

# **Benefits Realization Strategy for Information Technology Projects**

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**Office of Performance, Strategy and Budget**  
**February 25, 2013**  
*Revised October 2013*

## Proviso Text

The full text of the proviso in Ordinance 17476, Section 19, P3 reads:

*Of this appropriation, \$100,000 shall not be expended or encumbered until the executive transmits a report and a motion that acknowledges receipt of the report and the motion is passed by the council. The motion shall reference the proviso's ordinance, ordinance section, proviso number and subject matter in both the title and body of the motion.*

*The executive must file the report and motion required by this proviso by February 25, 2013, in the form of a paper original and an electronic copy with the clerk of the council, who shall retain the original and provide an electronic copy to all councilmembers, the council chief of staff and the lead staff for the government accountability, oversight and financial performance committee or its successor.*

*The executive shall provide a report detailing a proposed benefit realization strategy for information technology ("IT") projects. The report shall, at a minimum, describe how benefits for IT projects will be identified, tracked and monitored and how benefit data will be reported to council. The report shall also describe the roles and responsibilities of the office of performance, strategy and budget and King County information technology for benefit realization.*

## Background and Purpose

Information technology (IT) projects are typically evaluated based on their costs and the perceived benefits from implementation. King County, like many organizations, has mixed experiences with being able to identify potential benefits and measure whether they have been realized. The County has developed and implemented methodologies to identify, track, and report on benefits, however the approach to identifying potential benefits has not always been clear or consistently applied. While various categories of projects have been identified based on the expected type of benefits, those benefits have not always been clearly delineated and sometimes unrealistic levels or types of benefits have been projected. Post-implementation evaluation of benefits realization has been uneven, leading to skepticism about future IT investments.

The County Executive and County Council want to establish a consistent and transparent approach to identifying potential benefits of IT investments and evaluating whether those are actually achieved. The approach has several goals:

- Develop an understanding among staff and elected officials that what are traditionally called “IT investments” are actually investments in business processes supported by technology solutions. Furthermore, these investments usually require significant changes in how the business is conducted, not just deployment of new technology.
- Develop a consistent approach to categorizing potential benefits from IT projects.
- Increase the likelihood that expected benefits from IT projects are achieved.
- Develop an understanding among staff and elected officials that IT projects often are pursued for important business reasons that do not translate into reductions in costs and/or positions.
- Build greater expertise in evaluating potential benefits and determining whether the projected benefits are achieved.
- Create clear accountability for identifying and achieving benefits.
- Ensure that the projected benefits are consistently evaluated during the course of a project, updated and reported as needed, and if the revised benefits no longer warrant the investment, terminating the project is considered.
- Ensure that actual benefits are evaluated after a project is completed. If actual benefits differ significantly from projected ones, analyze the reasons for the difference in order to improve future project analysis.
- Provide staff of the Office of Performance, Strategy and Budget (PSB), King County Information Technology (KCIT), and the County Council a clear process with adequate time allowed through which to evaluate potential benefits.
- Produce an annual report summarizing benefits from recently completed projects and projected benefits from projects that are underway or have recently been approved.
- Use existing project materials as much as possible to avoid duplication and extra work.

It is important to recognize that progress in implementing this new approach will be gradual. Full success will require training, experience, and refinement over time. A reasonable time period for a successful implementation is about three years.

This report outlines proposed improvements in the County's IT system to realize value and benefits from technology investments. KCIT and PSB staff have collaborated with Council staff to clarify roles and identify and initiate steps that will improve accountability for realizing benefits from the County's investments in technology. County agencies as business owners, KCIT, and PSB each play an integral role in ensuring that County technology investments achieve outcomes that advance the County's strategic priorities and provide transparency and accountability for taxpayers.

## Improvements Proposed for Benefits Identification and Evaluation

Potential benefits of an IT project will be considered from the earliest phases of project identification and analysis. All projects will be required to complete a Benefit Achievement Plan (BAP) early in the budget development stage. (The Benefit Achievement Plan is attached to this report.) At the pre-budget stage, benefits may be based simply on why the project is being considered. As the project proceeds through various stages and evaluation checkpoints, benefits will be described more specifically.

The BAP form requests projects identify which specific category of benefits applies to the project. The categories were selected in order to encourage project staff to think about benefits in terms of the County's strategic plan. Additionally, having a standard set of benefits encourages consistency in reporting across projects. The categories are as follows:

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

Projects typically will produce benefits in one or two categories, not all of them. Projects will be asked to identify the primary benefit of the project, but may report on other benefits as well.

