



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

July 8, 2014

Motion 14165

Proposed No. 2014-0174.2

Sponsors von Reichbauer

1 A MOTION approving an annual technology benefits
2 report on the benefits achieved from technology projects.

3 WHEREAS, K.C.C. 2.16.025 requires that an annual report about benefits
4 achieved from technology projects and motion be transmitted by April 30, annually, and

5 WHEREAS, the annual report is a compilation of existing project documents, not
6 a new analysis, and

7 WHEREAS, the annual report contains a section describing any general lessons
8 learned about benefits and how that information might be used in projecting benefits for
9 future projects, and

10 WHEREAS, the report includes benefits from selected completed projects and
11 expected benefits from projects not yet completed, and

12 WHEREAS, the attached report is the first annual technology benefit achievement
13 report, and

14 WHEREAS, the council recognizes the efforts of departments to complete the
15 report and commends the office of performance, strategy and budget for achieving a
16 compliance rate from active technology projects of almost one hundred percent, and

17 WHEREAS, the process to complete the benefit achievement report represents a
18 shift in thinking about technology projects from measuring whether the technology works
19 to measuring improvements in operations, benefits to the public or cost savings, and

20 WHEREAS, the quality of the project documentation varied within the report, and

21 WHEREAS, with additional training, experience, and commitment to measuring

22 benefits, the quality of the documentation is expected to improve in future reports;

23 NOW, THEREFORE, BE IT MOVED by the Council of King County:

24 The IT Benefits Report for Year Ending 2013, which is Attachment A to this

25 motion and complies with K.C.C. 2.16.025, is hereby approved. However, approval of

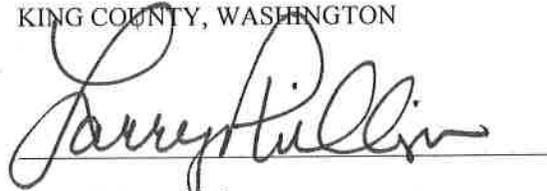
26 future reports is dependent upon improvement in the quality of project documentation in

- 27 identifying and measuring improvements in operations, benefits to the public or cost
28 savings from technology investments.
29

Motion 14165 was introduced on 5/12/2014 and passed by the Metropolitan King County Council on 7/7/2014, by the following vote:

Yes: 9 - Mr. Phillips, Mr. von Reichbauer, Mr. Gossett, Ms. Hague,
Ms. Lambert, Mr. Dunn, Mr. McDermott, Mr. Dembowski and Mr.
Upthegrove
No: 0
Excused: 0

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON



Larry Phillips, Chair

ATTEST:



Anne Noris, Clerk of the Council

Attachments: A. IT Benefits Report for Year Ending 2013, dated June 24, 2014

IT Benefits Report for Year Ending 2013

Office of Performance, Strategy, and Budget

April 2014

REVISED JUNE 24, 2014

Executive Summary

Reporting on the benefits of IT projects continues to evolve and continues to improve with each iteration of the process. 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 (during 2014). That 2014 report has been updated to include additional information on more than 70 active and proposed IT projects over the course of the past five months.

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 in a way to an audience without a shared background was difficult.** Departments and agencies struggled and to continue to struggle with the different viewpoints considered in the review of the benefits of a capital project. For example, agencies are accustomed to the business owner's view but sometimes struggle with an enterprise or external stakeholder view. Additional training and examples should help to mitigate this in the future.
- **Evaluation difficulties.** A number of projects reported 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, and in many cases required a number of meetings and draft revisions in order to get to a document that was considered final. Very few projects were able to create documents that didn't require extensive modifications. 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. Rapid change in this document over the past year likely contributed to this perspective and a fixed and standard template should help to mitigate this issue in the future as project owners continue to use it.
- **Time commitments required for the benefits process are significant.** The time spent by PSB staff, Council staff, and department / agency / project staff to complete the governance surrounding benefits reporting has been greater than anticipated. Initially the project team estimated that each project would take two hours to complete the benefits review documentation. Projects required between 2 and 60 hours to complete the benefits review documentation, actually. Additionally, review time from both PSB and Council staff was significant. As the process is repeated and

expectations become more well known, the quality of submissions may increase and the amount of time for review and revision may decrease.

- **A wide range of benefits are being realized.** Beyond simple cost savings (which in past years were the only benefit recognized in many cases) we are seeing an array of benefits for agencies, staff, and the public. Efficiencies, expanded service capacity, higher morale, timelier delivery, higher quality service as well as cost reductions are being realized by the public, King County agencies and departments, and internal staff. The documentation of these benefits will aid in future evaluations of projects.
- **Continuous improvement can be too continuous.** With a desire to improve the benefits reporting process, rapid change has occurred during the last several years. A balance needs to be found between improving the process, and allowing those involved in the process to become proficient and comfortable with the process. The multiple and continuous changes aimed at improving the process may result in lower quality than an existing process that people are familiar with, depending on the type, scope, and difference of the changes compared to the baseline.
- **Agencies are interested in the benefits process.** Agencies, departments, and projects perceive 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.

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.

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

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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.

