated 3/20/2015

The target is reduction of 10% of staff time currently involved or about 1,635 hours. These efficiencies will be redirected to other support activities to ensure high quality of the build process.

5. When is the benefit likely to be achieved?

~~Each agency will see this savings as soon as they adopt the new standard image process and new standard baseline image.~~

Updated 3/20/2015

Efficiency will be achieved within 1 year of the completion of KCIT alignment or roughly Q2 2016.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology. **This project is standardizing the process to image a computer with one standard baseline image. This upgrade is necessary because each agency currently completes this work in silos and they all use a different image. Moving to a standard process and standard baseline image, the County will save time and money by allowing each agency's support teams to concentrate more time supporting the ever-increasing number of automated devices that require technical set up and**

**support.**

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

### **Section 7. Benefit Achievement Summary**

#### **Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the*

measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Prosecuting Attorney's Office, Criminal Division
<b>Project Title</b>	Integrated Document Exchange Project (IDX)
<b>Project Number</b>	1111938

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Erin Ehlert and Daniel Clark, Assistant Chief Criminal Deputies

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Daniel Clark	Assistant Chief – Criminal Division - PAO	Sponsor
Erin Ehlert	Assistant Chief – Criminal Division - PAO	Sponsor
Mark Buening		
Kassie Tadsen	Karpel Program Manager - KCPAO	Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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Annual report	1-28-14	Dan Clark	New, Initial Draft	3 hours
Annual report	3/19/14	Kassie Tadsen	Revisions for council	3 hours
Annual report	3/20/14	Kassie Tadsen	Revisions for council	4 hours
Annual report	3/3/15	Kassie Tadsen	Revision of schedule	15 minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
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Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*  
 The IDX project was created to integrate with the new PAO Case Management System launched in June 2013 entitled PROSECUTORbyKarpel (PbK). Currently, law enforcement must bring original hard copy paper cases to our office for processing. The data associated with these cases must be entered by PAO staff, and the documents must be scanned and uploaded into PbK. Large files such as audio and video are submitted on DVD or CD, and these disks must be copied by PAO staff to provide discovery to defense.  
  
 The IDX project will create a unified, integrated system called eLODI for the 40 law enforcement agencies in King County to submit criminal case data and documents and digital evidence electronically into PbK.  
  
 There are two of components to the IDX project: eLodi and eEvidence. With eLODI, Law Enforcement agencies will submit data concerning the identification of a suspect and a crime, including victims and witnesses, in a consistent and uniform way, and will be able to upload

voluminous police reports, photographs and other digital evidence electronically. PAO staff will be able to transfer this electronic information directly into PbK without having to manually type the data or scan the documents. Finally, eEvidence will allow the police agencies and the PAO to upload and store large files, including audio and video, which can then be made available as electronic discovery to defense. Each of these automated functions will replace labor-intensive processes that currently draw upon the scarce resources of the PAO. In addition, because of the safeguards built into IDX, these functions will result in more consistent data entry, quicker outcomes, and improved quality of work.

- A. Allowing police to remain on patrol in their respective jurisdictions is an enormous benefit in terms of productivity and public safety.
- B. Each of these automated functions will replace labor-intensive data entry and scanning that currently draw upon the scarce resources of the PAO. Up to five temporary staff have been hired (depending on work volume) using the PbK project budget to manually scan and upload initial case documents, and 6 staff have been assigned to discovery and backfilled to follow-up materials into PbK, as there are simply no resources available to accomplish this significant workload. With the automation of much of this work, the PAO will not need to permanently budget for these staffing levels.
- C. With current staffing levels and even with the addition of temporary help, we have a lag between the time the case is received and the time it is entered into the system and ready for a prosecutor to work, resulting in a backlog of several days' worth to several weeks' worth of cases. With eLODI we will be able to eliminate the lag time and backlog, and Deputy Prosecutors will be able identify the most prolific reoffenders sooner and turn their attention to filing charges against them before they commit more crimes that could result additional victims and in longer (and more expensive) sentences for offenders. By getting cases loaded into the system and assigned to prosecutors sooner, the high costs of recidivism borne by victims, law enforcement, defense counsel, courts and incarceration can be mitigated.
- D. Like most modern case management systems, PbK is designed for the front-loading of data. Due to the siloed and sequential nature of our former systems (PROMIS and side systems), the PAO is not staffed to handle the volume of data entry at the beginning of our process. Currently, witness data is entered into the PbK system by word processing staff after a filing decision has been made. Victim information is fleshed out by the Victim Assistance Unit, also after filing. This means that prosecutors are making filing decisions without the benefit of knowing much about the background of the people involved in the case. For example, a prosecutor may think twice about filing charges in a case that rests entirely on a witness who has significant convictions for Perjury and Making False Statements. Under the new IDX system, the witnesses' names will be submitted by law enforcement up front, allowing a prosecutor to check witness history at the time of the filing decision and perhaps avoid filing a charge at all.
- E. Reduce time spent on follow-up discovery by receiving post-referral materials electronically instead of having to scan, and storing/transferring large files electronically instead of retaining disks that must be circulated around the office and be copied for discovery to defense. In recent months, our office had to move two paralegals and four LAS staff from their trial-preparation functions just to upload and process these materials.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

There are a number of different metrics that can be employed to measure the benefits of IDX. Some of the most important benefits, however, are less quantifiable than others.

- A. Electronic submission of case data, documents and evidence to the PAO will result in the savings

of hundreds of hours each year when 40 police agencies and 5000+ police officers are no longer required to print out their cases on paper, drive to the PAO offices in Seattle or Kent and physically submit their cases or follow-up work in person. Allowing police to remain on patrol in their respective jurisdictions is an enormous benefit in terms of both public safety and productivity. We will conduct a survey of police agencies to determine how their adoption of the system has impacted them.

- B. The temporary staff are spending approximately 800-1000 person hours a month scanning and loading documents into PbK, and could cost the PAO up to \$500,000 until the eLODI/eEvidence system is in place. The IDX project essentially moves this work to the originators of the information, law enforcement, who will be doing the initial data entry and uploading of digital evidence at the time of electronic submission. Now law enforcement will be doing all of this from their desks at their own offices in a fraction of the time it took to print out hard copies of reports and evidence, burn disks, print photos, etc., and drive to our office to hand-deliver them. The measure for this benefit is whether we are still reliant upon temporary workers and word processing to manually enter witness information and case documents into the system, or are able to accommodate this task within our existing sustainable resources.
- C. We can measure the average time between two key case events (case receipt and assignment to a prosecutor). This will let us determine how much sooner prosecutors are able to receive and work on new cases, that is, the reduction in lag time, especially for prolific offenders, thereby reducing the impact of recidivism.
- D. Under the new IDX system, the witnesses' name will be submitted by law enforcement up front, allowing a prosecutor to have that information at the time of the filing decision and perhaps avoid filing a charge at all. A decision to not file a charge and keep a suspect from entering the criminal justice system is obviously hugely impactful to the suspect, but also significantly saves resources for everyone in the system: public defense, courts, jail, etc. We will survey the deputy prosecuting attorneys for their assessment of the quality and quantity of victim and witness information available to them to make filing decisions and prioritize repeat offenders before and after the implementation of eLODI.
- E. If post-filing follow-up materials were uploaded, categorized and processed by IDX, then the 6 employees currently assigned solely to discovery could return to their trial-assistance functions.

3. *What is the current baseline for this measure?*

- A. Currently, we receive approximately 7000-8000 cases annually that are physically brought into our office in paper format which must be entered and scanned manually into PbK. We can assume that it takes an officer a minimum of 1-2 hours to print and assemble the hardcopy report, burn any disks, and bring the case into our office. This could be much higher for more complex cases.
- B. We have 9 temporary funded positions who have been hired to do data entry and upload documents into PbK.
- C. We will develop a report in PbK to monitor the lag time from system go-live to after the implementation of eLODI. Historical numbers to follow.
- D. With IDX we hope that 100% of the potential witnesses will be uploaded into PBK prior to a charging decision. This will result in a much better informed charging decision. We will need to do the survey to get a baseline for this.
- E. Currently we have 6 reassigned employees working on discovery.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- A. We will be doing acceptance testing with police in 2Q-3Q2014 2Q2015 and should have more information at that point for this target. **Update 3/3/15 – due to delays by KCIT in implementing a VPN tunnel, the project is over a year behind schedule.**

- B. The goal is to be able to complete the work with regular employees without for extra temporary staff.
- C. The target will be that the case is received into PbK from eLODI and assigned to a prosecutor within 2 days of receipt.
- D. We would like to see an improvement of 30% in prosecutors' opinion of the quality and quantity of victim and witness information they have to make filing decisions.
- E. This number should drop to 2 once IDX allows for police to upload and submit this information electronically.

5. *When is the benefit likely to be achieved?*

IDX should be completed and implemented by **the end of 2014 mid-year 2015**. Within 6 months after IDX is fully implemented and working properly we hope to see less demand for our temporary staff and can minimize those extra resources. As police adopt the use of the system, the benefits will increase over **2015 2016**.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

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**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## **Section 7. Benefit Achievement Summary**

### **Benefit Achievement Summary**

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1

day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the of the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To fill this document out fully, please read all of the colored sections and fill in the white cells.

<b>King County Department/Agency Name</b>	Superior Court IT
<b>Project Title</b>	Electronic Social Files
<b>Project Number</b>	1111932

### Section 2. Business Owner Accountability

*Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.*

Business Owner Name and Title: Bruce Knutson, Director of Juvenile Court Services  
 Business Owner Contact Information: (206) 205-9422, bruce.knutson@kingcounty.gov

### Section 3. Who is Involved in Developing the Benefit Achievement Plan?

*The development of the benefits achievement plan will include significant involvement from the operations or management staff related to this project and the services it will support. Involve staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:*

Name	Title / Agency	Project Role
Leannetta Jessie Susan Waild (retired 10/14)	Juvenile Probation Manager/KCSC	Product Owner

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

*The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:*

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

*Once the project is complete and benefits are achieved and reported, no additional reporting is required.*

### Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this processes in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release,</i>	<i>Date this document</i>	<i>Who did the document</i>	<i>A brief summary of what changed in the document. If this is an</i>	<i>How long did it take to</i>

<i>annual report, project implementation, or project completion.</i>	<i>was updated</i>	<i>updates?</i>	<i>initial draft, please indicate new. If nothing has changed, indicate "review only".</i>	<i>complete or revise the form at this stage?</i>
Conceptual review	2/2011	Linda Ridge	New, initial draft	3 hours
Funding release	7/2012	Hugh Kim	New	4 hours
Funding release	4/2013	Hugh Kim	Updated project plan, timeline	3 hours
Project Implementation	3/2014	Susan Waild/ Teddi Edington	New, updates	4 hours

**Category #2: Improved quality of service, such as faster response times, greater reliability, or greater accuracy. To the extent possible, the reasons such quality improvements are desirable should be explained.**

**1. Describe why you expect the proposed IT investment to produce the benefit.**

Superior Court's Juvenile Offender Probation social files are separate from the juvenile offender legal files and are used by Juvenile Probation Counselors (JPC) to monitor juvenile offenders who are on probation. Prior to electronic social files the social information gathered by probation was maintained in a single hard copy file. Copies of court orders, evaluations, reports to court, and all social information were gathered and maintained in a paper social file for probation. While some forms were created electronically, there was no consistent organization or standardized storage of these documents. This process required duplication of many existing electronic forms, physical space to store paper files, and significant staff support to create, copy, maintain, file, sort, archive, and destroy files in accordance with legal mandates. Additionally, a single hard copy file limits access to important information. Staff were unable to access the file from field locations, offices, and various court locations in a secure and timely manner.

This project has benefits the quality and timeliness of probation services in several ways:

- a. Improved access to records –The new system is web-based and with laptops assigned to each JPC, they can access social files from any location where the internet is available. This reduces the delays in sharing information, increases productivity, and improves oversight. Supervisors and management are able to respond to questions and address issues in a more timely fashion. Information is accessible in moments instead of days.
- b. Improved file security – permissions and authorized access is built into the system. Probation staff are no longer moving physical files from one point to another eliminating the potential for lost/stolen files.
- c. Reduction in case transfer time – since it is no longer necessary to physically transfer a hard copy file, there is no “down time” while files are in transit. Since any authorized staff can access the ESF in real time, some duties have been reassigned from Records Unit to the probation unit clerks allowing for more timely closing of cases and transfer to warrant status.
- d. Improved accuracy - files can more easily be sealed, archived and then destroyed in compliance with current legal mandates. ESF will reduce the staff time needed to review, request, or support the process. This system will provide flexibility as laws change and requirements for maintenance of social information changes.
- e. Electronic Case Management System – as part of the ESF project, enhancements will be made to KCMS so that probation staff can manage their case file, update specific fields and access some information currently only available in other data systems such as SCOMIS and JIMS. This portion of the project has not yet been completed.

**2. How will you measure the benefit? (How will you know if the benefit has been achieved?)**

Most of the benefits of the ESF system are self-evident.

- a. Improved access to records –JPCs have been assigned laptops and the social files are accessible via the internet. Authorized supervisors/management are able to access social files so they can respond to inquiries and provide oversight.
- b. Improved file security – There is no longer the potential for paper files to be lost or stolen.
- c. Reduction in case transfer time – The time it takes to transfer hard copy social files has been reduced.
- d. Improved accuracy – files are “sealed” and “destroyed” electronically, eliminating the need to sort, pull, archive and destroy physical files.
- e. Electronic Case Management System – JPCs are able to update and manage the social file electronically and can access specific information that was previously only available in other data systems.