The following are general principles for completing the BAPs:

- Wherever possible, the BAP should describe benefits to the business and identify measures of those business improvements, not simply changes in technology. For example, a technology may allow a report to be produced faster, but how does that change improve the business operations?
- Estimated benefits should be compared against a baseline that describes performance of existing systems. This may not always be possible because the County does not have optimal baseline performance data for all situations. If good baseline data do not exist, the benefits should be compared with best estimates of current performance.
- Benefits may also take time to realize after a project is completed. Once a project is complete and benefits are achieved and reported, no additional reporting is required.
- An individual should have principal accountability for identifying and documenting benefits during project planning. The same individual should have responsibility for evaluating benefits during and after implementation. This individual will typically be the "business owner" of the project, such as a division director or section head, and collaborate with the department/agency representatives in IT Governance (Business Management Council and Technology Management Board) on benefits of the project for their organization and

the County. The IT project manager typically will not be the individual accountable for benefits identification and realization, although he or she may play a major role in forecasting the likely benefits from a project. The individual with principal accountability for the project will be a member of the project steering committee and coordinate closely with the IT project manager in keeping benefits in the forefront during project planning and implementation, and ensuring tracking and reporting of benefits after the project is completed.

- Directions for completing BAP should include specific examples to assist agencies in completing the plan.
- Training in benefits identification and measurement needs to be improved for all staff, including project sponsors, PSB, KCIT, and Council staff.

## Early Review Opportunities for Council Staff

County Council staff expressed an interest in getting information about projected benefits of potential IT projects earlier so that their evaluation can support decision making during the Council's budget process each fall. The past approach of providing this documentation at the same time as the Executive's Proposed Budget is submitted (late September), left little time for the Council to review the projected benefits and proposed measures for IT projects.

The benefits of early Council staff review need to be balanced against the need for the Executive to be able to make decisions about which projects will be proposed. In particular, a revised process should avoid a situation in which an agency simultaneously is responding to questions about a potential project from both Executive and Council staff. A revised process should also recognize that many projects that are under consideration in the early summer will not be included in the Executive's Proposed Budget because of technical concerns and financial limitations.

Council and Executive staff developed and piloted an approach for the 2014 budget in which draft BAPs were provided to Council in the late summer. Council staff provided comments back to the projects. However, for most of the projects, those comments were not incorporated into the final BAPs transmitted with the Executive budget. It is anticipated that in 2015, Council staff can review the BAPs earlier in the summer so projects have sufficient time to incorporate Council staff comments into their BAPs.

The proposed new process will begin after the Enterprise Architecture review ("checkpoint 2") in early June. Council staff will receive access to documentation for projects that have passed through this checkpoint in Innotas (the County's automated project tracking system). They will have an opportunity to review and comment on the benefits analysis of projects at this stage. Council staff will not contact agencies proposing projects at this point. Feedback will be provided to KCIT and PSB by early July, which could be used by the Executive in making budget decisions. Feedback would also be shared with agencies in order to improve benefit realization plans.

In early September, after the Executive has decided on projects to be included in the Proposed Budget, PSB will provide Council staff with the final versions of the benefits analysis for these projects. This will likely occur two to three weeks before the Proposed Budget is submitted to the Council. This will provide Council staff with an opportunity to begin its review of benefits earlier. Council staff will seek to maintain confidentiality of the information until the Proposed Budget is submitted.

Benefit realization plans will be a significant factor in the Council's review of IT projects. The Council wants to understand the projected benefits of proposed projects, and how those benefits will be measured, when making decisions about whether to fund projects. Projects with inadequate benefit realization plans may not be funded or may be subject to provisos or other spending restrictions, in addition to those already incorporated in the IT Governance process.

## Monitoring During Project Implementation

Each month, project managers complete monthly project updates. As part of that process, project managers will review the BAP and update it to reflect any changes. Monthly project updates posted to the Innotas system will include any material change in expected benefits. These changes will be reflected in the monthly status reports. Significant changes will be reviewed through the existing PRB process and may lead to discussions with project sponsors or steering committees. As noted previously, projects with significant reductions in benefits may be modified or terminated. Each project will submit an updated benefits achievement plan not less than annually.