King County Department/Agency Name	Department of Adult and Juvenile Detention
Project Title	Jail Management System
EBS Project Number	

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: 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
Scott Lackey	KCIT-DAJD	Project Manager
Mike Holland	IT SDM, KCIT-DAJD	KCIT Coordination
Steve Larsen	Chief of Administration	Business Sponsor
Operational SMEs - ITR	ITR	Subject Matter Expert, Customer
Operational SMEs - Classifications	Classifications	Subject Matter Expert, Customer
Operational SMEs - Commitments	Commitments	Subject Matter Expert, Customer
Operational SMEs –	Administration	Subject Matter Expert, Customer

Administration		
Operational SMEs - Visitation	Visitation	Subject Matter Expert, 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>
Budget Process	7/15/13	Mike Holland	New, initial draft	3 hours
Budget Process	10/15/13	Scott Lackey	Rev. 2, updated template, business workflow sample audit, financial benefits	52 hours

			estimate	
Budget Process	12/23/13	Scott Lackey	Rev. 2.1, Corrections based on Council, PRB input.	62 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).
Summary of Perceived Benefits**

The County currently utilizes a loosely-connected collection of applications to support the necessary day-to-day jail-related services and operations. These consist (post Mainframe Re-host) of a set of antiquated interfaces and workflows which replicate the old Mainframe environment functionality. The original mainframe system applications and workflows in turn were developed over a span of almost 4 decades by numerous developers for a wide variety of users, and the functionality consists of an outdated, disjointed collection of automated and manual workflows and alerts; a mix of electronic, hard copy (typed) forms and even handwritten log books; in both electronically searchable/reportable data and data which cannot be electronically accessed by any method. And all of these interfaces and workflows are time-consuming, unintuitive and potentially error-prone.

The new Jail Management System (JMS) will replace these unintuitive, antiquated jail system interfaces and work flows with a modern electronic Jail Management System designed to better meet our modern day business needs. The new JMS will support all key JMS business processes with a single, integrated, intuitive and efficient system.

Current System - Post Mainframe Rehost project

Once completed, the Mainframe Re-host project is expected to explicitly provide only the replacement of the underlying hardware platform (mainframe.) As such, per that project's scope definition there will be no new functionality, enhancements, work flow process efficiencies, bug fixes or other changes. In fact, there will be no change at all from the perspective of the end users – it should be fully transparent but offers no bug fixes, efficiency gains, etc. The Re-host effort is designed to be only a stop-gap measure; solely meant to avoid the escalating licensing costs of running on the mainframe environment and maintaining the associated outdated code.

Comparisons in functionality and work flows between the new JMS and either the Mainframe or the Mainframe Re-host solution are essentially the same. In either comparison, JMS dramatically improves work flow efficiency, system functionality, leveraging of industry best practices, data access, reporting, transparency, security, predictive analytics, etc. While the Mainframe Re-host effort mitigates the quickly escalating costs of mainframe hosting, it does nothing to address the very significant potential efficiency gains, enhanced functionality, data accessibility, big data analytics, security, etc. in day to day operational work done by jail staff, our internal County partners and by external agencies. This is the job of the new JMS. JMS is part 2 of bringing our systems up to modern standards from its current 1970s and 1980s functionality.

Future System:

The new Jail Management System will support all key business processes and improve our internal operations in the following ways:

- **Issue:**
Today's "system" includes a disjointed mix of manual and computer processes. As a result, some data is entered electronically while other key data is in hard copy forms or even hand written journals.
Solution:
The new system will support all key process electronically, making all data available electronically in real time - to all applicable parties, long term.
- **Issue:**
In today's system, some data is searchable; other data is not. Today, access to data can depend on advanced training. Data is not always available to all applicable parties, both inside or outside the County and for some data users must search across multiple systems and/or hard copy sources.
Solution:
The new system will make all applicable data available at all appropriate points in the workflows to all applicable parties. This includes searching and reporting – as well as scheduling and alerts.
- **Issue:**
Today, secured access to sensitive data is controlled only for electronically captured data. While numerous security methods are employed, they are configured on a system-by-system basis using largely undocumented security levels and permissions. Every system must be secured separately, typically on a terminal-by-terminal basis. *Worse, manually captured data access is only protected by physical access to the information.*
Solution:
The new system will secure all data electronically, using single-sign-on windows permissions across all systems, neatly and cleanly protecting access to data by job classification, work group, individual ID and/or terminal ID. All settings can be configured through a single interface and all access to the data is logged for future audits.
- **Issue:**
Data backups: Today, only electronically captured data is protected by backups in the event of emergency. Hard copy data has no backup support.
Solution:
In the new system, since all data will be recorded electronically, automated backups using modern technology will reliably back up all information cleanly and quickly, with the option for additional backups in multiple geographic locations for even greater recovery capabilities in the event of major disaster.
- **Issue:**
Duplicate data: Today there is substantial duplication of data in multiple systems as well as multiple hard copy forms.
Solution:
In the new single system, the need for entering, retaining, reporting or reconciling duplicate data will be largely eliminated – as will the need for nearly all hard copy forms. Additionally, errors will be reduced through the avoidance of entering the same data in multiple systems or forms – and the associated need for transcription.
- **Issue:**
Training and efficiency: Today's system is largely undocumented; the training/ramp up of new officers is very challenging. Also this results in errors which must be corrected by more senior officers.
Solutions:

The new system will be fully documented and intuitive, reducing training time, incidence of user errors and improved time to complete tasks.

- **Issue:**

Reporting: Today many reports take multiple days to produce – and many reports are difficult or impossible to generate in the current system due to both limitations in functionality as well as the mix of electronic and hard copy data.

Solution:

The new JMS system will provide integrated data reporting and data analysis tools, allowing for improved reporting flexibility, faster report generation times and better data access for impromptu report requests. Since all data will be captured electronically, all data will be available for reporting.

- **Issue:**

Big data analytics: Currently the system has many limitations. All data is not stored according to modern standards and interchange of data with outside agencies is limited or in some cases, impossible. Consequently big data analytics and predictive analysis is not feasible.