**3. What is the current baseline for this measure?**

- a. Improved access to records –Prior to ESF, copies of court orders, evaluations, reports to court, and all social information were gathered and maintained in a paper social file for probation. While some forms were created electronically, there was no consistent organization or standardized storage of these documents.
- b. Improved file security – Prior to ESF, hard copy social files were often transported between satellite

probation offices and the court by probation staff in their POVs increasing the chance that the files, which contain confidential information, could be lost or stolen.

- c. Reduction in case transfer time – Prior to ESF, it took an average of 5 days to transfer files. This included some staff time for processing, tracking, and logging files, but mostly it was down time while files sat waiting to be picked up and transported.
- d. Improved accuracy – Prior to ESF, files were “sealed” and “destroyed” electronically and then Records Unit staff had to locate, close, box and store or physically destroy the hard copy social files. Because the files were centrally located, Records Unit staff were responsible for all aspects of this process.
- e. Electronic Case Management System – Prior to ESF, JPCs maintained the hard copy social file. This process required duplication of many existing electronic forms, physical space to store paper files and limited access to information. Important case information was spread across several electronic data systems.

4. *What is the target for this measure? (How much improvement/savings will this project achieve?)*

- a. Improved access to records – JPCs have assigned laptops, the social files are accessible via the internet. Authorized supervisors/management are able to access social files so they can respond to inquiries and provide oversight.
- b. Improved file security – permissions and authorized access is built into the ESF system. Probation staff are no longer moving physical files from one point to another eliminating the potential for lost/stolen files.
- c. Reduction in case transfer time – The goal is to transfer cases in 1 day.
- d. Improved accuracy – files are “sealed” and “destroyed” electronically, eliminating the need to store, manage, pull, archive, and destroy physical files.
- e. Electronic Case Management System – JPCs are able to update and manage the social file electronically and can access specific information that was previously only available in other data systems.

5. *When is the benefit likely to be achieved?*

- a. Improved access to records – Completed. JPCs were assigned laptops and had access to the ESF in August 2013. All historical social file records were scanned and available by November 2013. Authorized supervisors and managers are able to access social files so they can respond to inquiries and provide oversight.
- b. Improved file security – Completed. Permissions and authorized access were built into the ESF system. Probation staff are no longer moving physical social files eliminating the potential for lost/stolen files.
- c. Reduction in case transfer time – Completed. Cases and access are assigned by the probation supervisors and probation unit administrative staff in the ESF system. Once assigned, JPCs have immediate access to the records. The entire process typically takes less than 24 hours. Because the ESF is accessible via the internet, some case closing/transfer duties have been reassigned from Records Unit to the probation unit clerks allowing for more timely closing and transfer of cases to warrant status.
- d. Improved accuracy – Completed: Files are now “sealed” and “destroyed” electronically, eliminating the need to store, manage, pull, archive and destroy physical files.
- e. Electronic Case Management System – Completed: Effective 8/8/14 probation staff began using functionality in KCMS to track probation time including tolling time on warrant status. Specific information from JIS and JIMS is pulled into KCMS for easier access/viewing.

**Category #4: Reduced cost to produce service**

*This category is for those projects that will reduce the costs to deliver a county service. The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.*

1. *Describe why you expect the proposed IT investment to produce the benefit.*

The ESF project budget is \$394,095. The project provides both measurable cost savings and cost avoidance.

- a. **Cost Savings** – An electronic document management system should require less staff support. A system that automatically flags files that need to be archived or destroyed to comply with legal mandates would require less employee time to review, request and support file management. In anticipation of this benefit, 2 FTE Administrative Specialists II positions were eliminated at \$61,211 each. Total annual reduction of \$122,422.
- b. **Cost Avoidance** - Reduction of the physical space needed to store probation social files. A reduced footprint for records storage and maintenance has already been factored into the design of the new Children and Family Justice Center. This project saved an estimated \$592,000 (one time cost avoidance) in development costs and reduced on-going facility operational/maintenance costs by \$17,481 annually.

2. *How will you measure the benefit? (How will you know if the benefit has been achieved?)*  
Positions eliminated and reduced records storage incorporated into CFJC design.
3. *What is the current baseline for this measure?*  
3 FTE AS II positions in Probation Records Unit prior to the ESF project.  
Reduction in CFJC space as noted.
4. *What is the target for this measure? (How much improvement/savings will this project achieve?)*  
1 FTE AS II position in Probation Records Unit after ESF implementation.  
Reduction in CFJC space as noted.
5. *When is the benefit likely to be achieved?*  
2 FTE AS II positions eliminated effective 12/31/13.  
Reduction in CFJC space as noted.

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>

Metric Description	Metrics	Baseline	Target	Actual
<i>ESF will provide improved access to JPC social file records.</i>	<i>Electronic access to social files.</i>	<i>Most social file documents were maintained in hard copy. While some forms were created electronically, there</i>	<i>JPCs have assigned laptops, the social files are accessible via the internet. Authorized supervisors/managemen</i>	<i>JPCs were assigned laptops and had access to the ESF in 8/13. All historical</i>

		<i>was no consistent organization or standardized storage of these documents.</i>	<i>social files so they can respond to inquiries and provide oversight.</i>	<i>social file records were scanned by 11/13. Authorized supervisors and managers are able to access all social files.</i>
<i>Improved file security</i>	<i>There is no longer the potential for paper files to be lost or stolen.</i>	<i>Hard copy social files were often transported between satellite probation offices and the court by probation staff in their POVs increasing the chance that the files, which contain confidential information, could be lost or stolen.</i>	<i>Files are “sealed” and “destroyed” electronically, eliminating the need to store, manage, pull, archive, and destroy physical files.</i>	<i>Files are now “sealed” and “destroyed” electronically, eliminating the need to store, manage, pull, archive and destroy physical files.</i>
<i>Reduction in case transfer time</i>	<i>The time it takes to transfer hard copy social files.</i>	<i>An average of 5 days to transfer files.</i>	<i>Transfer cases in 1 day.</i>	<i>Case transfer process typically takes less than 24 hours.</i>
<i>Improved accuracy</i>	<i>Files are “sealed” and “destroyed” electronically.</i>	<i>Files were “sealed” and “destroyed” electronically and then Records Unit staff had to locate, close, box and store or physically destroy the hard copy social files.</i>	<i>Files are “sealed” and “destroyed” electronically, eliminating the need to store, manage, pull, archive, and destroy physical files.</i>	<i>Files are now “sealed” and “destroyed” electronically.</i>
<i>Electronic Case Management System</i>	<i>JPCs update and manage the social file electronically and can access specific information through the ESF.</i>	<i>JPCs maintained the hard copy social file. This process required duplication of many existing electronic forms, physical space to store paper files and limited access to information. Important case information was spread across several electronic data systems.</i>	<i>JPCs are able to update and manage the social file electronically and can access specific information that was previously only available in other data systems.</i>	<i>Effective 8/8/14 probation staff began using functionality in KCMS to track probation time including tolling time on warrant status. Specific information from JIS and JIMS is pulled into KCMS for easier access.</i>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	<b>King County Sheriff's Office</b>
<b>Project Title</b>	<b>2FA (Two Factor Authentication)</b>
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: **Chief Robin Fenton**

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
<b>Kelly Furner</b>	<b>IT Manager, Public Safety</b>	<b>Manager of ISS</b>
<b>Lynda Kamrath</b>	<b>IT Supervisor</b>	<b>Supervising CRU Desktop Support Specialists who are installing the application</b>

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance**
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than**

**provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

- *Describe why you expect the proposed IT investment to produce the benefit(s).*
- *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
- *What is the current baseline for this measure?*
- *What is the target for this measure? (How much improvement will this project achieve?)*
- *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project**

**will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

***Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

***Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

**Per the WSP & FBI technical audit for CJIS (use of: ORI to pull ACCESS information):**

The goal is to provide dual factor authentication (password plus proximity card or fingerprint swipe) when accessing a mobile computer (such as officers wireless laptops that are carried around in their vehicle or in any unsecured location).

King County identified a software product “Imprivata One Sign” that offers the use of either proximity card or fingerprint swiping, along with Active Directory password authentication.

Implementation to all mobile laptops or unsecured desktops must meet the CJIS audit requirement (installing the software on all computers that are physically unsecure and have an ORI to pull ACCESS data from WSP/FBI).

Reports can be proactively run using the Imprivata administrative console to see the number of computers with the software installed to compare with SDE and Active Directory (for all mobile laptops) to see the number of machines remaining that still require installation.

When 100% of the machines are in compliance with the CJIS audit – the project is a success.

**Target completion date: By April 30<sup>th</sup>, 2015**

**Current % complete: 47% 413 out of 881 (including 100 from AFIS)**

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver	Processing	• 10 days	• 1 day	2 day

<p><i>service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>Time annual savings, and percentage of purchases receiving prompt payment discounts</i></p>	<p><i>processing time</i></p> <ul style="list-style-type: none"> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<p><i>processing time</i></p> <ul style="list-style-type: none"> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<p><i>processing time</i></p> <p><i>20 percent of purchases are receiving prompt payment discounts</i></p> <p><i>\$200,000 savings</i></p>
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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Regional AFIS Program (KCRA)
<b>Project Title</b>	Regional Mobile Identification Project
<b>Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Carol Gillespie, Manager, King County Regional AFIS

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Patty Klopp	Project/Program Manager IV, King County Regional AFIS	Project Manager
Carol Gillespie	Manager, King County Regional AFIS	Project Sponsor
Ryan Abbott	Deputy, King County Sheriff's Office	Pilot participant and RFP evaluator

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as

information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	11/12/13	Patty Klopp	New, initial draft	2 hours
Annual Report	03/18/15	Patty Klopp	Update Section 7	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

This project will provide law enforcement officers throughout King County with mobile handheld fingerprint capture devices that they can use to identify subjects in the field. This project will improve operations in three ways:

Benefit 1: Officers will be able to get the results of their Question of Identity (QID) checks faster providing them with the information they need to make critical decisions about a subject.

Benefit 2: This project will increase the amount of time officers are on the street providing law enforcement services. In the current environment when a subject's identity is in question, the officer has the option to transport the subject to a stationary electronic fingerprint capture workstation (livescan) site for fingerprint processing. The amount of time this takes can vary from one (1) to two (2) hours depending on several variables. With the mobile

device, the officer will have the ability to ID a subject on-the-spot.

Benefit 3: Easier for officers to use. The new device is much easier to use than the livescan. It requires neither extensive training nor consistent use to remain proficient.

*2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Benefit 1: Comparison of the time it takes to receive a response with the mobile device versus existing QID livescan submissions.

Benefit 2: We will measure whether officers have more time on the street from not transporting subjects for QIDS by surveying officers to ask in cases of non-jail bookings whether they used the mobile device in lieu of transporting the subject to a livescan site for identification.

We are not able to track additional time on the street because in some cases officers will use a mobile device and then need to transport the subject to jail anyway, thus there would not be a savings of transport time. We will not have data that distinguishes between the use of the mobile device in the field and then the subject being booked in the jail versus those mobile IDs that are not transported.

Benefit 3: We will survey officers to learn their opinion on the ease of use and functionality of the new device.

*3. What is the current baseline for this measure?*

Benefit 1: Our estimate is it currently takes up to one hour to receive results from the existing livescan submissions. This is because the officer must roll a full set of fingerprints (fourteen images), fill out a form that must be faxed to the AFIS Tenprint Unit, the officer must also call and notify the Tenprint Unit of the QID, the Tenprint Unit manually processes each submission and then calls and faxes the results to the officer. The amount of time it takes the officer to roll the fingerprints depends on the officer's experience with livescan and the quality of all of the subject's fingerprints. In addition, it takes time to transport the subject to a livescan location.

Benefit 2: Using a conservative number, we estimate officers currently are off the streets for 2,000 hours a year in order to transport subjects for QID livescan processing.

Benefit 3: Based on informal user interviews with officers, we know that some consider the current livescan system to be cumbersome and not user friendly.

*4. What is the target for this measure? (How much improvement will this project achieve?)*

Benefit 1: We expect officers to be able to receive a response within two (2) minutes of electronically submitting the fingerprints.

Benefit 2: In identifying non-booking subjects, we anticipate officers will use the mobile devices consistently in place of transporting the subject to a livescan site.

While we won't be able to verify due to the data limits described above, we estimate officers will be able to be on the street for 500 more hours a year. This is based on 2012 QID statistics of approximately 2,000 QIDs. Approximately 50% of those are known to be booked (1,000) so the officer would have been off the street anyway for transport only (approximately 1,000 hours). There are no statistics to support the remaining 1,000 QIDs, but we would estimate 50% end up not being booked generating 500 hours in savings.

Benefit 3: We anticipate 99 percent of surveyed officers will find the mobile technology user friendly and functional. KCRA's target goal is for the mobile devices to be consistently used by the agencies where they are distributed. A plan will be in place to monitor usage and redistribute as appropriate.

*5. When is the benefit likely to be achieved?*

We would expect to see an immediate benefit within the first quarter of deployment of devices.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

*Example: Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
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3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment	Processing Time annual savings, and percentage of purchases receiving prompt payment	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment

<i>discounts.</i>	<i>discounts</i>	<i>\$100,000</i>	<i>savings</i>	<i>discounts</i> <i>\$200,000</i> <i>savings</i>
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**UPDATE**

This project was successfully implemented in October 2014 at the local AFIS level. The identification rate since implement is at 64%. The connectivity for state and federal responses is not active yet but is expected to be tested around the end of April 2015.

