

IT Project Benefits Achievement Plan (Version 2)

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.

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

King County Department/Agency Name	King County Sheriff's Office
Project Title	RMS Replacement
Project Number	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.

Patti Cole-Tindall, Chief of Technical Services Division

Section 3. Who is involved in developing the BAP?

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 BAP below:

Name	Title / Agency	Project Role
Judy McDermott	Business Implementation Manager / KCSO	Team member
Lynda Kamrath	IT Manager / KCSO	Team member
Glen Connolly	911 Communications Center Supervisor	Business Operations Staff

Section 4. When should the BAP 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, 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 BAP?

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	2/11/14	Judy McDermott	Review existing project documents and compile into BAP	3 hours
Annual Report	2/10/15	Judy McDermott	Review Only	10 min
Annual Report	5/23/16	Judy McDermott	Review Only	10 min
Annual Report	6/8/16	Judy McDermott	Update Benefit Summary	2 hours
Annual Report	1/12/17	Judy McDermott	Update BAP with new project information	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).
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/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 3 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%. 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).
KCSO is on 2 RMS systems. The current >20 yr old in-house built legacy system, IRIS, has unsupported technology that is failing and is past the end of it's life cycle. The Total Enforcement

(TE) system is built on newer technology and is currently managing all of KCSO's property (evidence) that was migrated from TESS (older decommissioned property management system). KCSO is looking to replace the two RMS systems with Mark 43's government cloud based software Cobalt in 2017. However, it is necessary to continue to maintain both IRIS and TE until the new RMS is fully deployed. Mark 43's Cobalt will address Officer Safety concerns and potential liability issues KCSO has with the current RMS's and will provide KCSO with new features (i.e. interfaces to regional and King County systems, attaching media files or pictures, and address validation) that will assist the Officer in solving crimes and improve service to the public. KCSO will also be compliant with Federal Government National Incident Based Reporting System (NIBRS) reporting.

Benefit 1. Improved officer safety (when officers receive a call, with the new system they are able to perform pre-incident investigation on all calls and get the entire history).

Benefit 2. Improved ability to research and identify problem causes through full audit date/time stamp logs for activity in the RMS, including "before" and "after" values when fields have been updated.

Benefit 3. Ability to report NIBRS (hence, compliance with Federal Government requirement)

Benefit 4. Reduced amount of officers' time spent on writing reports

Benefit 5. Reduced amount of time it takes the Comm. Center call takers to write a 911 call report

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

See summary table below

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

See summary table below

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

Benefit	Measure	Baseline	Target
1. Improved officer safety due to ability to perform pre-incident investigation on all calls and get the entire history	Number of years of historical data available to officers when doing pre-incident investigations for calls	1 year of data currently available	from 2008 and on
2. Improved ability to research and identify problem causes through full date/time stamp audit logs	Percentage of problems for which causes were identified thanks to the audit log (through a 1-week long monitoring)	Currently, 0% since no audit log exists	90% of cases
3. Ability to report NIBRS (hence, compliance with Federal Government requirement)	Error rate (%) when reporting NIBRS	Currently, not able to report NIBRS	4% error rate
4. Reduced amount of officers' time spent on writing reports	Amount of time spent by officers (on average) on writing reports (information will be tracked by the new system)	Average 30 min/report 81,939 reports written in 2016, 70% or 57,358 by officers	<20 min/report
5. Reduced amount of time for the	Amount of time it takes the	Average 30	<20 min

911 Comm. Center call takers to write a 911 call report	Comm. Center call takers to write a 911 call report	min/report 81,939 reports written in 2016, 30% or 24,581 by 911 Comm. Center	/report
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5. When is the benefit likely to be achieved?

One year after full implementation of Mark 43's Cobalt is complete in 2017 (i.e., 12/31/2018)

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 systems.