Solution:

The new JMS will allow information management and exchange with outside agencies to allow us to leverage County, States and Federal data in order to make Big Data analytics possible. With broader data, we can do analyses which allow us to do such things as compare trending data for offender management within the County as it relates to other states or Federal institutions and offender populations, as well as to take a proactive approach to improving our services, including inmate behavioral treatments and training programs which will improve the lives of both our staff and inmate populations. Areas which will benefit include but are not limited to inmate intake, management, housing, health services, support of our courts, etc.

Where will the Improvements Occur with the New System – What Will Change?

Since all areas of the current system are based on the mix of old Mainframe processes and manual tasks done by staff, we expect that efficiencies will be gained across the board throughout all current jail processes. Some of the major examples include:

- Pre-Booking:

- Offenders offering up false names currently can result in 30-45 minutes of rework by multiple teams within booking. This will be prevented by an up-front thumb print scanner similar to that being implemented in police vehicles currently within the County
- Property will be more efficiently catalogued and, ultimately, retrieved – with improved accuracy. This will result in reduced claims for lost property
- Superforms: These hard copy forms are generated and typically filled out manually over half of the offenders currently booked – a very time consuming process. They are then also manually time-stamped, transcribed and stored long-term. Changes to the functionality and processes involved will pre-populate nearly all Superforms, electronically time stamping and storing them – then making them available to other teams within the Pre-Booking as well as subsequent processes. While hard copy forms will still be accepted for walk-in bookings, even in this scenario the majority of such bookings will have the Superform data accurately and quickly prepopulated following a thumb print scan at the outset of the booking process – or potentially even at the officer's car at time of arrest. Additionally BARs pre-bookings will also continue to be

- supported.
- Booking:
 - Multiple unintuitive screens with duplicate data will be replaced with easy to use, efficient interfaces in a single system
 - Hard copy forms will be replaced with electronic web forms, using drop-down choices, work flow routing and electronic data validity checks – preventing errors and facilitating rapid completion of the work
 - Health Screening:
 - Decreased data redundancy
 - Decreased/eliminated use of paper forms
 - Increased access to accurate and timely data from upstream booking processes
 - Faster overall processing time
 - No need to back out records and re-enter/re-hard copy when offenders give the wrong name
 - More timely receipt of relevant records taken during booking
 - Pre-trial Release Screening:
 - Better access to more relevant data
 - Improved accuracy of decisions based on accurate and timely information
 - No need to back out records due to potential duplicates
 - Access to *complete* data in a timely manner to promote better decision-making
 - Classifications:
 - Elimination of the transcription, storage and retrieval of hard copy records
 - Ability to better access complete background and other offender related data in real time
 - Improved reporting and analysis
 - Ability to better leverage industry best practice in an automated workflow
 - More timely access to all information received from upstream teams as well as offender management service-related staff
 - Court Services:
 - Better schedule alerts and facilitation of court appearances
 - Access to a complete set of all records and events related to an inmate upon inmate appearance at a court proceeding.
 - The ability to make higher quality decisions as it relates to release on personal recognizance, appropriateness for referred to CCD or home detention as well as sentencing.
 - The ability to better facilitate attendance by all relevant jail staff who may have information relevant to the proceedings.
 - Commitments:
 - Avoidance of hard copy data
 - Better access to all relevant electronic data – both within and outside of the County
 - Electronic access to all incidence reports which may affect commitment calculations
 - Dramatically improved reporting
 - Offender Management
 - Access to enter data electronically for all stations and officers (no more hand written log books)
 - Better and more timely access to alerts and protocols
 - Better ability to more quickly record inmate events in real time

- Better automated notification and facilitation of outside facility appointments of offenders
- Ability to run predictive analytics on how various inmate courses and activities are resulting in decreased inmate incidences and improved inmate behavior.
- Release
 - Better and more timely access to all relevant information regarding the release dates of inmates

NOTE: the list above is by no means exhaustive but is instead just a brief overview of the types of improvements we expect to realize with a modern COTS JMS.

It is also important to note that while the system is far more automated and intuitive, some level of staff retraining will be required. To this end the team anticipates that a phased deployment approach will likely be preferred and will work with the vendor selected to build adequate time and budget into the project immediately following this Planning and RFP project in order to make sure adequate resources are allotted for this organizational transition.

A phased deployment approach will also likely better facilitate the creative financing options which the team anticipates will be required given the current budget realities.

Estimated Number of Workflow Efficiencies with the New System:

With the implementation JMS, it is anticipated that many efficiencies would be realized with the new system. Specifically our workflow analysis has estimated that the department might be able to achieve a maximum of around 2,830 improved. The new JMS will provide a set of much more efficient work flow processes supporting various tasks within the Jail and related services. While further analysis will occur during the selection process and subsequent vendor gap analysis following the RFP stage, it is clear that the dramatic number of operations workflow efficiencies gained through a modern JMS will significantly free up current staff to focus on the core responsibilities of their roles (such as offender management, supporting court services, jail health, commissary, etc.) rather than having to focus a very significant amount of time they currently spend trying to accomplish their jobs using extremely obsolete systems, workarounds and needlessly redundant paperwork. It would also free staff up to attend career development training, maintaining certifications, a potential reduction in mandatory overtime, etc.

Summary

Deployment of a modern Jail Management System will stage King County to be the regional leader in the area of adult and juvenile detention. The new JMS will promote better and faster service; the ability to readily exchange data with - and learn from - other law enforcement communities; provide better accountability and improved transparency; the ability to make fact-driven, real-time and proactive decisions; and to better utilized its people and information assets to do more meaningful work. The information in our systems will be more secure, more accurate, more complete and more readily accessible to those

authorized to access it – both inside the County as well as our external law enforcement partners. All of this will be accomplished while both driving up service quality, reducing service times, and driving down overall cost of service.