As of February 28, 2015:

Officers trained	259
Devices issued (out of 250)	86
Agencies with signed ILA/MOU (out of 42 eligible)	21

A survey was distributed to all 259 trained officers. Out of 56 responses received, we have the following target status:

<b>Metric Description</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Officers receive results of their Question of Identity checks faster.	Up to one hour	Within two (2) minutes	79% report receiving responses within 2 minutes.
Increase the amount of time officers are on the street providing law enforcement services.	2,000 hours per year *this is not a feasible baseline for follow-up purposes	Officers will use the mobile device consistently in place of transporting a subject to a livescan location	84% report using the device consistently. Of the 9 who responded “No”, two had just begun using the device and one had changed to a position that does not have much opportunity to use the device.
Easier method to use	Current method cumbersome and not user friendly	99% will find the technology user friendly and functional.	96% The remaining 4% is comprised of two (2) responses: one reported “No” due to connectivity issues and one answered they found it user friendly and functional “Sometimes”.

While the Target for Benefit 3 has not been met yet, we expect that to change once the state and federal connectivity is in place.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	King County Sheriff's Office
<b>Project Title</b>	IRIS/TESS Replacement
<b>Project Number</b>	377214

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Robin Fenton, Chief of Technical Services Division

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Judy McDermott	IT Project Manager / KCSO	Project Manager
Kelly Furner	Information Services Section Manager	Team member, Development assistance

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Conceptual review	2/11/14	Judy McDermott	Review existing project documents and compile into BAP	2 hours
Annual Report	2/10/15	Judy McDermott	Review only	10 min

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
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**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

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**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those**

**benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

*1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

This project is meant to consolidate and replace three mission essential systems.

- a. IRIS (Incident Reporting and Investigation System) – For criminal activity. IRIS is used by all commissioned staff for event and case reporting, safety warnings notification, pre-incident checks, post incident investigations, litigation, and regional and national information sharing. Commissioned and non-commissioned staff use IRIS for overtime submissions and management.
- b. TESS (The Evidence Support System) – For evidence management. All property and evidence seized or collected by the Sheriff's Office is tracked and managed through TESS. This system also tracks chain of custody, essential for effective litigation.
- c. EDMS (Electronic Documents Management System) – for scanned paper and PDF storage. EDMS currently stores electronic copies of all IRIS event and case files. It also includes scanned copies of all related handwritten reports and attachments.

IRIS and TESS were written internally in 1997 and 1999, using Microsoft Access 97. They were upgraded recently to Access 2007, a process that took over two years. IRIS and TESS are extensive and complex (IRIS alone has over 500K lines of code). IRIS also utilizes shared code files to extend its abilities in key areas. These files are also used by tools such as Outlook and Internet Explorer, and upgrading any of these external systems can break IRIS and TESS. This significantly complicates keeping either on a supportable platform and makes it almost impossible for KCSO to keep up with County MS Windows and Office version standards. The EDMS, using Questys, is also out of date and unless it is upgraded, we are unable to upgrade the computers in our Records unit that are needed to access it. Right now, they are stuck on Windows XP.

This project will replace these three difficult to maintain applications with a single commercial product that supports environmental changes (such as wireless data access), reduces MS Office version-specific dependencies, supports mandated data standards for crime reporting (such as NCIC), provides full audit logging, and significantly lessens exposure to Breach Law due to lost or stolen equipment.

This project will also introduce several other key benefits, including:

- New: Increased information access for officer safety and operational efficiency. IRIS was not architected for remote access and requires local data. Mobile officers are currently limited to the last year of IRIS information in the field due to MS Access file size limitations. The new system does not depend on local storage, so users will wirelessly be able to search the entire database for pre-incident notifications, officer safety warnings, and report generation.
- New: Ability to attach media files to case files. The new software accepts the storing of photos, audio files and video files, etc., linked to specific cases. IRIS and TESS do not have this capability.
- New: Interfaces to local, state and regional data systems. The new system is linked to the Washington State Patrol's Access system, the Department of Licensing, the NCIS and FBI's Law Enforcement Information Exchange (LInX) systems, to name a few. This will give users the ability to verify subject identity through driver's license photos, run names and plates, etc. These are new capabilities that do not exist with IRIS, TESS, or EDMS and they can be accessed at the scene without involving the very busy communication and dispatch center.
- New: Full audit logs for case and evidence management. Whenever a record in the new system is accessed, modified or deleted, a full record of that transaction is logged by the new system. Each transaction is tracked individually. IRIS, by contrast, tracks only the last change of a record, not the nature of the change.
- New: Encoded and validated addressing. The new system will validate addresses entered by users. This is an important prerequisite for crime mapping. With validated addresses, deputies and detectives can analyze criminal activity by area, crime type, date, and other factors, looking for patterns that can then *lead to more informed proactive and preventive measures, special emphasis patrols, etc.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.*** *If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project	Processing Time annual	• 10 days processing	• 1 day processing time	2 day processing

<p><i>reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>savings, and percentage of purchases receiving prompt payment discounts</i></p>	<p><i>time</i></p> <ul style="list-style-type: none"> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<p><i>time</i></p> <p><i>20 percent of purchases are receiving prompt payment discounts</i></p> <p><i>\$200,000 savings</i></p>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	<b>King County Sheriff's Office</b>
<b>Project Title</b>	<b>The Scheduling Project (ATLAS)</b>
<b>EBS Project Number</b>	

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: **Chief Robin Fenton**

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
<b>Diana Landry</b>	<b>IT Supervisor II, Public Safety</b>	<b>Sr. Project Manager Technical Consultant (no longer with King County)</b>
<b>Janielee Amina Osborne</b>	<b>IT Project Manager</b>	<b>Project Manager</b>

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Initial – conversion of existing documentation into new format.	Feb 11, 2014.	Janielee Amina Osborne	Collecting and coalescing pre-existing documentation for the project into the new BAP format.	1 hour
Edited – based on ‘notes/comments’ in document on SharePoint.	Mar 24, 2014	Janielee Amina Osborne	Re-formatted to conform to requested standards.	1 hour
Reviewed	Feb 5, 2015	Janielee Amina Osborne	Reviewed to ensure continued accuracy.	½ hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services**
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

**Per the original Grant write up by Joe Lewis for ORI: WAKCS00:**

- *Describe why you expect the proposed IT investment to produce the benefit(s).*  
 The goal of this request is that first level supervisors spend the majority of their time in the field providing direct oversight to line level employees. Additionally, the Sheriff desires to have available the tools necessary to effectively manage the scheduling of personnel from all Sections. To this end the Sheriff's Office has identified a software product that is believed to have the capability of automating most of the scheduling and reporting tasks and processes currently done manually. It is believed that implementing this software program will free up significant first level supervisor and manager time that can be spent directing and overseeing the work of the Sheriff's Office; consequently, enhancing community policing efforts and reducing risk to King County and its' employees. In addition to the above, Superior and District courts, prosecutors and public defenders will be able to make inquiries as to an employee's availability in scheduling activities such as interviews and trials. This program also provides rapid identification and automated contact to specialty groups and available team members, such as hostage negotiators or bomb technicians, for emergency events.

- *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*  
Implementation will accomplish two major measurable goals. It will allow for the accurate collection and reporting of employee work and leave information that will allow the Sheriff to make thoughtful policy, supported by data. Additionally, it will free first-level supervisors and managers from the tedious time consuming tasks of scheduling and result in better oversight of employees in the field.
- *What is the current baseline for this measure?*  
First level supervisors and managers spend an inordinate amount of time filling absences to provide minimum shift coverage. Patrol sergeants can spend 30% to 40% of an eight-hour shift covering short-notice vacancies for the current day and trying to fill planned shortages on future days.
- *What is the target for this measure? (How much improvement will this project achieve?)*  
Each user group (Comm Center, SeaTac, Metro, Patrol units, etc.) will have their own specific measurements and benefits based on their realized time savings.
- *When is the benefit likely to be achieved? **Beginning in 2015 with larger benefits realized in 2016.***

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or

internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

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1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
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## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

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**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User

agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	King County Sheriff's Office
<b>Project Title</b>	Wireless CAD Upgrade
<b>Project Number</b>	377196

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Robin Fenton, Chief

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Name	Title / Agency	Project Role
Fenton, Robin	Chief/King County Sheriff	Business Owner
Butschli, Patrick	Captain/King County Sheriff	Project Oversight
Rhodes, Ken	PPM3/King County Sheriff	Project Manager

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Annual Report	2/9/15	Pat Butschli	Project Update	1 hours

## Section 6. Description of Project Benefits

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- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
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- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

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*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

(Previous completed phases of this project) Due to the success of earlier phases of this project deputies have the ability to run license plates and names remotely through a laptop computer in their police car. In addition, deputies have access to the CAD system reducing the need for communication to occur over busy radio frequencies. This portion of the project has been successfully implemented and has improved the capabilities and safety of deputies working in the field. This allows deputies to work faster and increases productivity and safety.

(The current and final phase of this project) The final phase of the Mobile CAD project is adding the capability to GPS locate deputies working in our communities. This will allow a dispatcher to instantly know what unit is the closest to any request for service. This should modestly improve response times and safety for both the community and our deputies. We can compare unit response time both before and after the implementation of the GPS component of this project to measure the impact of the GPS implementation. Response times are currently measured in minutes and seconds based on call priority. Since these response times are already very quick we anticipate a modest lowering of these response times, perhaps 10% faster. This benefit should be achieved following rollout and implementation of the GPS system.

In addition to anticipated improvements in efficiency GPS will allow us to know where patrol deputies are located while on duty. This will allow us to send help to a deputy who is unable to communicate over the radio. At present we have no way of locating a deputy if they cannot advise us of their location over the air.

The project is currently awaiting the outcome of contract negotiations with the King County Police Officer Guild. This contract is currently in the final stages and awaiting King County Council approval. Initial testing on equipment to accomplish the GPS location has begun.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor*

support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

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**Example:** Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

**Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

The final stage of the Mobile CAD project has not yet been implemented. It is anticipated that implementation (delay due to demand to bargain and contract negotiations) will begin in early 2015. Testing on potential hardware solutions has begun. It is anticipated that the GPS issue will be settled in the current contract.



## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	King County Prosecuting Attorney's Office, Criminal Division
<b>Project Title</b>	Integrated Document Exchange Project (IDX)
<b>Project Number</b>	1111938

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Erin Ehlert and Daniel Clark, Assistant Chief Criminal Deputies

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Daniel Clark	Assistant Chief – Criminal Division - PAO	Sponsor
Erin Ehlert	Assistant Chief – Criminal Division - PAO	Sponsor
Mark Buening		
Kassie Tadsen	Karpel Program Manager - KCPAO	Project Manager
Latasha Battle	IT Project Manager – KCIT	Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Annual report	1-28-14	Dan Clark	New, Initial Draft	3 hours
Annual report	3/19/14	Kassie Tadsen	Revisions for council	3 hours
Annual report	3/20/14	Kassie Tadsen	Revisions for council	4 hours
Annual report	3/13/15	Latasha Battle	Review, no changes	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).  
 The IDX project was created to integrate with the new PAO Case Management System launched in June 2013 entitled PROSECUTORbyKarpel (PbK). Currently, law enforcement must bring original hard copy paper cases to our office for processing. The data associated with these cases must be entered by PAO staff, and the documents must be scanned and uploaded into PbK. Large files such as audio and video are submitted on DVD or CD, and these disks must be copied by PAO staff to provide discovery to defense.  
  
 The IDX project will create a unified, integrated system called eLODI for the 40 law enforcement agencies in King County to submit criminal case data and documents and digital evidence electronically into PbK.  
  
 There are two of components to the IDX project: eLodi and eEvidence. With eLODI, Law Enforcement agencies will submit data concerning the identification of a suspect and a crime, including victims and witnesses, in a consistent and uniform way, and will be able to upload

voluminous police reports, photographs and other digital evidence electronically. PAO staff will be able to transfer this electronic information directly into PbK without having to manually type the data or scan the documents. Finally, eEvidence will allow the police agencies and the PAO to upload and store large files, including audio and video, which can then be made available as electronic discovery to defense. Each of these automated functions will replace labor-intensive processes that currently draw upon the scarce resources of the PAO. In addition, because of the safeguards built into IDX, these functions will result in more consistent data entry, quicker outcomes, and improved quality of work.

- A. Allowing police to remain on patrol in their respective jurisdictions is an enormous benefit in terms of productivity and public safety.
- B. Each of these automated functions will replace labor-intensive data entry and scanning that currently draw upon the scarce resources of the PAO. Up to five temporary staff have been hired (depending on work volume) using the PbK project budget to manually scan and upload initial case documents, and 6 staff have been assigned to discovery and backfilled to follow-up materials into PbK, as there are simply no resources available to accomplish this significant workload. With the automation of much of this work, the PAO will not need to permanently budget for these staffing levels.
- C. With current staffing levels and even with the addition of temporary help, we have a lag between the time the case is received and the time it is entered into the system and ready for a prosecutor to work, resulting in a backlog of several days' worth to several weeks' worth of cases. With eLODI we will be able to eliminate the lag time and backlog, and Deputy Prosecutors will be able identify the most prolific reoffenders sooner and turn their attention to filing charges against them before they commit more crimes that could result additional victims and in longer (and more expensive) sentences for offenders. By getting cases loaded into the system and assigned to prosecutors sooner, the high costs of recidivism borne by victims, law enforcement, defense counsel, courts and incarceration can be mitigated.
- D. Like most modern case management systems, PbK is designed for the front-loading of data. Due to the siloed and sequential nature of our former systems (PROMIS and side systems), the PAO is not staffed to handle the volume of data entry at the beginning of our process. Currently, witness data is entered into the PbK system by word processing staff after a filing decision has been made. Victim information is fleshed out by the Victim Assistance Unit, also after filing. This means that prosecutors are making filing decisions without the benefit of knowing much about the background of the people involved in the case. For example, a prosecutor may think twice about filing charges in a case that rests entirely on a witness who has significant convictions for Perjury and Making False Statements. Under the new IDX system, the witnesses' names will be submitted by law enforcement up front, allowing a prosecutor to check witness history at the time of the filing decision and perhaps avoid filing a charge at all.
- E. Reduce time spent on follow-up discovery by receiving post-referral materials electronically instead of having to scan, and storing/transferring large files electronically instead of retaining disks that must be circulated around the office and be copied for discovery to defense. In recent months, our office had to move two paralegals and four LAS staff from their trial-preparation functions just to upload and process these materials.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

There are a number of different metrics that can be employed to measure the benefits of IDX. Some of the most important benefits, however, are less quantifiable than others.