- TESS (Property / Evidence Management System) – decommissioned in 2014
- IRIS (Incident Reporting and Investigation System) – For criminal activity
- TE (Total Enforcement) – For criminal activity and evidence management

Past State

The legacy Records Management System (RMS), IRIS, was built in 1997 and TESS, evidence tracking system, were not designed for the demands and capabilities of current and evolving environment or for high performance, security and scalability in a heavy multi-user environment. Audit logs are not available in these legacy systems and deputies spend too much time writing case reports vs. patrol community policing. This situation causes a significant patrol productivity impact and limits participation in county and regional integration projects, such as ACCESS, DOL, Seaking, LinX, BARS. IRIS/TESS are past their end of life, very fragile, and the system platform is no longer supported. Therefore, King County Sheriff's Office (KCSO) will be implementing a Commercial Off the Shelf (COTS) system to replace the fragile IRIS/TESS systems.

Recent State

KCSO has been working to implement a new RMS (TE) for the past several years. Property Management Unit (PMU) went live with TE July 2014 and TESS was decommissioned. 250 (30% of KCSO) professional staff went live in October 2015. CID went live March 2016 and Kenmore/Shoreline were trained in April. As soon as TE was piloted to patrol and detectives, it became clear that police work was being compromised due to the length of time it took to writing case reports and TE was not a viable solution for patrol (70% of KCSO). On May 31st, 2016 Sheriff

Urquhart made the decision to suspend TE for officers.

Incident/case reports and property are being entered in the legacy IRIS RMS by officers. The data in IRIS is populating TE via daily periodic migration, allowing PMU to manage property/evidence. At this time TE is the repository for all KCSO RMS/Property data. However, TE is not a viable RMS option for officers to use for their incident/case reports due to the length of time spent writing reports vs being on patrol for community policing. The addition of the federal NIBRS process to TE caused the officers writing of reports to be four times greater than normal and the system required several clicks to “Apply / Save” or data would be lost. In addition, the screens did not have a logical flow and officers were having to click around to enter the report data, causing confusion and frustration.

Future State

Since TE is not a viable replacement solution for patrol, KCSO’s selected option is a Sole-source 1 year Subscription Pilot with Mark 43 that resides in the AWS Gov-Cloud.

Historical incident/report data from TE will either be migrated to Cobalt or housed in a Data Warehouse. Once KCSO is fully deployed on Cobalt, IRIS will be decommissioned. Cobalt’s Property Module is scheduled to be available to KCSO by second quarter of 2017. Once the property and historical data is transferred from the current TE system to Cobalt, TE will be decommissioned 30-60 days after go-live (by end of year 2017).

Since this is the same RMS replacement project with a different solution, the remaining \$1,187,631 of the projects \$5,832,209 funding will be spent on Training Overtime, IT Project Manager, and Functional Analyst, with \$60,000 in contingency.

This project will also introduce several other key benefits listed below:

New	Increased information access for officer safety and operational efficiency <ul style="list-style-type: none">Currently the officers only have one year of data available in the car. With the new system they can access the entire database from 2008. When they receive a call, with the new system they will be able to perform pre-incident investigation on all calls and get the entire history. They will know the suspect was arrested two years ago for attacking police officers when they were called to a domestic disturbance. The officer will know that he should request back up for this call.
New	Ability to attach media files to case files (not currently available)
New	Interfaces to local, state and regional data systems <ul style="list-style-type: none">Ability to query local, state and regional systems from within the application (Department of Licensing, NCIC/ACCESS, SeaKing, LinX, etc.), eliminating multiple logons and improving efficiency.
New	Full audit logs for case and evidence management showing date/time stamps, logged on user’s name, and “before” “after” values if data was changed. <ul style="list-style-type: none">The current IRIS system does not have any audit logs of what is done on the system.
New	Encoded and validated addressing (using KCSO’s King County GIS maps)
Improvement of	Streamlined B138 process

the Existing Functionality	<ul style="list-style-type: none"> Automates a process to request status and disposition on evidence being held at the Property Management Unit (PMU).
Improvement of the Existing Functionality	<p>Federal crime stat reporting</p> <ul style="list-style-type: none"> Compliant with National Incident Based Reporting (NIBRS) for the Federal Government.

- 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 million 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.

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

Section 7. 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 5 years. This project is currently functioning at 99.999% up-time and will report annually for the next 5 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 to 2 days, not quite reaching the 1 day target. Additionally, only 20% 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"> • 10 days processing time • 10% of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30% of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> • 2 day processing time • 20% of purchases are receiving prompt payment discounts • \$200,000 savings