We can no longer maintain operations using 1970s technologies; JMS will provide us with the system and tools needed to meet and exceed our internal and external customer's expectations.

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

During the process of reviewing proposals from vendors responding to our RFP, DAJD and the Vendor will perform a comprehensive "gap analysis" process and document how their system will satisfy DAJD's requirements. This "gap analysis" will help to validate the findings in the table above. Also, post production launch, at the 1-year mark the team, if required, can document deltas to the base line work flow, documenting those areas of the work flow in which steps have been made more efficient or have been eliminated entirely due to lack of need for those steps under the new system.

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

As part of the Jail Management System requirements generation phase, the department documented their existing processes and data flows that support current operations. From this extensive analysis process, the benefits matrix shown above was generated.

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

It is anticipated that the quality of service, safety, service capacity and efficiency of service will improve in many of the areas of DAJD Operations, as documented in the matrix above. However until a specific vendor proposed solution is selected and fully evaluated it is difficult to determine the precise total improvements that would be realized by the department. **To this end, all respective potential benefit targets in the JMS BAP should be considered estimates with a potential variance of plus or minus 20%.**

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

The actualized benefits of a new Jail Management System will be quantifiable the year after the system is fully deployed into production status. The cumulative benefits will continue to accrue as the system is utilized in production in an ongoing manner and as our external customers become more aware of the greater quality of service and improved data access/accuracy/completeness afforded by the new JMS.

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
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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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<p><i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i></p>

DAJD - RMS Employee Interface

IT Project Benefits Achievement Plan (Version 2)

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

5. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
6. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
7. To establish accountability for identifying and achieving benefits
8. 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.

King County

Department of Adult and Juvenile Detention

Department/Agency Name	
Project Title	RMS Employee Interface
EBS Project Number	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.
Ramona Flores	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:

6. To support initial project request during “gate two” phase of conceptual review.
7. For the annual Benefits report that PSB compiles.
8. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
9. When a material scope change is identified and reported.
10. 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	10/25/13	Don DiJulio	Required replacement of 2013 Benefit Realization Report with a new form	10 hours
2014 1 st 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

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:

- 5) External service benefits: Improving the quality or quantity of services provided to the public
- 6) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 7) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 8) 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.

6. *Describe why you expect the proposed IT investment to produce the benefit(s).*
7. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
8. *What is the current baseline for this measure?*
9. *What is the target for this measure? (How much improvement will this project achieve?)*
10. *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?*

Description	Baseline
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?)*

Description	Target
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.

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.

3. *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.*
4. *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.

6. Describe why you expect the proposed IT investment to reduce costs?
7. 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

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"> <i>• 10 days processing time</i> <i>• 10 percent of purchases are receiving discount</i> <i>• Savings of \$100,000</i> 	<ul style="list-style-type: none"> <i>• 1 day processing time</i> <i>• 30 percent of purchases are receiving prompt payment discounts</i> <i>• \$400,000 savings</i> 	<ul style="list-style-type: none"> <i>2 day processing time</i> <i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>

DCHS - Demographic Data Project

IT Project Benefits Achievement Plan	
Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?	
<p>9. To achieve a clear understanding and focus on the benefits of a project prior to its beginning</p> <p>10. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure</p> <p>11. To establish accountability for identifying and achieving benefits</p> <p>12. To ensure that benefits are achieved</p> <p>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.</p>	
King County Department/Agency Name	DCHS
Project Title	Demographic Data Project
Project Number	1117279
Section 2. Business Owner Accountability	
<p>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.</p>	

Business Owner Name and Title: Terry Mark, 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
Terry Mark	Deputy Director, DCHS	Project Sponsor
Steve Andryszewski	Business Director, DCHS	Steering Committee Member
Diep Nguyen	KCIT SDM, DCHS	Steering Committee Member
Wyatt Yee	KCIT Service Manager, DCHS	Steering Committee Member
Ina Percival	KCIT Sr. Business Analyst, DCHS	Project 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:

11. To support initial project request during “gate two” phase of conceptual review.
12. For the annual Benefits report that PSB compiles.
13. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
14. When a material scope change is identified and reported.
15. 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>
Funding Release	12-25-13	Ina Percival	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:

- 9) External service benefits: Improving the quality or quantity of services provided to the public
- 10) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 11) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 12) 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.

11. Describe why you expect the proposed IT investment to produce the benefit(s).
12. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
13. What is the current baseline for this measure?
14. What is the target for this measure? (How much improvement will this project achieve?)
15. 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.

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

Compiling a cohesive view of DCHS service and business related data currently involves a largely manual process of gathering information from separate systems and compiling them into a single report. The process is time consuming, labor intensive, must be repeated every time a report is requested, and cannot achieve consistent results. This project will establish a consolidated departmental view of DCHS service related data. It will provide the fundamental building blocks for establishing new service data baselines, with reporting capacity that ensures consistent methodologies, significantly improved capacity to produce and replicate reports on demand, and will allow access to a central repository of reports and reporting templates by DCHS leadership and program staff. Essentially, the following benefits are anticipated:

- Allow DCHS to report on agreed upon and existing client demographic and service data from three divisions with minimal manual intervention.
- Improve DCHS capacity to track services across contracts and tie those back to a contractor and a program area.
- Provide the ability for individual staff to access data, generate reports and conduct analysis.

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

- a. The system provides DCHS personnel with on-demand access to views of aggregate departmental data related to services, clients, and cost.
- b. Production time for the DCHS Council District Service Reports reduced to eight (8) hours, the equivalent of a single business day.
 - Report updates available at least quarterly, to be produced in the equivalent of a single business day
- c. Internal customer satisfaction ratings.