- A. Electronic submission of case data, documents and evidence to the PAO will result in the savings

of hundreds of hours each year when 40 police agencies and 5000+ police officers are no longer required to print out their cases on paper, drive to the PAO offices in Seattle or Kent and physically submit their cases or follow-up work in person. Allowing police to remain on patrol in their respective jurisdictions is an enormous benefit in terms of both public safety and productivity. We will conduct a survey of police agencies to determine how their adoption of the system has impacted them.

- B. The temporary staff are spending approximately 800-1000 person hours a month scanning and loading documents into PbK, and could cost the PAO up to \$500,000 until the eLODI/eEvidence system is in place. The IDX project essentially moves this work to the originators of the information, law enforcement, who will be doing the initial data entry and uploading of digital evidence at the time of electronic submission. Now law enforcement will be doing all of this from their desks at their own offices in a fraction of the time it took to print out hard copies of reports and evidence, burn disks, print photos, etc., and drive to our office to hand-deliver them. The measure for this benefit is whether we are still reliant upon temporary workers and word processing to manually enter witness information and case documents into the system, or are able to accommodate this task within our existing sustainable resources.
- C. We can measure the average time between two key case events (case receipt and assignment to a prosecutor). This will let us determine how much sooner prosecutors are able to receive and work on new cases, that is, the reduction in lag time, especially for prolific offenders, thereby reducing the impact of recidivism.
- D. Under the new IDX system, the witnesses' name will be submitted by law enforcement up front, allowing a prosecutor to have that information at the time of the filing decision and perhaps avoid filing a charge at all. A decision to not file a charge and keep a suspect from entering the criminal justice system is obviously hugely impactful to the suspect, but also significantly saves resources for everyone in the system: public defense, courts, jail, etc. We will survey the deputy prosecuting attorneys for their assessment of the quality and quantity of victim and witness information available to them to make filing decisions and prioritize repeat offenders before and after the implementation of eLODI.
- E. If post-filing follow-up materials were uploaded, categorized and processed by IDX, then the 6 employees currently assigned solely to discovery could return to their trial-assistance functions.

3. *What is the current baseline for this measure?*

- A. Currently, we receive approximately 7000-8000 cases annually that are physically brought into our office in paper format which must be entered and scanned manually into PbK. We can assume that it takes an officer a minimum of 1-2 hours to print and assemble the hardcopy report, burn any disks, and bring the case into our office. This could be much higher for more complex cases.
- B. We have 9 temporary funded positions who have been hired to do data entry and upload documents into PbK.
- C. We will develop a report in PbK to monitor the lag time from system go-live to after the implementation of eLODI. Historical numbers to follow.
- D. We will need to do the survey to get a baseline for this.
- E. Currently we have 6 reassigned employees working on discovery.

With IDX we hope that 100% of the potential witnesses will be uploaded into PBK prior to a charging decision. This will result in a much better informed charging decision.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- A. We will be doing acceptance testing with police in 2Q-3Q2014 and should have more information at that point for this target.
- B. The goal is to be able to complete the work with regular employees without for extra temporary

staff.

- C. The target will be that the case is received into PbK from eLODI and assigned to a prosecutor within 2 days of receipt.
- D. We would like to see an improvement of 30% in prosecutors' opinion of the quality and quantity of victim and witness information they have to make fining decisions.
- E. This number should drop to 2 once IDX allows for police to upload and submit this information electronically.

5. *When is the benefit likely to be achieved?*

IDX should be completed and implemented by the end of 2014. Within 6 months after IDX is fully implemented and working properly we hope to see less demand for our temporary staff and can minimize those extra resources. As police adopt the use of the system, the benefits will increase over 2015.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

- 1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
- 2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is*

approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

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**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
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## IT Project Benefits Achievement Plan (Version 2)

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<b>King County Department/Agency Name</b>	King County Prosecuting Attorney
<b>Project Title</b>	Prosecutor Case Management Project – PROSECUTORbyKarpel (PbK)
<b>Project Number</b>	1111941

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Dan Satterberg, King County Prosecuting Attorney

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
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Erin Ehlert	Assistant Chief – Criminal Division - PAO	Sponsor
Daniel Clark	Assistant Chief – Criminal Division - PAO	Sponsor
Mark Buening	Finance Manager - PAO	Sponsor

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The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Annual report	1/30/14	M. Buening	Initial draft	2 hours
	1/30/14	K. Tadsen	Added additional supporting information	2 hours
	3/14/14	K. Tadsen	Rev 2	2 hours
	3/18/14	K. Tadsen	Rev 2	1 hour
Annual report and benefits measurement	3/18/15	K. Tadsen, A. Summers, D. Clark, E. Ehlert	Rev 3	4 hours

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Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
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Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
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**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).  
 PROSECUTORbyKarpel (PbK) will allow the PAO to do justice with significantly more and better information. PbK replaced the PROMIS system and multiple side systems and paper files with an integrated system for case tracking and management, workload management, event management, calendar generation, victim and investigative services, and case document generation and storage. PbK has the capability to provide a wide variety of historical person data to assist with risk assessment and provide criminal case data. The integration of all the data and electronic documents in one system instead of multiple systems, gives the Deputy Prosecutors much greater ability to view the case data “holistically” and will allow them to prioritize the cases on which to spend their limited time and resources. The added information will assist in nearly every decision the prosecutor makes. For example: By identifying the most prolific offenders it will help prioritize which cases to address sooner. By having more information about the background of witnesses and victims, a prosecutor is better able to make charging decisions, and potentially decide which cases should not be filed at all.

Knowing when a defendant is arrested for a new charge, it will assist in negotiating his pending cases potentially avoid the filing of new charges.

By having all person and case data in one system will greatly improve the office's ability to manage cases after filing. Maintaining a central location for officer unavailability will assist in ensuring that witnesses are subpoenaed for days they can actual appear in court. Maintaining contact information in one location will help locate and contact witnesses. Storing certified copies of criminal history will reduce the number of times paralegals need to reorder documents from agencies around the country. The Sexually Violent Predator Unit and Involuntary Treatment Unit will be able to see the criminal cases for their respondents, which will better inform their commitment cases. The DV Unit will be able to see protection order case history for both defendants and victims, and know about escalation of violence. By having more accurate and comprehensive information all in one system earlier in the prosecution process, it will be possible to identify and move forward with cases with merit.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The PAO will survey the deputing prosecuting attorneys to determine if they believe that the new case management system has allowed them to prioritize cases better, and has resulted in better, more informed decisions in their work and management of their cases.

3. *What is the current baseline for this measure?*

Since the PROMIS system was around for nearly 40 years, including in the survey a simple comparison between the two systems should be fairly straightforward to assess if employees believe that PbK has resulted in a more informed system to achieve just results.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

An overall satisfaction rating of 70% would be a success.

5. *When is the benefit likely to be achieved?*

The benefit will be achieved over several years as more complete case data is entered, including documents, and as we are able to bring the District Court and Juvenile Units onto the system.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The previous case management system was the 35-year-old PROMIS system running on a mainframe platform, which was several generations of technology behind current systems. The PROMIS system had long passed the end of its useful life; and the decision to phase out the County's mainframe systems necessitated the replacement of the legacy system.

The PAO's needs long ago surpassed the capabilities of the PROMIS system, which resulted in a proliferation of proprietary side systems and workarounds to manage critical business processes. The PAO handles nearly 10,000 felony referrals annually. With the increasing complexity of cases, the violent and more significant property crimes arrive with an average exceeding 150 pages. These files may include multiple witnesses; documentation of physical evidence processing, and frequently electronic media such as footage from surveillance cameras or recordings of 911 calls. The result is that felony cases now consist of twice as much documentation and evidentiary and forensic issues as the same volume of cases just a few years ago. The current staff of the PAO, especially since reduced by severe budget cuts from 2009 to 2011, could not handle this volume of documentation with the existing staffing levels and the old PROMIS technology. The old legacy system did not provide the capability for integrated document storage or the maintenance of critical data for record keeping and statistical analysis. Important data was stored in a number of different repositories including numerous paper case files which resulted in a disjointed and unconnected system which made it difficult and labor intensive to track and report statistical information with any consistency (many statistical reports were tracked and compiled manually with great effort). Most case-related documents were generated on paper with no way to tie them back to other information kept in the mainframe system. This necessitated the storage and maintenance of large number of paper files.

In addition, several key PAO employees that are the most knowledgeable PROMIS users are approaching retirement age. Implementing a new system on which more people can become proficient mitigates this risk. The PAO can use a modern case management system as a state-of-the-art tool to attract and retain talented staff.

The maintenance of the PROMIS system was dependent on a shrinking pool of technical staff with the skills to support '80s-era technology. The new PbK system takes advantage of several new up-to-date technologies. It uses a Microsoft SQL Server database along with the robust SQL Server Reporting Services for reporting and statistical analysis; Microsoft Word for document generation and Microsoft SharePoint for a document repository; Adobe Acrobat for electronic discovery; web services for interface development; and a web-based architecture to make all of these capabilities accessible to the PAO, as well as to its criminal justice partners.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The probability of these risks occurring was 100%. KCIT has a current project for moving the mainframe applications to another platform, and KCIT and PAO employees that know PROMIS continue to approach retirement age.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or

internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be

assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

This project to implement a modern case management system for the PAO was implemented for the felony criminal division, Sexually Violent Predator Unit, Involuntary Treatment Unit, Appellate Unit, and three small units in the District Court Unit (DV Court, Mental Health Court, and Regional Veterans Court). We went live with the system in June 2013 with basic case processing and have continued to streamline our processes and implement new features and functions. We have not yet implemented the mainstream District Court Unit or the Juvenile unit.

Our measure is the users' opinion on whether the system provides the benefit of allowing the PAO to do justice with more and better information. We conducted our first survey in 1Q2015. Based on 100 responses to six questions (with only two questions skipped once each), we have easily exceeded our target of a 70% approval rating with an overall score of 86%.

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
Allow the PAO to do justice with significantly more and better information. Greater ability to view case data holistically and better prioritization of cases. Improvement in the office's ability to manage cases after filing.	Satisfaction rating by users of the system: 1. More information to perform duties 2. More information about criminal cases. 3. More information		<ol style="list-style-type: none"> <li>70% agreement</li> <li>70% agreement</li> <li>70% agreement</li> <li>70% agreement</li> <li>70% agreement</li> <li>70% agreement</li> </ol>	Strongly agree or agree: 1. 89% 2. 91% 3. 93% 4. 89% 5. 73% 6. 83%

		<p><i>about defendants.</i></p> <p><i>4. More information about witnesses.</i></p> <p><i>5. More ability to organize information.</i></p> <p><i>6. Access to information more quickly</i></p>				
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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Public Health – Seattle and King County Emergency Medical Services Division
<b>Project Title</b>	eCBD/CAD Interface at NORCOM
<b>Project Number</b>	377240

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Jim Fogarty, Division Director

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Linda Culley	Manager, Community Programs, EMS Division, PHSKC	Project Manager
Cleo Subido	EMD Program Administrator, EMS Division, PHSKC	Assist Project Manager, manage content, user interface, testing and communication with com center.
Dan Anderson	IT Project Manager, PH IT	IT Project Manager
Julie Buckingham-Lofink (Revised 3/19/15)	EMD QI Program Manager, EMS Division, PHSKC	QI Manager, product testing

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Conceptual review	2/14/14	Linda Culley	New, initial draft	45 Minutes
Annual BAP	3/19/15	Linda Culley	One name correction in Section 3; one date correction in Section 6, Category 3 (1).	15 minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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5. *When is the benefit likely to be achieved?*

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**Example:** This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

**Example:** This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.

NORCOM is currently using an eCBD/Tri Tech interface developed in 2006. In 2008, NORCOM decided to purchase a new CAD from vendor New World Systems. The original project proposal was to develop an eCBD application for New World CAD. In 2013, NORCOM abandoned their efforts to procure a New World CAD and currently continue using the Tri Tech CAD, Version 4.5, which was released in 2006.

In 2015, ~~At the end of 2014~~ NORCOM plans to upgrade to Version 5.5 of Tri Tech CAD. Due to the advancement of technology from 2006 to 2014, this requires updates to the current eCBD product and interface in order to be compatible with NORCOM's CAD. (Revised 3/19/15)

This proposal is now to update the current eCBD and Tri Tech interface due to changes in technology.

Average life cycle replacement of CAD is 6-8 years.