In 2013, KCIT developed and implemented a risk-based project oversight procedure that is supported by Innotas. The objectives are to assist business owners in addressing risks and to promote project success by increasing stakeholder involvement and transparency of oversight. Key project metrics and milestones are tracked on a monthly basis. Updates to cost or benefit estimates are tracked as they are refined. As project risks or deficiencies are identified, KCIT initiates contact with the project sponsor and notifies PSB. The findings, recommendations and resulting actions are recorded and published on the KCIT SharePoint site for full transparency. KCIT and PSB have established monthly meetings to review project progress during implementation. The monthly technology management board and business management council meetings will serve as periodic forums for sharing project plans and successes and learning from project challenges.

## Annual Reporting

An annual report about IT benefits realization will be presented to the Council in April. This report will include information about the benefits associated with three categories of IT projects:

- Completed projects. These projects will include information about the actual benefits obtained and a comparison with benefits that were projected during different stages of the project, including when the project was approved and funded. If benefits realization is complete, the project will not be included in subsequent annual reports. If some of the projected benefits have not yet been realized, but are expected to be in the future, the project will be included in future annual reports.
- Projects under development. These projects will include information about projected benefits that was made when the project was approved and any update about these benefits.
- Projects approved but not yet started. These projects will include information about projected benefits that was made when the project was approved and any update about these benefits.

The annual report is intended to be a compilation of existing project documents, not a new analysis. The new content will be a section describing any general lessons learned about benefits and how that information might be used in projecting benefits for future projects.

Project close out documents will include post-project reporting on costs and assessment of business metrics as well as narrative or examples to explain project benefits that are not easily measured. Recognizing that project benefits and business process improvements may take time to fully mature, project closeout reports and performance management plans will serve as indicators of successful project completion and will be considered in evaluation of project risk for subsequent projects proposed by the business owner.

## Implementation Timeline and Summary of Steps Taken

### 1<sup>st</sup> Quarter of 2013

- PSB and KCIT surveyed IT project stakeholders to identify pain points and areas for improvement.
- KCIT implemented the County's IT Portfolio System Innotas for IT project request and review, providing a system of record for project documentation, including project benefit tracking.
- KCIT and PSB revised project request and review forms to emphasize identification of project benefits and improve transparency of the process.

### 2<sup>nd</sup> Quarter of 2013

- PSB and KCIT collaborated with Council staff to develop a new Benefits Achievement Plan (BAP) document and agreement on timeline for review by PSB, KCIT, and Council staff.
- PSB provided training to County departmental and Council staff on benefits identification and reporting.

### 3<sup>rd</sup> Quarter of 2013

- PSB collaborated with Council staff to refine BAP forms to improve documentation of benefit and metric development.

### 4<sup>th</sup> Quarter of 2013

- PSB and KCIT will assess the 2014 project proposal and review process, gather stakeholder input and document lessons learned.
- Existing projects will complete BAP forms for the annual report to Council.

### 1<sup>st</sup> Quarter of 2014

- 2015 / 2016 Biennial Budget Project Review process will be refined based on lessons learned in 2013.

### April 2014

- PSB will compile and transmit annual Benefits Achievement Report to Council.

### 4<sup>th</sup> Quarter 2014

PSB and KCIT will assess the 2015 / 2016 project proposal review process, gather stakeholder input, and document lessons learned to continue to improve the process.

## Summary of Roles and Responsibilities

	Business Owner	PSB	KCIT
Identification of Value and Benefits	<p>Identify business need &amp; proposed improvement</p> <p>Identify costs &amp; value/benefits</p> <p>Identify relevant business metrics</p>	<p>Provide training, consultation and assistance as needed</p> <p>Evaluate business value, risks &amp; costs</p>	<p>Provide consultation and assistance as needed</p> <p>Evaluate technology value/risks and alignment with IT enterprise architecture</p>
Tracking and Monitoring	<p>Submit updates to CBA &amp; BAP as developed or refined</p> <p>Update metrics as refined</p> <p>Prepare and submit monthly reports</p>	<p>Evaluate changes in costs and benefits and metrics as refined</p> <p>Support KCIT on oversight actions</p>	<p>Monthly risk based project oversight and action</p>
Reporting	<p>Submit updated BAP not less than annually</p> <p>Submit project close out report and BAP</p> <p>Establish plan for on-going performance reporting on metrics</p>	<p>Ensure that close out report is submitted</p> <p>Compile and transmit annual BAP report including summary of lessons learned</p>	<p>Schedule project presentations at TMB and BMC</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>Project Title</b>	
<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:

### 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

## 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

## 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.*
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

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