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

- a. The elements for refining this measure do not yet exist, as there are currently multiple, disparate data sources across the department, resulting in a number of baselines that are division specific. This project will allow DCHS to establish new baselines for access to available *departmental* data, including *aggregate* client service data, as well as a range of associated demographic and cost

data. Against the new baseline of accessible data, the department will be better able to measure success going forward, particularly as the system is expanded over time.

- b. It currently takes eight (8) to 12 weeks to produce this report, which can only be supported, at most, once annually and must be recreated each time for every boundary area in each type of legislative district (e.g., King County District, Congressional District, and Municipality). King County District related reports have been the priority for production. In addition, reports cannot be proactively updated or produced for every district type, so are done so only on an as needed basis.
 - c. This survey doesn't currently exist, but will be developed and deployed among key DCHS staff (e.g., program coordinators, departmental leadership, data analysts) to assess system effectiveness in supporting staff roles/needs, and to assist in guiding the ongoing system development priorities. The survey will be deployed at least annually. The first survey results will set the baseline for assessing effectiveness and improvement in the delivery of this internal service over time.
9. *What is the target for this measure? (How much improvement will this project achieve?)*
- a. Establishment of access to aggregate departmental data, which does not currently exist. Subsequent phases will build upon this initial capacity and will use measures based upon the initial baseline.
 - b. The target is the ability to produce the King County District report within the equivalent of a single business day, reduced from the 8 – 12 week timeframe currently required.
 - i. Secondly, the department will be able to expand and track the number and types of these reports produced, as well as the number of updates available within the year.

Metric Description	Metrics	Baseline	Target	Actual
<i>This project will reduce the processing time of the Council District Report from 8 – 12 weeks to 8 hours, or the equivalent of a single business day.</i>	<i>Processing Time</i>	<i>8 – 12 Weeks</i>	<i>1 business day</i>	
<i>This project will ensure quarterly updates to the Council District Report</i>	<i>Updates Produced</i>	<i>Once Annually</i>	<i>Quarterly</i>	

- c. The initial survey results will be used to establish a baseline and target for ongoing efforts. Over time and with system expansion, DCHS would like to achieve an 85% or higher level of

satisfaction.

10. When is the benefit likely to be achieved?

- a. The benefit will be achieved upon system deployment in April of 2014. It is recognized that this deployment will constitute the basic building blocks for achieving DCHS long term goals and objectives related to data consolidation, analysis and reporting.
- b. The benefit will be achieved upon initial system deployment in April of 2014.
- c. The first survey will be conducted in July of 2014. DCHS expects that staff will express both satisfaction related to the new tool and its impact, as well as desires related to the need for system expansion and necessary, ongoing business process support and re-engineering.

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.

- 5. 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.
- 6. 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.

11. Describe why you expect the proposed IT investment to reduce costs?
12. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
13. What is the current baseline?
14. What is the target for this measure? (How much savings will this project achieve)
15. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DCHS - DMHP and Public Safety Project

IT Project Benefits Achievement Plan (Version 2)

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

- 13. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 14. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 15. To establish accountability for identifying and achieving benefits

16. 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.

King County Department/Agency Name	DCHS
Project Title	DMHP and Public Safety Project
Project Number	1117281

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:	Amnon Shoenfeld
Business Owner Title:	Division Director, King County Mental Health, Chemical Abuse and Dependency 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
Amnon Shoenfeld	Division Director Mental Health, Chemical Abuse and Dependency Services Division/ DCHS	Project Sponsor
JoEllen Watson	Coordinator Crisis and Commitment Services/ DCHS	Steering Committee Member
Steve Wooley	Involuntary Commitment Supervisor/ DCHS	Subject Matter Expert
Diane Swanberg	Involuntary Commitment Supervisor/ DCHS	Subject Matter Expert
Don Clayton	Involuntary Commitment Supervisor/ DCHS	Subject Matter Expert
Meagan DeSart	Involuntary Commitment Supervisor/ DCHS	Subject Matter Expert
Melanie Shipley	Administrative Supervisor	Subject Matter Expert
Ken Bradford	Administrator I	Subject Matter Expert
Cherie Jones	IT Business Analyst Sr/ KCIT	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:

- 16. To support initial project request during “gate two” phase of conceptual review.
- 17. For the annual Benefits report that PSB compiles.

- 18. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 19. When a material scope change is identified and reported.
- 20. 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	01/24/14	Cherie Jones	New - Initial draft	6 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:

- 13) External service benefits: Improving the quality or quantity of services provided to the public
- 14) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 15) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 16) 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.

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

The Crisis and Commitment Services (CCS) files used by Designated Mental Health Professionals (DMHPs) are currently paper-based and reviewing them is a time-consuming process, often requiring a return trip to the Chinook Building from the field to search in clinical records for important client information. This situation can result in either a delayed response, putting the safety of the public at risk, or a response with incomplete information, putting the safety of both the public and the DMHP at risk.

The clinical record for a client includes the following safety-related information:

- Previous incidents in which the client posed a danger to others
- Previous incidents in which the client posed a danger to themselves
- Previous incidents in which the client wielded a weapon
- Mentally Ill Offender history, including history of violent acts

- Date of last homicide inflicted by the client
- Date of last non-fatal injury inflicted by the client
- Date of last attempted suicide
- Date of last property damage inflicted by the client

The DMHP and Public Safety Project will implement a solution that will provide the DMHPs with mobile access to clinical records, including scanned clinical and electronic court documents. The project will improve the safety of the public and the DMHPs by providing the DMHPs with the information they need to move forward with psychiatric detentions quickly and appropriately.