2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

This is not a risk reduction project. The primary reason is to ensure compatibility with the new version of Tri Tech CAD at a major communications center in King County.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

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qualifying for prompt payment discounts.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

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4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

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**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

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**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
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<p><i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i></p>	<ul style="list-style-type: none"> <li>• <i>10 days processing time</i></li> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>1 day processing time</i></li> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<p><i>2 day processing time</i>  <i>20 percent of purchases are receiving prompt payment discounts</i>  <i>\$200,000 savings</i></p>
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## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	Department of Public Health – Seattle & King County (PHSKC), Emergency Medical Services (EMS) Division, Medic One (Section)
<b>Project Title</b>	EMIRF (Electronic Medical Incident Report Form) Application Replacement
<b>EBS Project Number</b>	1121610 (KCIT-DPH EMS EMIRF REPLACEMENT)

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: David Fleming, Director and Health Officer, Public Health – Seattle & King County

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
John Herbert	Medical Services Administrator, KCM1	Project Contact
Michele Plorde	Deputy Director, EMS Division	Project Sponsor
Tracie Jacinto	KCIT-PH Business Analyst	IT Business Analyst

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

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<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Checkpoint #2 PRB/KCIT 2014 budget process	07/22/13	Michele Plorde	New, initial draft	2 hours
Checkpoint #3 PRB/KCIT 2014 budget submittal	08/27/13	Michele Plorde	Revised draft per Council and PSB feedback	2 hours
BAP Revision	10/17/13	Michele Plorde	Revised draft per Council and PSB feedback	2 hours
BAP Revision	10/22/13	Michele Plorde	Revised draft per Council request	2 hours
BAP Revision	10/28/13	Michele Plorde	Revised draft per Council request	2 hours
BAP Submittal	03/20/15	John Herbert	First report	1 hour

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

This project will modernize the way that KCM1's paramedics capture data in the field electronically using ruggedized tablet personal computer (PC) devices to fill out medical incident report forms. Today, KCM1 paramedics communicate important information critical to a patient's treatment plan via telephone prior to patient arrival, and then transfer written patient notes to the receiving emergency room staff upon arrival at the emergency department. After this project is implemented, KCM1 paramedics will gain the ability to transmit patient information digitally to the receiving hospital via the ESO data exchange (Systemwide Enhanced Network Design - SEND infrastructure) prior to the patient's arrival. The data received in advance of a patient's arrival enables the receiving hospital to obtain the supplies required to treat the patient, as well as the ability to assemble the necessary medical professional staff to provide treatment to the patient immediately upon arrival at the emergency room. This capability may not benefit every patient to the same degree, but having patient information in digital format prior to the patient's arrival will improve access to data in the emergency department when and where needed.

With these factors in mind, this project will achieve two benefits that will improve quality of service for our King County constituents: Benefit 1 improved patient outcomes. (There are no added benefits related to paramedics completing forms more quickly, or getting back in service more rapidly.) In addition, this project will also achieve a second external benefit, improving the service we provide to hospitals. This project improves our services to hospitals by allowing hospitals to receive patient data ahead of patient arrival so they can prepare for patient arrival. Additionally, having patient information electronically simplifies the hospital's record keeping tasks.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Improved quality of service may not be prudent to use as a measure of these benefits since there are various contributing factors associated with improved patient outcomes. Two proposed benefit measures are outputs due to limited ability to attribute true service quality benefits, while a third benefit measure is designed to approximate the benefit of users.

Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital (B1):

EMS KCM1 staff will track the number of patient cases where pre-hospital data is transmitted en route to the receiving hospitals. A benefit will be achieved when a pre-hospital record is successfully received by the receiving hospital. The number of patient cases where pre-hospital data is successfully transmitted en route to the receiving hospital will be divided by the total number of KCM1's patient cases.

**Findings:** Transmission of the pre-hospital electronic patient care record (ePCR) has now been fully automated. Updates are automatically provided every 15 minutes to the receiving hospital. Once a destination for the patient is determined, the hospital receives 100% of all records.

Use of Pre-Hospital Data Prior to Patient Arrival (B2): EMS program managers will interview participating hospitals to determine to what extent they used the pre-hospital data prior to patient arrival. It is not feasible to ask hospitals to track their use of the data for every patient, so EMS Program managers will simply be asking for the general impression of hospital staff of how often the data is used pre-arrival.

**Findings:** Hospital ED staff are becoming more comfortable with an electronic record. The dissemination of that information within the hospitals is steadily increasing. Cardiologists and neurologists are very interested in having this information prior to the patient's arrival so that interventional treatments can be prepared for. The SEND Project will continue to report on these types of interventions on a regional level.

Satisfaction of Participating Hospitals (B2): EMS program managers will conduct a survey of participating hospitals and paramedics regarding their level of satisfaction with access to the newly available patient information. Components of the survey will include: use of information prior to patient arrival, appropriateness, timeliness, and format of the data.

Findings: As with any new system, there has been some resistance to this new technology, however, as they become more familiar with the software, they in a number of types of cases find it easier to complete their required documentation. The Stroke, STEMI and Trauma Care coordinators at each hospital are very excited to have access to all of this data on their patients.

3. *What is the current baseline for this measure?*

Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital (B1):

Prior to the go-live of ESO's ePCR solution, 0% of KCM1's patient cases transmit pre-hospital data en route to the receiving hospital.

Survey of Participating Partners Regarding Level of Satisfaction (B2):

No baseline.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital (B1):

KCM1's target goal is to transmit 100% of all pre-hospital data for patient cases where applicable. KCM1 currently transports approximately 7,500 patient cases per year.

Use of Pre-Hospital Data Prior to Patient Arrival (B1): KCM1's target goal is for the pre-hospital data to be used consistently by hospital staff prior to patient arrival.

Satisfaction of Participating Hospitals and use pre-arrival data (B2): KCM1's target goal is to be very satisfied with access to available information based on survey results.

5. *When is the benefit likely to be achieved?*

Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital (B1):

This benefit will be fully achieved by December 2015. For both benefits – B1 and B2 – EMS will begin realizing this benefit immediately after several milestones are achieved. Major milestones include: the acquisition and implementation of ruggedized tablet PCs, the go-live of the ESO ePCR solution, implementation of computer aided dispatch systems (CAD), and the development of required interfaces from hospitals to the ESO data exchange. The benefits of this project will also dramatically increase as more regional partner agencies implement ESO's ePCR solution.

Satisfaction of Participating Hospitals (B2): This benefit will be fully achieved by December 2015. EMS will begin realizing this benefit after go-live of the fully implemented ESO ePCR solution and hospitals as they opt in to receive pre-hospital data by developing the required interfaces to the ESO data exchange.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be*

improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

This project will implement ESO's software-as-a-service (SaaS) solution and will automate KCM1's administrative support staff's (not paramedic staff) business processes to realize operational efficiencies. Additionally, it reduces KCM1's reliance on a paper-based medical incident report form. The acquisition of ruggedized tablet PCs enables KCM1 paramedics to serve as a mobile workforce. This also reduces the risk of inaccurate data entry by enabling KCM1's paramedics to work remotely in the field using ruggedized tablet computer devices to electronically capture information for the Medical Incident Report Form (MIRF). This project leverages the existing ESO data exchange infrastructure implemented from the Systemwide Enhanced Network Design (SEND) project, effectively reducing the reliance on KCIT's existing resources.

Implementation of this project will improve timeliness of the complete patient care record and allow the EMS Quality Improvement (QI) Program to provide more rapid feedback to paramedics regarding the delivery of patient care.

KCM1 will also have direct access to patient outcome data directly through the ESO data repository. Patient outcome data is used by the EMS QI Program to track patient outcomes related to cardiac cases (e.g., stroke patients, heart attacks). Direct access to patient outcome data is critical to EMS QI staff that develops training materials and medical protocols and procedures based on a review of the patient care record and the outcome. Without this project, EMS QI staff must manually retrieve patient care records by coordinating with the hospitals that receive and treat KCM1's patients to obtain outcome data. Additionally, access to regional data from our partner advanced life support (ALS) and basic life support (BLS) agencies in the State is virtually non-existent and limited.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Reduction in KCM1 Administrative Staff Time (B3): KCM1 administrative staff will immediately see a reduction in the amount of time and effort dedicated to print and scan paper medical incident report forms into the system. This will be measured by periodically surveying KCM1 administrative staff time to obtain quarterly estimates for time and effort spent on other activities due to the increased efficiencies gained as a result of this project. Reduction in staff time will not result in reduced costs by deferring new hires or enabling reduction by attrition. The reduction of 10 hours of administrative staff time spent on scanning paper MIRFs will be re-allocated to supporting other valuable activities that could not have been previously worked on due to time constraints.

**Findings:** The act of gathering and scanning physical MIRF documents is no longer needed. We are able to shift that staff time to other tasks including an increase in our QA/QI process.

Reduction in KCIT-PH Database Administrator Staff Time (B4): We will periodically ask KCIT-PH management staff to provide time and effort estimates dedicated to the EMIRF project. EMS anticipates that the KCIT-PH staff response will support that very little to no time is spent on EMIRF support since this project involves a SaaS solution, which will be fully supported by the third-party vendor, ESO Solutions. This reduction will not result in reduced costs by deferring new hires or enabling reduction by attrition, but the saved time will be re-allocated to supporting other valuable activities that could not have been previously worked on due to time constraints.

**Findings:** EMIRF is now used only to retrieve historical data prior to December 22, 2014. This database will need to be minimally maintained to meet records retention requirements. This has shifted staff time to other

database priorities.

Reduction in Time to Feedback (B5): Benefits will be achieved when the provision of feedback to paramedics regarding the quality of their patient care for cardiac arrest cases is reduced.

Findings: We are continuing to work a large hospital in South King County to create an automated feedback system. This will require the hospital to make changes to their Epic Records System to provide that feedback.

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B6): EMS quality improvement staff will track the number of patient outcomes obtained directly from the data exchange. Benefits will be achieved when EMS QI staff reports a reduced lag time in receiving patient outcome data and EMS QI staff identify a patient record being closed at the hospital and the data is immediately accessible via the ESO ePCR SaaS application.

Findings: Once we have successfully created the first connection, we will work with the 2 other large hospital systems to add the automated feedback feature to their systems. This will be reported via the SEND project.

3. *What is the current baseline for this measure?*

Reduction in KCM1 Administrative Staff Time (B3): KCM1 administrative staff currently spends approximately 10 hours per week on activities to print and scan paper-based medical incident report forms into the EMIRF application.

Reduction in KCIT-PH Database Administrator Staff Time (B4): KCIT-PH's database administrator dedicates approximately six hours per month to support the EMIRF custom-developed solution. This time savings will enable this staff member to allocate these six hours per month to other projects.

Reduction in Time to Feedback (B5): Currently, the turnaround time for provision of cardiac arrest case review is approximately 7-8 days.

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B6): Prior to the go-live of ESO's ePCR solution, 0% of patient outcomes are obtained directly from the ESO data exchange.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

Reduction in KCM1 Administrative Staff Time (B3): We anticipate that approximately 10 hours per week of administrative staff time. This time and effort savings will enable this staff member to re-allocate 10 hours per week to perform other job functions to provide valuable support to KCM1's business needs. For example, the time saved will be re-directed to valuable activities such as the gathering of patient outcome data from the ESO data exchange or generating reports that would be used to make informed business decisions.

Reduction in KCIT-PH Database Administrator Staff Time (B4): We anticipate that approximately six hours per month of KCIT-PH database administration time will be available to be re-purposed for other projects. KCIT-PH's database administrator will be able to spend six hours per month in support of other valuable, EMS projects.

Reduction in Time to Feedback (B5): We anticipate a reduction to 3-4 days for cardiac case review.

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B6): KCM1's target goal is to retrieve patient outcome data electronically for 100% of all transported patient cases (approximately 7,500 cases per year).

5. *When is the benefit likely to be achieved?*

Reduction in KCM1 Administrative Staff Time (B3): This benefit will be achieved by Q4 2015.

Reduction in KCIT-PH Database Administrator Staff Time (B4): This benefit will be achieved by Q4 2015.

Reduction in Time to Feedback (B5): This benefit will be achieved by Q4 2015.

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B5): This benefit will be fully achieved by December 2015. EMS will begin realizing this benefit immediately after go-live of the fully implemented ESO ePCR solution and will dramatically increase as more hospitals opt in to receive pre-hospital data by developing the required interfaces to the ESO data exchange.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

In addition to the rationale provided in Category #2, the KCM1 EMIRF replacement project will supplant the current custom, in-house EMIRF application which was first developed by KCIT-PH staff and implemented in 2006. The ESO ePCR software-as-a-service (SaaS) solution is used by numerous other EMS agencies in the County, thereby providing additional standardization of the patient record. Due to the fact that the proposed project will utilize a SaaS solution, the average lifecycle replacement is dependent on the viability of the ESO ePCR SaaS product. As a direct result, the County will receive the latest version of the software application which will be maintained and updated on a quarterly basis by the third-party vendor ESO.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Not applicable.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items*

qualifying for prompt payment discounts.

**Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver	Processing	• 10 days	• 1 day	2 day

<i>service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<i>processing time</i> <ul style="list-style-type: none"> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<i>processing time</i> <ul style="list-style-type: none"> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<i>processing time</i> <ul style="list-style-type: none"> <li>• 20 percent of purchases are receiving prompt payment discounts</li> <li>• \$200,000 savings</li> </ul>
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## Benefit Achievement Summary

The EMIRF (Electronic Medical Incident Report Form) Application Replacement project was implemented in April 2014 with the complete transition from EMIRF to the web-based ESO Solutions product. Project benefits include the following:

- 1) Transmission of Pre-hospital electronic Patient Care Record (ePCR): Now fully automated. Updates are automatically provided every 15 minutes to the receiving hospital. As expected, the hospital receives 100% of all records.
- 2) Use of Pre-Hospital Data Prior to Patient Arrival: Hospital ED staff are becoming more comfortable with an electronic record and the dissemination of that information within the hospitals is steadily increasing. Cardiologists and neurologists are very interested in having this information prior to the patient's arrival so that interventional treatments can be prepared for. The SEND Project will continue to report on these types of interventions on a regional level.
- 3) Satisfaction of Participating Hospitals: As with any new system, there has been some resistance to this new technology, however, as they become more familiar with the software, they in a number of types of cases find it easier to complete their required documentation. The Stroke, STEMI and Trauma Care coordinators at each hospital are very excited to have access to all of this data on their patients.
- 4) Reduction in KCM1 Administrative Staff Time: The act of gathering and scanning physical MIRF documents is no longer needed. Approximately 10 hours per week of administrative staff time was shifted to other tasks including an increase in QA/QI.
- 5) Reduction in KCIT-PH Database Administrator Staff Time: EMIRF is now used only to retrieve historical data prior to December 22, 2014. This database will need to be minimally maintained to meet records retention requirements. Approximately six hours per month to support the EMIRF custom-developed solution has shifted staff time to other database priorities.
- 6) Reduction in Time to Feedback: We are continuing to work a large hospital in South King County to create an automated feedback system. This will require the hospital to make changes to their Epic Records System to provide that feedback. This will be reported via the SEND project.
- 7) Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange: Once we have successfully created the first connection, we will work with the 2 other large hospital systems to add the automated feedback feature to their systems. This will be reported via the SEND project.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Public Health – Emergency Medical Services Division, Community Programs Section
<b>Project Title</b>	Regional Emergency Medical Dispatch ( <del>EMD</del> ) and Telecommunicator CPR ( <del>T-CPR</del> ) Quality Improvement ( <del>QI</del> ) Application Replacement (EMDQI)
<b>Project Number</b>	1123857 KCIT-DPH EMS EMD AND T-CPR QI APPLICATION REPLACEMENT

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Jim Fogarty, EMS Division Director

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jim Fogarty	EMS Deputy-Director, EMS Division	Project Sponsor
Linda Culley	Community Programs Section Manager, EMS Division	Program Manager/Project Contact
Julie Buckingham-Lofink	Emergency Medical Dispatch (EMD) Quality Improvement (QI) Program/Project Manager, EMS Division	Project Manager
Tracie Jacinto	IT Business Analyst, King County Information Technology Department	IT Business Analyst
Dan Anderson	IT Project Manager - KCIT	IT Project Manager

### Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Checkpoint #2: PRB/KCIT 2015-2016 budget process	5/30/14	Julie Buckingham-Lofink/ Tracie Jacinto	New, initial draft	4 hours
BAP Update	2/10/15	Linda Culley/Dan Anderson	Draft update	30 min

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Although this project is primary aligned with Category #2 benefits, this project will enable a regional solution for emergency medical dispatch quality improvement oversight that will directly benefit our constituents through the following two benefits that will stem from improved telecommunicator performance:

Reduced number of emergency medical calls involving incorrect instructions given by telecommunicators (B1): Telecommunicators that receive and respond to 9-1-1 calls involving emergency medical situations may deal with a stroke patient or someone that may require CPR. Our telecommunicators act as our first line of defense to instruct the caller to perform life-saving techniques over the phone.

Reduced number of emergency medical calls involving incorrect resources dispatched to incidents (B2): Another important aspect of the telecommunicator's role is to dispatch the correct medical resources to the scene of the medical incident. If a telecommunicator dispatches the incorrect medical resources to the scene, a person's life could be at risk. Telecommunicators may dispatch advanced life support resources or basic life support resources, which have varying levels or abilities to respond to and treat emergency medical situations. With the tough economic conditions that King County faces, dispatching the correct resources the first time, without error is critical to avoid any unnecessary expenses.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

As part of the EMS Division's ongoing quality improvement program, we will continue to track and the number of emergency medical calls involving incorrect instructions given by telecommunicators. Additionally, we will continue to track the number of emergency medical calls which involve inappropriate resources to be dispatched to the scene. The benefits of this project will be achieved by observing a downward trend and reduction in incidents which involve incorrect instructions provided by telecommunicators or inappropriate resources being dispatched to the scene.

3. *What is the current baseline for this measure?*

In 2013, EMS' QI staff identified 237 emergency medical calls which involved incorrect instructions given by telecommunicators. This represents 9% of total calls reviewed for EMD QI purposes. As of May 2014, telecommunicators are meeting performance standards goal set forth by the EMS Division.

In 2013, 451 emergency medical calls involved inappropriate resources being dispatched. This represents 18% of total calls reviewed for EMD QI purposes.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The EMS Division anticipates that 85% of all telecommunicators calls reviewed for QI purposes will involve the correct instructions provided to telecommunicators and the appropriate resources to be dispatched to respond to the emergency medical incident.

5. *When is the benefit likely to be achieved?*

These benefits will likely to be achieved by the end of 2016 after this project is fully implemented, following the go-live of the solution at each dispatch agency.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved,*

inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

**Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.

**Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

*1. Describe why you expect the proposed IT investment to produce the benefit(s).*

This project will identify and implement a best-fit, third-party commercial-off-the-shelf solution to optimally meet the business needs related to emergency dispatch quality improvement of both the County and our partner, regional dispatch agencies – Valley Communications Center (Valley Com) in Kent; North East King County Regional Public Safety Communication Agency (NORCOM) in Bellevue; Port of Seattle; and Enumclaw. A third-party vended commercial-off-the-shelf solution will create a single repository of 9-1-1 audio recordings (accessible near real-time after a call is completed). In addition, the chosen solution will offer highly configurable out-of-the-box functionality that does not currently exist today, including: audio call conversion and centralization of all audio calls, and modules that support our business staff to provide playback calls, annotate calls, generate interaction analytics, and perform quality assurance, coaching, and performance reporting functionality. This project will also leverage third-party implementation services and 24/7 ongoing support and maintenance.

EMS will also work collaboratively with our partners to develop a standardized approach to emergency medical dispatch quality improvement. This project will achieve the following internal service benefits:

Reduced time to gain access to 9-1-1 audio call recordings to perform QI (B1)

Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to retrieve calls from various audio recording systems (B2)

Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3)

*2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

We propose the following measures for each benefit listed above, followed by a brief description of indicators of success that the benefit has been achieved:

Reduced time to gain access to 9-1-1 audio call recordings to perform QI (B1): King County's QI staff currently experiences a six- (6) to eight (8) week delay in gaining access to select 9-1-1 audio call recordings from the Port of Seattle and Enumclaw dispatch agencies. With the lack of the ability to

remotely log in to their audio recording systems, these dispatch agencies send EMS' EMD QI staff CD-ROMs containing the audio call recordings via United States Postal Service mail for QI review. In contrast, both Valley Com and NORCOM provide EMD QI staff with the ability to remotely log in to their 9-1-1 audio call recording systems to view select calls for QI purposes. Once this project is implemented, the system will provide near real-time access to 9-1-1 audio call recordings.

Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to retrieve calls from various audio recording systems (B2): We anticipate that after this project is implemented, the direct access to audio call recordings will save approximately six to eight hours per month to retrieve the audio calls that need to be reviewed for QI purposes. EMD QI staff members spend considerable time and effort to log in to each audio call recording system, locate each call recording file, and must then manually download the call recording file to begin performing QI reviews. As each call is reviewed, the QI staff member utilizes a Microsoft Access database to enter approximately 50 to 60 data elements which is stored in a SQL database. EMD QI reports are then generated from SQL by logging in to the PH Portal Reports section. The reduction in time to retrieve calls will result in significant gains in employee productivity in performing more QI reviews.

Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3): After gaining access to call recordings, EMD QI staff must perform its QI reviews to provide feedback and to recommend training targeted to correct deficiencies in telecommunicator performance or dispatch agency systems. Currently, it takes anywhere between four- (4) to six (6) weeks to provide QI feedback to the telecommunicator due to the limitations of the current system to efficiently generate reports by dispatch agency and individual telecommunicator.

### *3. What is the current baseline for this measure?*

Reduced time to gain access to 9-1-1 audio call recordings to perform QI (B1): The County's EMS EMD QI staff currently experiences a six to eight week delay to obtain audio call files from the Port of Seattle and Enumclaw dispatch agencies.

Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to retrieve calls from various audio recording systems (B2): EMD QI staff must manually download calls from audio call recording systems owned by Valley Com and NORCOM. EMS QI staff downloads call via a Web browser, by logging into each audio call recording system to download audio files. QI reviews are performed on a daily basis. The process to download each call takes approximately five (5) minutes. The process to identify which calls to review once all audio call files are downloaded takes approximately two (2) to three (3) business days each month. Currently, EMD QI staff performs approximately 2,400 call reviews annually.

Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3): Once a call is reviewed for QI purposes, it takes approximately four to six weeks after the call is received to provide feedback to individual telecommunicators due to inefficiencies in the current process which require EMS EMD QI staff to have to generate individual feedback reports and mail it to the dispatch agencies to be disseminated and reviewed by the telecommunicator.

### *4. What is the target for this measure? (How much improvement will this project achieve?)*

Reduced time to gain access to 9-1-1 audio call recordings to perform QI (B1): We anticipate that calls will be retrieved near real-time, or at least within 24 hours after a call has ended.

Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to retrieve calls from various audio recording systems (B2): We anticipate that EMD QI staff will save approximately two (2) to three (3) business days each month across two EMS staff members that perform QI to not have to manually identify and download audio files from our regional

dispatch agencies' audio recording systems. The target for this measure is to perform 600 more EMD QI call reviews annually after this project is implemented at each of the dispatch agencies.

Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3): We anticipate that EMD QI call review feedback will be provided back to the telecommunicator within one week of completion of the report. Monthly reports for the dispatch agency will maintain the current schedule and will be delivered approximately one week after the close of each month.

5. *When is the benefit likely to be achieved?*

We anticipate that all benefits will be achieved immediately after the solution is implemented and utilized by each dispatch agency. EMS will monitor and track the benefits achieved as a result of this project over the course of one year after go-live at each dispatch agency.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The current technologies being used do not fully align with King County's technology standards as a Microsoft Access database is still being used to enter data elements. Additionally, the reports that are currently available do not fully meet the business' needs. The current EMD QI solution (Microsoft Access, Microsoft SQL Server, Microsoft SQL Server Reporting Services reports) had recently been upgraded to address short-term business needs, however, it does not provide a regional EMD QI solution that may be utilized by other non-King County dispatch agencies (Valley Com, NORCOM, Port of Seattle, Enumclaw). The average life cycle replacement for the new technology is approximately four to five years prior to a major system upgrade.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Not applicable.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay,

has the capacity and intent to pay, but will be avoided due to the project.

**Example:** *Reduced cost to produce service.* If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the

processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

<b>Metric Description</b>	<b>Metrics</b>	<b>Baseline</b>	<b>Target</b>	<b>Actual</b>
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>

## IT Project Benefits Achievement Plan (Version 2)

12/31/2013

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Department of Public Health
<b>Project Title</b>	PH-HIT Improvement Project
<b>Project Number</b>	pr_1113974

#### **Executive Summary**

*The HIT project will allow PH and its staff more timely access to patient records and to improve the quality, safety and efficiency of assistance provided to clients, to help more deeply engage patients and families in their health care, while protecting privacy and security of private health information as directed by federal law and reducing health disparities across the community. This will all be accomplished within the Meaningful Use standard as set out in the American Recovery and Reinvestment Act which will provide approximately \$4.3M in revenue over the next 6 years. Details are provided below. For more information on Meaningful Use Standard see [http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful\\_Use.html](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Meaningful_Use.html).*

*This project will plan, purchase and implement a federally qualified electronic health record (EHR) that will meet the entire Public Health Department's varied health requirements. The legacy system that the Public Health Department uses to register and schedule patients and to bill for patient services will lose vendor support at the end of 2014. An extension is being negotiated for 2015. No upgrades are available and as a result, Public Health must replace the system and views this as an important opportunity to achieve a consistent, efficient and unified system for the entire agency.*

*Public Health plans its new system to include an integrated EHR including Jail Health Services integrated practice management system (PMS), electronic dental systems, with a robust and scalable system that will interoperate successfully with business requirements for Public Health and meet the federal standards. This project is expected to span multiple years.*

#### **Project Success and Benefits**

*Success of this project can be measured by the realization of benefits as outlined in section 6 in this document. In addition the Project has established a Vision and Goals by which to guide the success of the project. They are:*

#### Vision

- *Public Health will develop and maintain state of the art tools and systems to; protect the public's health, promote healthy communities and provide an integrated, high quality, efficient public health and clinical services.*

#### Goals/Objectives

- *Better information to provide care for the patient*
- *More efficient care*

- *Engaging the patient in their care*
- *Providers will have more time to engage their patients and prioritize health care and whole patient care*
- *Better care across systems through integrated health information*
- *More timely access to information*
- *Assurance of adequate privacy and security protections and accountability of access to safeguarded Protected Healthcare Information as required by Federal Law*
- *Benefit: Meet Federal Meaningful Use Criteria which will also allow for Public Health to receive Medicaid Incentive Dollars*

Alignment to Business Strategy

The PH-HIT project is strategically aligned with the broader vision and goals of the County through the Public Health Operational Master Plan (PHOMP) and the King County Strategic Plan.