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

While the ultimate achievement of increased safety is difficult to measure, this benefit should be evident through a substantial reduction in the number of times a DMHP responds to a client evaluation call without the opportunity to review the case file prior to response. This occurs most often during the night and weekend shifts. During regular business hours staff in the office can provide the DMHPs with client history over the phone if needed.

Staff working night and weekend shifts will track the number of times in a 7-day period they respond to a client evaluation call without the opportunity to review the case file prior to response. This count will be conducted prior to implementation of the DMHP Mobile Solution to establish the baseline and again 3 months after implementation to assess improvement.

18. What is the current baseline for this measure?

Prior to implementation of the DMHP Mobile Solution, staff working night and weekend shifts responded to a client evaluation call without the opportunity to review the case file prior to response a total of ??? times in a 7-day period.

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

While occasional scheduled or unexpected downtime of the DMHP Mobile Solution will prevent a complete elimination of responding to a client evaluation call without first reviewing the case file, such instances should be extremely rare. The target for this measure is no more than 1 occurrence in a 7-day period.

20. When is the benefit likely to be achieved?

The benefit should be achieved within 3 months of implementation. Nevertheless, full realization of this benefit is dependent on consistent, uninterrupted service from the KCIT Enterprise network, VPN, and EDMS solutions. Any downtime, however brief that downtime may be, will detract from project benefits and jeopardize the safety of both the DMHPs and the general public.

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.

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

The Crisis and Commitment Services (CCS) files used by Designated Mental Health Professionals (DMHPs) are currently paper-based and reviewing them is a time-consuming process, often requiring a return trip to the Chinook Building from the field to search in clinical records for important client information. Even when the DMHP is able to obtain the needed information over the phone rather than returning to the office, productivity suffers as a staff member in the office needs to set aside their own work, look up the information needed, and then read it to the DMHP over the phone.

The DMHP and Public Safety Project will implement a solution that will provide the DMHPs with mobile access to clinical records and an extensive repository of resources, including policies and procedures, statutes, protocols, contact information, court calendar information, and treatment facility information. All resource information can be centrally updated and immediately available to all staff, eliminating the need to distribute notices and/or updated printed versions of resources whenever anything changes. The project will increase staff efficiency by providing DMHPs with the information they need to move forward with psychiatric detentions quickly and appropriately.

When working in teams, staff will be able to review case files in the car en route to the client rather than spending time in the office reviewing case files prior to leaving, and a DMHP can review case files for new assignments while out in the field. Additionally, having a mobile device will allow a DMHP to make effective use of time that is currently spent waiting for various other professionals,

such as police, emergency transport, admission screeners, etc. by allowing the DMHP to review the file for an upcoming case, write up their case notes, update system data or notes, or perform a variety of other tasks that are currently performed in the office.

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

The primary benefit of increased staff efficiency will be evident through a number of measures.

Implementation of the DMHP Mobile Solution will reduce the number of return trips the DMHPs make from the field to the office and the number of times the DMHPs call the office to obtain needed information over the phone. Staff will track the number of times in a 7-day period they return to the office from the field during a work shift for the specific purpose of reviewing a case file or call the office to obtain case or resource information. This count will be conducted prior to implementation of the DMHP Mobile Solution to establish the baseline and again 3 months after implementation to assess improvement.

The ability to perform work during time that is currently spent waiting for other professionals should increase the percentage of staff time spent in the field vs. in the office during a client evaluation/outreach work shift. Using a survey questionnaire, each DMHP will be asked to estimate the average amount of time spent in the office during a client evaluation/outreach work shift, including

- time spent in the office between receiving an assignment and going into the field (reviewing the case file, etc)
- time spent in the office reviewing a case file if a return trip is necessary mid-shift
- time spent in the office at the end of a shift (writing up case notes, updating system data or notes, etc)

This survey will be conducted prior to implementation of the DMHP Mobile Solution to establish baseline practices and again 6 months after implementation to assess changes.

13. What is the current baseline for this measure?

Prior to implementation of the DMHP Mobile Solution, staff returned to the office from the field during a work shift for the specific purpose of reviewing a case file or called the office to obtain case or resource information a total of ??? times in a 7-day period.

Prior to implementation of the DMHP Mobile Solution, staff spent an average of ??? minutes in the office during a client evaluation/outreach work shift.

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

While occasional scheduled or unexpected downtime of the DMHP Mobile Solution will prevent a complete elimination of return trips to the office or phone calls to the office to obtain case or resource information, such instances should be extremely rare. The target for this measure is no more than ??? occurrences in a 7-day period.

With the ability to use time in the field more productively, the target for this measure is a 30% reduction in the amount of time spent in the office, which equates to a target of ??? minutes.

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

The benefit of a reduction in the number of times staff return to the office from the field during a work shift for the specific purpose of reviewing a case file or call the office to obtain case or resource information should be achieved within 3 months of implementation. Nevertheless, full realization of this benefit is dependent on consistent, uninterrupted service from the KCIT Enterprise network, VPN, and EDMS solutions. Any downtime, however brief that downtime may be, will detract from project benefits and impede staff efficiency.

As DMHPs will require some time to learn all the ways in which they can use their time in the field more productively and adapt their work processes accordingly, the benefit of an increase in the percentage of staff time spent in the field vs. in the office during a work shift will likely be achieved 6 months or more after 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.

7. *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 existing application, known as Lola, is built on a PowerBuilder platform, which is based on traditional desktop-based client-server technology. Client-server technology, however, is cumbersome in comparison to web-based technology. It requires software to be installed on each

machine from which a user would access the application. Any change, even a very small change, requires recompilation of the code and deployment of the new version to each machine that has the application. Conversely, a web-based application only requires that a web browser be installed on the user's machine. The new version of an application is simply loaded on the web server and all users immediately have access to it.