- *Develop and maintain state of the art tools and systems to; protect the public’s health, promote healthy communities and provide reliable, high quality public health services.*
- *Adhere to sound operational practices and systems including assuring the transparency, cost effectiveness, and accountability of its activities, services and outcomes.*
- *Raise capability to match modern public health practice needs with the organizational attribute domains of workforce quality, obtain information for decision making, basic systems and infrastructure.*
- *Rapidly and accurately assess key infections and environmental health threats and response efforts through selected enhancements in: (1) Collection and analysis of electronically transmitted data (2) Methods for measuring the health of vulnerable populations (3) Capability to monitor the health care delivery system.*
- *Improve the capability of Public Health to fulfill its functions through selective enhancement of key system elements including, modernizing key business tools and administrative systems to improve business efficiency.*

**Section 2. Business Owner Accountability**

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Michael Gedeon, Chief Administrative Officer

**Section 3. Who is involved in developing the Benefit Achievement Plan?**

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Kristi Korolak	HSA II	Project Manager
Michael Gedeon	Chief Administrative Officer	Project Sponsor
Lisa Hillman	IT Service Delivery Manager	Steering Committee Member
David Bibus	Deputy Division Mgr, Prev	Steering Committee Member
Moffett Burgess	Dental Director	Steering Committee Member
Maureen Peterson	Finance & Administrative Services Manager, CHS	Steering Committee Member
Eben Sutton	Interim Chief Financial Officer	Steering Committee Member
Dorene Hersh	Chief of Nursing	Steering Committee Member
Bill Kehoe	Chief Information Officer	Steering Committee Member

Judy MacCully	Regional Health Admin, JHS	Steering Committee Member
TJ Cosgrove	Deputy Division Director, CHS	Steering Committee Member
Ben Sanders	Medical Director	Steering Committee Member
Cristin Burris	PPM IV	HIT Project

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

**Section 5. How long will it take to complete the benefit achievement plan?**

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
Budget Process	2/7/14	Jeff Boudreau Cristin Burris	New, initial draft	
Funding Release Request	8/1/14	Cristin Burris Wendy Seese	Minor updates	30 minutes
Annual update	3/12/15	Cristin Burris	Minor updates for clarification purposes. Added targets achieved to-	90 minutes

			date.	

**Section 6. Description of Project Benefits**

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

**Please respond to each question listed below rather than provide a summary.**

Public Health will know that it has achieved benefits through reviewing reports and data to demonstrate meeting the Meaningful Use Standard outlined in the American Recovery and Reinvestment Act. Benefits will begin at the time that the first clinic go-live can meet Meaningful Use criteria and continues as each clinic is rolled-out and meets criteria.

**B-1 Benefit: Better information to provide care for the patient through integrated health information.**

- 1. Describe why you expect the proposed IT investment to produce the benefit?
  - When providers can find the right information or critical information better, they make better and more personalized treatment decisions.

- Electronic health records provide access to information that otherwise can be “buried” or misfiled in thick paper charts.
- Prescriptions and prescription refills with pharmacies will be managed through the provider using e-prescribing technology, reducing errors and waiting times.
- Care provided by other participating organizations is accessible through records share technology, so patients’ providers can quickly get “up to date” not matter where the patient last received care.

2. *How will you measure the benefit?*

Patients seen by a **medical\*** provider will have :

- At least one problem identified or indication that no problems are known on the problem list.
- At least one medication allergy identified or indication that no allergies are known on the allergy list.
- Height, weight and blood pressure recorded.
- Smoking status recorded.

Patients seen by a provider who have medication orders will have:

- At least one medication on their medication list ordered using Computerized Physician Order Entry (CPOE).
- Prescriptions transmitted electronically to identified pharmacy.

3. *What is the current baseline for this measure?*

The use of paper records means that baseline data for any of these activities is difficult to know, except for those activities that do not occur in the absence of CPOE (electronic medication orders, electronic transmission of medication orders to identified pharmacy).

4. *What is the target for this measure?*

Patients seen by a **medical\*** provider will have all of the above that are age and developmentally appropriate for each visit they access care at a site using the electronic health record. Our target is to achieve 80% of the above for each provider clinic visit once all sites have implemented the electronic health record. These targets exceed the federal mandates.

**\* A medical provider is defined as an independent health care provider (MD, Nurse Practitioner, Physician Assistant) in Primary Care, Family Planning, STD Clinic, TB Control program or Jail Health Services.**

**B-2 Benefit: More efficient care.**

1. *Describe why you expect the proposed IT investment to produce the benefit?*

- Results and information on tests, treatments and procedures that were provided at other Public Health Sites or external providers are more readily available and will not need to be repeated.
- Patients won’t have to repeat the same history over and over, since the electronic health record allows for quick review and update

2. *How will you measure the benefit?*

Patients seen by a provider who have clinical lab tests ordered will have their results either in a positive/negative or numerical format incorporated in the EHR as structured data.

3. *What is the current baseline for this measure?* 0%

4. *What is the target for this measure?*

Our target is to achieve 80% of the above for each provider clinic visit once all sites have implemented the electronic health record. These targets exceed the federal mandates.

**B-3 Benefit: Engaging the patient in their care.**

1. *Describe why you expect the proposed IT investment to produce the benefit?*

- At the end of every visit, patients will be offered a printed visit summary, as well as health education and a list of necessary follow-up items.
- Patients will be able to access their record electronically through a patient portal.

2. *How will you measure the benefit?*

Patients seen by a medical\* provider will have clinical summaries provided after office visits and/or access to their patient portal.

3. *What is the current baseline for this measure?* 0%

4. *What is the target for this measure?*

For patients seen by a medical\* provider, our target is to achieve 80% of the above for each provider clinic visit once all sites have implemented the electronic health record. These targets exceed the federal mandates.

\* A medical provider is defined as an independent health care provider (MD, Nurse Practitioner, Physician Assistant) in Primary Care, Family Planning, STD Clinic, TB Control program or Jail Health Services.

**B-4 Benefit: Providers will have more time to engage their patients and prioritize health care and whole patient care.**

1. *Describe why you expect the proposed IT investment to produce the benefit?*

- When providers don't have to wait for paper records to be found and spend time "digging" through paper records to find key information, they can spend more time examining and counseling their patients
- Electronic health records provide summary screens so that *all* aspects of a patient's care can be considered, including the psychological and social factors affecting health and wellness.

2. *How will you measure the benefit?*

Patient and provider surveys post implementation

3. *What is the current baseline for this measure?*

No current baseline

4. *What is the target for this measure?*

Patients and providers will rate their level of satisfaction with time spent in encounters post implementation at "Satisfied" or higher 50% of the time.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

**Please respond to each question listed below rather than provide a summary.**

**B-5 Benefit: More timely provider access to information.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Availability of complete patient records/health information for clinical decision making

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Records available to provider for patient visit at another site location.

3. *What is the current baseline for this measure?*

66%

4. *What is the target for this measure? (How much improvement will this project achieve?)*

99%

5. *When is the benefit likely to be achieved?*

Benefits will begin at first clinic go-live (December 2013) and continue through the roll-out of each clinic location.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

**B-6 Benefit: Assurance of adequate privacy and security protections and accountability of access to safeguarded Protected Healthcare Information as required by Federal Law.**

- 1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*  
All Certified electronic health records (EHR) must comply with Meaningful Use requirements, which include protecting electronic health information created or maintained by the Certified EHR through the implementation of appropriate technical capabilities. The EHR will be able to provide timely reports on workforce access to Protected Health Records to meet HIPAA requirements.
- 2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

**Please respond to each question listed below rather than provide a summary.**

**B-7 Benefit: Meet Federal Meaningful Use Criteria which will also allow for Public Health to receive Medicaid Incentive Dollars.**

- 1. Describe why you expect the proposed IT investment to reduce costs?*  
Public Health will be eligible to receive approximately 4.3 million over 6 years if additional funds by implementing a Certified Electronic Health Record and using the system in a meaningful way as out lined in the Meaningful Use Standards criteria. If Public Health does not implement the system we will not receive the funds.
- 2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*  
Receipt of payment.
- 3. What is the current baseline?*  
N/A. PHSKC is not currently meeting Meaningful Use criteria.
- 4. What is the target for this measure? (How much savings will this project achieve)*  
Revenue is projected to be 4.3 million over 6 years.
- 5. When is the cost reduction likely to be achieved?*  
Benefits will begin at the time that the first clinic go-live can meet Meaningful Use Criteria and continues as each clinic is rolled-out and meets criteria for five years.

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

**Example:** *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

*If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.*

**Example:** *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

#### Example:

Metric Description	Metrics	Baseline	Target	Actual
<i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i>	<i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i>	<ul style="list-style-type: none"> <li>• 10 days processing time</li> <li>• 10 percent of purchases are receiving discount</li> <li>• Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>• 1 day processing time</li> <li>• 30 percent of purchases are receiving prompt payment discounts</li> <li>• \$400,000 savings</li> </ul>	<ul style="list-style-type: none"> <li>2 day processing time</li> <li>20 percent of purchases are receiving prompt payment discounts</li> <li>\$200,000 savings</li> </ul>
<i>B-1 Better information to provider care for the patient through integrated health information</i>	<ol style="list-style-type: none"> <li>1. At least one problem or no known problem on problem list</li> <li>2. At least one medication allergy or no know allergies on allergy list</li> <li>3. Vitals: Height, weight and BP recorded</li> <li>4. Smoking status</li> </ol>	<ul style="list-style-type: none"> <li>• Unknown</li> </ul>	<ul style="list-style-type: none"> <li>• 80% of provider clinic visits</li> </ul>	<p><i>For visits at live clinics in 4<sup>th</sup> Quarter 2014:</i></p> <ol style="list-style-type: none"> <li>1. Problem list = 83%</li> <li>2. Med Allergy = 98%</li> </ol>

	<i>recorded</i> 5. Medication orders through CPOE 6. Electronic prescribing (E-Rx)			3. Vitals = 83% 4. CPOE = 99% 5. E-Rx = 94%
<i>B-2 More efficient care</i>	<i>Clinical lab results as structured data</i>	<ul style="list-style-type: none"> <li>0%</li> </ul>	<ul style="list-style-type: none"> <li>80% or above</li> </ul>	100%
<i>B-7 Meet Federal Meaningful Use Criteria which will also allow for Public Health to receive Medicaid Incentive dollars</i>	<i>Receipt of payment</i>	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>\$4.3 million over 6 years</li> </ul>	\$1,020,000 has been received as of March 1, 2015. Another \$63,750 is pending approval.

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

<b>King County Department/Agency Name</b>	Public Health – Seattle & King County/EMS Division
<b>Project Title</b>	Systemwide Enhanced Network Design (SEND) Project
<b>EBS Project Number</b>	1111947

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Michele Plorde, Deputy Director, EMS Division

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Michele Plorde	Deputy Director, EMS	Project Manager
Dan Anderson	IT Project Manager/KCIT	IT Project Manager

## Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

## Section 5. How long will it take to complete the benefit achievement plan?

*Completion of the BAP depends on the project’s complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:*

**Revision History Table**

Stage	Date	Revised By	Description	How long did it take?
<i>Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>Date this document was updated</i>	<i>Who did the document updates?</i>	<i>A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate “review only”.</i>	<i>How long did it take to complete or revise the form at this stage?</i>
<b>Example:</b> Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
<b>Example:</b> Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Phase IIIb	11/15/11	Michele Plorde	Initial Document Creation	1 hour
Phase IIIb	10/01/12	Michele Plorde	Document Update	1 hour
Phase IIIb	12/20/13	Michele Plorde	Document Format Update	5 hours
BAP - First Report	02/12/15	Michele Plorde	BAP Report	2 hours

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Complete, accurate, and timely information is integral to the management of all aspects of the Emergency Medical Service (EMS) system in King County. The SEND project modernized the network and technical infrastructure components (e.g. ESO-hosted secure servers, ESO data hub) supported by a third-party vendor, ESO Solutions. This critical infrastructure supports the transfer of patient data between EMS agencies' staff that respond to emergency calls in the field and participating hospitals en-route to the hospital to improve patient care. This project will achieve one benefit in this category that will improve quality of service for our King County constituents described below.

Benefit #1 (B1) Improved Patient Care: Following implementation, EMS personnel capture medical incident report data in the field electronically using rugged tablet computing devices. Prior to this project, they communicated important information critical to a patient's treatment plan via telephone prior to patient arrival then transferred written patient records to the receiving emergency room staff upon arrival at the emergency department.

Benefit #2 (B2) Satisfaction of Participating Hospitals: The data received in advance of a patient's arrival enables the receiving hospital to obtain the supplies required to treat the patient, as well as the ability to assemble the necessary professional medical staff to provide treatment to the patient immediately upon arrival at the emergency room. Additionally, having patient information electronically simplifies the hospital's record keeping tasks. This capability may not benefit every patient to the same degree, but having patient information in digital format prior to the patient's arrival will improve access to data in the emergency department when and where needed.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Improved quality of service may not be prudent to use as a measure of these benefits since there are various contributing factors associated with improved patient outcomes. The following benefit measures reflect an output due to limited ability to attribute true service quality benefits and an approximation of the benefit to users.

B1 Measure - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: The EMS Division will track the number of patient cases where pre-hospital data is transmitted en route to the receiving hospitals. A benefit will be achieved when a pre-hospital record is successfully received by the receiving hospital. The number of patient cases where pre-hospital data is successfully transmitted en route to the receiving hospital will be divided by the total number of patients delivered to participating hospitals.

**Findings: Not available at this time. Evergreen Hospital was in the midst of a system upgrade in 2014 and Northwest Hospital completed their interface in late December. Expect to report fully next year.**

B2 Measure - Satisfaction of Participating Hospitals: The EMS Division will conduct a survey of participating hospitals and paramedics regarding their level of satisfaction with access to the newly available patient information. Components of the survey will include: use of information prior to patient arrival, appropriateness, timeliness, and format of the data. As part of this survey, the EMS Division will gather qualitative feedback from participating hospitals to determine to what extent they use the pre-hospital data prior to patient arrival. If it is not feasible to ask hospitals to track their use of the data for every patient, the EMS Division will simply ask for the general impression of hospital staff of how often the data is used pre-arrival.

**Findings: Early anecdotal evidence reflects very positive impacts on both the hospital side (receiving information prior to arrival) and EMS agencies (receiving outcomes). Expect to report fully next year.**

3. *What is the current baseline for this measure?*

B1 Measure Baseline - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: Prior to the go-live of ESO's ePCR solution, 0% of patient cases transmit pre-hospital data en route to the receiving hospital.

B2 Measure Baseline - Satisfaction of Participating Hospitals: No baseline exists.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

B1 Measure Target - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: The target goal is to transmit 100% of all pre-hospital data for patient cases where applicable. EMS agencies currently transport approximately 75% of the over 150,000 patient cases per year.

B2 Measure Target - Satisfaction of Participating Hospitals: The target goal is to be very satisfied with access to available information based on survey results. The long-term goal is to have pre-hospital data used consistently by hospital staff prior to patient arrival.

5. *When is the benefit likely to be achieved?*

B1 Measure Target Date - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: The benefit will dramatically increase as more regional partner agencies implement ESO's ePCR solution and hospital interfaces are built. Major milestones include: the acquisition and implementation of ruggedized tablet PCs, the go-live of the ESO ePCR solution, implementation of computer aided dispatch systems (CAD), and the development of required interfaces from hospitals to the ESO data exchange.

B2 Measure Target Date - Satisfaction of Participating Hospitals: EMS will begin realizing this benefit after go-live of the fully implemented ESO ePCR solution and hospitals as they opt in to receiving pre-hospital data by developing the required interfaces to the ESO data exchange.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

*Example: If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

*Example: If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

*Example: The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than**

**provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

This project implements ESO's software-as-a-service (SaaS) solution and automates EMS agencies' administrative support staff's (not EMS personnel) business processes to realize operational efficiencies. Additionally, it reduces EMS agencies' reliance on a paper-based medical incident report form. The acquisition of ruggedized tablet PCs enables EMS personnel to serve as a mobile workforce. This also reduces the risk of inaccurate data entry by enabling EMS personnel to work remotely in the field using ruggedized tablet computer devices to electronically capture information for the Medical Incident Report Form (MIRF). Implementation of this project improves timeliness of the complete patient care record and allows the EMS Quality Improvement (QI) Program to provide more rapid feedback to EMS personnel regarding the delivery of patient care.

Benefit #3 (B3) Reduction in EMS Division Administrative Staff Time: EMS Division administrative staff (originally 2 FTEs) will no longer data enter the paper medical incident report form. EMS paramedics will be able to enter MIRF data directly into the electronic patient care record system either in the field or on their desktop.

Benefit #4 (B4) Direct and Immediate Access to Patient Outcome Data for QI Purposes: Patient outcome data is used by the EMS QI Program to track patient outcomes, including cardiac arrests, stroke patients, and chest pain. Direct access to patient outcome data directly through the ESO data repository is critical to EMS QI staff that develops training materials and medical protocols and procedures based on a review of the patient care record and the outcome. Without this project, EMS QI staff must manually retrieve patient care records by coordinating with the hospitals that receive and treat EMS patients to obtain outcome data.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

B3 Measure - Reduction in EMS Division Administrative Staff Time: EMS Division administrative staff will see a reduction in the amount of time and effort dedicated to entering the medical incident report forms into the database. The reduction of administrative staff time spent on MIRF data entry will be eliminated or re-allocated to supporting other valuable activities that could not have been previously worked on due to time constraints.

**Findings: There is no longer dedicated staff time to MIRF data entry. Administrative time has been re-allocated to support other EMS Division activities, such as running reports to assist the EMS finance team, entering data for the Cardiac Case Review program, and providing EMS Online adhoc program support.**

B4 Measure - Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange: EMS quality improvement staff will track the number of patient outcomes obtained directly from the data exchange. Benefits will be achieved when EMS QI staff reports a reduced lag time in receiving patient outcome data and EMS QI staff identify a patient record being closed at the hospital and the data is immediately accessible via the ESO ePCR SaaS application.

**Findings: Not available at this time. Expect to report fully next year.**

3. *What is the current baseline for this measure?*

B3 Measure Baseline - Reduction in EMS Division Administrative Staff Time: Two full time (FTE) administrative staff data enter MIRF information.

B4 Measure Baseline - Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange:

Prior to the go-live of ESO's ePCR solution, 0% of patient outcomes are obtained directly from the ESO data exchange.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

B3 Measure Target - Reduction in EMS Division Administrative Staff Time: We anticipate a full reduction of the data entry workload. This time and effort savings will enable staff to be re-allocated to perform other job functions or to enable a reduction in FTE numbers. For example, the time saved will be re-directed to valuable activities such as the gathering of patient outcome data from the ESO data exchange or generating reports that would be used to make informed business decisions.

B4 Measure Target – Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange: The EMS Division target goal is to retrieve patient outcome data electronically for 100% of all transported patient cases (approximately 75% of all patient cases per year).

5. *When is the benefit likely to be achieved?*

B3 Measure Target Date - Reduction in EMS Division Administrative Staff Time: This benefit will be achieved by Q4 2014.

B4 Measure Target Date – Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange: This benefit will be fully achieved by December 2015. EMS will begin realizing this benefit immediately after go-live of the fully implemented ESO ePCR solution and will dramatically increase as more hospitals opt in to receive pre-hospital data by developing the required interfaces to the ESO data exchange.

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

Modernization of the EMS data network and technical infrastructure (e.g. ESO hosted secure servers, ESO data hub) was a critical component of the SEND project. As a Software as a Service (SaaS) model, ESO Solutions will be responsible for the ongoing system maintenance and operability assurance. This functionality will be monitored by the following two metrics:

- a. Performance metrics to ensure adequate performance under peak load conditions.
- b. Metrics for monitoring the vendor's performance.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Not applicable.

#### **Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

***Example: Reduced cost to produce service.** If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

***Example: Cost Avoidance.** Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

### **Section 7. Benefit Achievement Summary**

#### **Benefit Achievement Summary**

*To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the*

measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

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**Example:**

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	Processing Time annual savings, and percentage of purchases receiving prompt payment discounts	<ul style="list-style-type: none"> <li>10 days processing time</li> <li>10 percent of purchases are receiving discount</li> <li>Savings of \$100,000</li> </ul>	<ul style="list-style-type: none"> <li>1 day processing time</li> <li>30 percent of purchases are receiving prompt payment discounts</li> <li>\$400,000 savings</li> </ul>	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

## IT Project Benefits Achievement Plan (Version 2)

### Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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<b>King County Department/Agency Name</b>	Public Health – Seattle and King County Emergency Medical Services Division
<b>Project Title</b>	eCBD/CAD Interface at Valley Communications
<b>Project Number</b>	377216

### Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Jim Fogarty, Division Director

### Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Linda Culley	Manager, Community Programs, EMS Division, PHSKC	Project Manager
Cleo Subido	EMD Program Administrator, EMS Division, PHSKC	Assist Project Manager, manage content, user interface, testing and communication with com center.
Dan Anderson	IT Project Manager, PH IT	IT Project Manager
Julie Buckingham-Lofink (Revised 3/19/15)	EMD QI Program Manager, EMS Division, PHSKC	QI Manager, product testing

**Section 4. When should the Benefit Achievement Plan be started, updated and completed?**

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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**Section 5. How long will it take to complete the benefit achievement plan?**

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Conceptual review	2/14/14	Linda Culley	New, initial draft	3 hours
2015 Annual BAP	3/19/15	Linda Culley	One name correction in Section 3; .	10 Minutes

## Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

- 1) External service benefits: Improving the quality or quantity of services provided to the public
- 2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

**What is the primary benefit of your project?** After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

**Primary project benefit?** (Check only one)

- Category #1: External service benefits: Improving the quality or quantity of services provided to the public
- Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- Category #3: Maintaining service levels by replacing or upgrading older technology
- Category #4: Reduced cost or cost avoidance to produce services

**Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.**

*Example: If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

*Example: If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

An electronic Criteria Based Dispatch (eCBD) application that successfully interfaces with the communication center CAD system will benefit our customers, i.e. the 9-1-1 communication centers, dispatchers, and King County residents who call 9-1-1 during medical emergencies.

This interfaced application will improve internal and external access to county records, services and resources. It will integrate existing systems, enhance system reliability and improve the quality, accuracy and transparency of data that is used to make decisions about revisions to the emergency medical triage system.

The goal of the CBD Guidelines is to implement methods to manage costly, existing EMS resources more effectively and efficiently. Enhanced technology will enable data collection on Emergency Medical Dispatch (EMD) call processing, improving the ability of the EMS Division to perform efficient EMD case review.

A. Benefits to dispatchers include:

1) Increased functionality of their primary call processing tool during medical emergencies. This increased functionality will produce process benefits including but not limited to:

- a. Increase instances of appropriate resource deployment as a result of inadequate triage.
- b. Increased opportunity for provision of medical pre-arrival instructions (PAI).

B. Benefits to Communication Center Supervisors and EMS Division staff include:

- 1) Ability to collect accurate and timely documentation for the purposes of quality improvement to evaluate 9-1-1- call handling techniques;
- 2) Ability to identify calls by specific call type and employee for Quality Improvement (QI) review .

C. Benefits to EMS Administrators include:

- 1) Access to aggregate data and reports for purposes of quality improvement review, trend identification, training needs analysis and EMS levy performance standard compliance review.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

A. EMD QI performance outcomes:

- 1) Correctly Rule Out Cardiac Arrest
- 2) Appropriate Level of Response (LOR) Chosen
- 3) Applicable PAI Provided
- 4) Assigned Correct Initial Dispatch Code (IDC)

B. Access to call data based upon chief complaint or employee in order to perform QI reviews.

C. Access to performance and trending reports.

3. *What is the current baseline for this measure?*

A. The baseline for Item 2.A., 2013 performance outcomes:

- 1) Correctly Rule Out Cardiac Arrest: 62%
- 2) Appropriate Level of Response (LOR) Chosen: 78%
- 3) Pre-Arrivals Given When Needed: 83%
- 4) Assigned Correct IDC: 74%

B. The baseline for Item 2.B., prior to project implementation is zero eCBD call records could be accessed.

C. The baseline for Item 2.C., prior to project implementation is zero performance or trending reports can be accessed.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

A. The target for measure 2.A., is

- 1) Correctly Rule Out Cardiac Arrest
  - a) Year 1: 75%
  - b) Year 2: 80%
  - c) Year 3: 85%
- 2) Appropriate Level of Response (LOR) Chosen
  - a) Year 1: 75%
  - b) Year 2: 80%
  - c) Year 3: 85%
- 3) Pre-Arrival Instructions Given When Needed
  - a) Year 1: 75%
  - b) Year 2: 80%
  - c) Year 3: 85%
- 4) Assigned Correct IDC
  - a) Year 1: 75%
  - b) Year 2: 80%
  - c) Year 3: 85%

B. The target for measure 2.B., Within one year of implementation, 95% of 9-1-1 calls under EMD QI review will have an eCBD call record available.

C. The target for measure 2.C., is nine performance or trending reports available to EMS staff.

5. *When is the benefit likely to be achieved?* The benefit is expected to be achieved within 6 months to 3 years of project implementation. There are different target milestones for each benefit.

**Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.**

***Example:** If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

***Example:** If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

***Example:** The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to produce the benefit(s).
2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
3. What is the current baseline for this measure?
4. What is the target for this measure? (How much improvement will this project achieve?)
5. When is the benefit likely to be achieved?

**Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.**

*Example: This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

*Example: This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.
2. If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.

**Category #4: Reduced cost to produce service (external or internal) or cost avoidance**

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

*Example: Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over \$15,000,000 of annual purchases. These discounts average 2%, yielding*

annual savings of about \$300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

**Example:** *Cost Avoidance.* Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of \$100,000.

**The above examples are summaries. Please respond to each question listed below rather than provide a summary.**

1. Describe why you expect the proposed IT investment to reduce costs?
2. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
3. What is the current baseline?
4. What is the target for this measure? (How much savings will this project achieve)
5. When is the cost reduction likely to be achieved?

## Section 7. Benefit Achievement Summary

### Benefit Achievement Summary

**To be completed when benefits have been achieved or no further benefits are expected.** For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

**Example:** This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of \$500K - \$1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

**Example:** This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

**Example:**

Metric Description	Metrics	Baseline	Target	Actual
<p><i>Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.</i></p>	<p><i>Processing Time annual savings, and percentage of purchases receiving prompt payment discounts</i></p>	<ul style="list-style-type: none"> <li>• <i>10 days processing time</i></li> <li>• <i>10 percent of purchases are receiving discount</i></li> <li>• <i>Savings of \$100,000</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>1 day processing time</i></li> <li>• <i>30 percent of purchases are receiving prompt payment discounts</i></li> <li>• <i>\$400,000 savings</i></li> </ul>	<p><i>2 day processing time</i>  <i>20 percent of purchases are receiving prompt payment discounts</i>  <i>\$200,000 savings</i></p>