As an organization, King County Information Technology (KCIT) is moving away from desktop-based client-server applications in favor of web-based applications because of the great benefits that can be realized using web-based technology solutions. A .NET web-based application would align with King County IT standards and roadmaps for the future. The migration to a newer technology is inevitable, but proactively choosing to transition to .NET now avoids a forced and potentially ill-timed migration in the future.

The development of a view-only, web-based, .NET application would not only meet the requirements of this project, but it would also be the first step in a complete transition of the full Lola application to an updated technology platform. Although it may require several project phases over several years, as an increasing amount of functionality from the existing Lola application is incorporated into the web-based application, the Lola application could be replaced in its entirety by the new solution.

The Lola application was first developed in 1998 and has evolved over time to meet the business needs. The average life cycle replacement for a PowerBuilder application is unknown, however, PowerBuilder's market share is substantially diminished from what it was in 1998 as it has failed to keep pace with the evolution of technology.

8. *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.

- 16. Describe why you expect the proposed IT investment to reduce costs?
- 17. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 18. What is the current baseline?
- 19. What is the target for this measure? (How much savings will this project achieve)
- 20. 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>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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings
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Metric Description	Metrics	Baseline	Target	Actual
Reduce the number of times a DMHP responds to a client evaluation call without the opportunity to review the case file prior to response	The number of times in a 7-day period	??? times in a 7-day period	<= 1 time in a 7-day period	TBD 3 months after implementation
Reduce the number of times staff return to the office from the field during a work shift for the specific purpose of reviewing a case file or call the office to obtain case or resource information	The number of times in a 7-day period	???? times in a 7-day period	???? times in a 7-day period	TBD 3 months after implementation
Increase the percentage of staff time spent in the field vs. in the office during a work shift	The average number of minutes a DMHP spends in the office during a client evaluation/ outreach work shift	??? minutes	30% reduction	TBD 6 months after implementation

DES / RALS - King County Archives Collection Management System

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.

King County Department/Agency Name	Executive Services, Records and Licensing Division, Archives and Records Management Section/Archives
Project Title	King County Archives Collection Management System
EBS Project Number	

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.
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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>
Example: Funding release	12/5/13	Carol Shenk	New, initial draft	3 hours
Example:				

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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DES / BRC - PeopleSoft 9.2 Upgrade

IT Project Benefits Achievement Plan (Version 2)

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

- To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure

- 7. To establish accountability for identifying and achieving benefits
- 8. 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.

King County Department/Agency Name	Department of Executive Services / Business Resource Center
Project Title	PeopleSoft 9.2 Upgrade
EBS Project Number	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:

- 6. To support initial project request during “gate two” phase of conceptual review.

- 7. For the annual Benefits report that PSB compiles.
- 8. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 9. When a material scope change is identified and reported.
- 10. 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:

- 5) External service benefits: Improving the quality or quantity of services provided to the public
- 6) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 7) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 8) 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.

6. Describe why you expect the proposed IT investment to produce the benefit(s).
7. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
8. What is the current baseline for this measure?
9. What is the target for this measure? (How much improvement will this project achieve?)
10. 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.

6. 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.*

7. *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.*

8. *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.)*

9. *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.*

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

- *Reduction of defects – after upgrade stabilization (2nd 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.

3. *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*

4. *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.

6. Describe why you expect the proposed IT investment to reduce costs?
7. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
8. What is the current baseline?
9. What is the target for this measure? (How much savings will this project achieve)
10. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>

DJA - Core ECR Replacement Project

IT Project Benefits Achievement Plan (Version 2)

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

- 9. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 10. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 11. To establish accountability for identifying and achieving benefits
- 12. 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.

King County Department/Agency Name	Department of Judicial Administration (DJA)
Project Title	Core ECR Replacement Project
Project Number	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
Kathei McCoy	DJA Kent RJC Div. Manager	<ul style="list-style-type: none"> • Business Process Oversight • Ensuring that stakeholder business needs are met

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:

11. To support initial project request during “gate two” phase of conceptual review.
12. For the annual Benefits report that PSB compiles.
13. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
14. When a material scope change is identified and reported.
15. 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</i>	<i>Date this</i>	<i>Who did the</i>	<i>A brief summary of what</i>	<i>How long</i>

<i>review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>document was updated</i>	<i>document updates?</i>	<i>changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate "review only".</i>	<i>did it take to complete or revise the form at this stage?</i>
Benefits Achievement Plan	Feb. 2014	Teresa Bailey	Annual Benefits 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:

- 9) External service benefits: Improving the quality or quantity of services provided to the public
- 10) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 11) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 12) 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.

- 11. Describe why you expect the proposed IT investment to produce the benefit(s).
- 12. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 13. What is the current baseline for this measure?
- 14. What is the target for this measure? (How much improvement will this project achieve?)
- 15. 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.

- 11. Describe why you expect the proposed IT investment to produce the benefit(s).
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- 13. What is the current baseline for this measure?
- 14. What is the target for this measure? (How much improvement will this project achieve?)
- 15. 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.

5. 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 maximum¹. 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.

6. *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.

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

¹ 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.

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.

- 11. Describe why you expect the proposed IT investment to reduce costs?
- 12. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 13. What is the current baseline?
- 14. What is the target for this measure? (How much savings will this project achieve)
- 15. 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"> • 10 days processing time 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of 	<ul style="list-style-type: none"> 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>	<ul style="list-style-type: none"> <i>10 percent of purchases are receiving discount</i> <i>Savings of \$100,000</i> 	<i>purchases are receiving prompt payment discounts</i> <ul style="list-style-type: none"> <i>\$400,000 savings</i> 	<i>purchases are receiving prompt payment discounts</i> <ul style="list-style-type: none"> <i>\$200,000 savings</i>
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DJA - Delta Viewer Replacement Study Project

IT Project Benefits Achievement Plan (Version 2)

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

- 13. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 14. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 15. To establish accountability for identifying and achieving benefits
- 16. 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.

King County Department/Agency Name	Department of Judicial Administration (DJA)
Project Title	Delta Viewer Replacement Study Project
Project Number	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
Kathei McCoy	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?

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:

- 16. To support initial project request during “gate two” phase of conceptual review.
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- 19. When a material scope change is identified and reported.
- 20. 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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<i>review, budget process, funding release, annual report, project implementation, or project completion.</i>	<i>document was updated</i>	<i>document updates?</i>	<i>changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate "review only".</i>	<i>did it take to complete or revise the form at this stage?</i>
Budget Process	Jul. 2013	Teresa Bailey	Initial Project Request	2 hours
Benefits Achievement Plan	Feb. 2014	Teresa Bailey	Annual Benefits 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:

- 13) External service benefits: Improving the quality or quantity of services provided to the public
- 14) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 15) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 16) 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.

16. Describe why you expect the proposed IT investment to produce the benefit(s).
17. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
18. What is the current baseline for this measure?
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20. 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.

7. 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 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 Viewer². 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/replacement³. 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 actual replacement.

8. *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.

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

² 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.

³ 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.

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.

16. *Describe why you expect the proposed IT investment to reduce costs?*

17. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

18. *What is the current baseline?*

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

20. *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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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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DNRP / SWD - Faster Web

IT Project Benefits Achievement Plan (Version 2)

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

- 17. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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King County Department/Agency Name	Department of Natural Resources & Parks Solid Waste Division
Project Title	Faster Web
Project Number	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

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:

21. To support initial project request during "gate two" phase of conceptual review.
22. For the annual Benefits report that PSB compiles.
23. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
24. When a material scope change is identified and reported.
25. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 17) External service benefits: Improving the quality or quantity of services provided to the public
- 18) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 19) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 20) 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.

21. Describe why you expect the proposed IT investment to produce the benefit(s).
22. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
23. What is the current baseline for this measure?
24. What is the target for this measure? (How much improvement will this project achieve?)
25. 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.

21. 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. Less downtime means more uptime for customers, such as transfer station operators and truck drivers, to do their jobs without delay. Finally, parts and equipment warranties are flagged in real time allowing proactive follow up and better warranty recovery.
22. 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.
23. 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%.
24. What is the target for this measure? (How much improvement will this project achieve?)
The target is to reduce downtime by 10% based on a rolling 12 month actual average after one year of software use. The interim 6 month target will be a 5% reduction in downtime compared to the prior average twelve month period.
25. When is the benefit likely to be achieved?
There will be a one-time learning curve for the new software, so an interim target is set for 6 months after implementation and another target for one year after 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.

9. 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.
10. 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.

21. Describe why you expect the proposed IT investment to reduce costs?
22. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
23. What is the current baseline?
24. What is the target for this measure? (How much savings will this project achieve)
25. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

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DNRP / WTD - Mainsaver Conversion to ABT

IT Project Benefits Achievement Plan (Version 2)

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

- 21. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 22. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 23. To establish accountability for identifying and achieving benefits
- 24. 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.

King County Department/Agency Name	DNRP/WTD
Project Title	Mainsaver Conversion to ABT
Project Number	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:

- 26. To support initial project request during “gate two” phase of conceptual review.
- 27. For the annual Benefits report that PSB compiles.
- 28. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 29. When a material scope change is identified and reported.
- 30. 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,</i>	<i>Date</i>	<i>Who did the</i>	<i>A brief summary of what</i>	<i>How long</i>

<i>budget process, funding release, annual report, project implementation, or project completion.</i>	<i>this document was updated</i>	<i>document updates?</i>	<i>changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate "review only".</i>	<i>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

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:

- 21) External service benefits: Improving the quality or quantity of services provided to the public
- 22) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 23) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 24) 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

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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i>

Section 7. Benefit Achievement Summary

DNRP / WTD - PRISM Conversion to ABT

IT Project Benefits Achievement Plan (Version 2)

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

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- 26. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 27. To establish accountability for identifying and achieving benefits
- 28. To ensure that benefits are achieved

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King County Department/Agency Name	DNRP/WTD
Project Title	PRISM Conversion to ABT
Project Number	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:

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- 25) External service benefits: Improving the quality or quantity of services provided to the public
- 26) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 27) Maintaining service levels by replacing or upgrading older technology or reducing risk of system

failures
 28) 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

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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.

26. 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..

27. 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.

28. What is the current baseline for this measure?
 Bi-monthly data processing under IBIS.

29. 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.

30. 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.

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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	Processing Time annual savings, and	<ul style="list-style-type: none"> 10 days processing time 	<ul style="list-style-type: none"> 1 day processing time 30 percent of 	2 day processing time

Project Title	Replacement of Rbase for DOS
EBS Project Number	1111662 (C77134)

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: Kathryn Terry, Parks 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:

	Title / Agency	Project Role
Bing Subelbia	Program Manager IV	Project Manager
Gary Hocking	IT SD Manager	Project Advisor
Jerry Hughs (retired)	Parks Finance Manager	Steering Committee Member
Kristi Beattie (new)	Parks Finance Manager	Steering Committee Member
Sisack Kitnikone	LAN Administrator	System Support
Nancy Fye	Inventory Purchasing Specialist II	Project Team
Warren Timmons (retired)	Inventory Purchasing Specialist III	Project Team
Kirsten Chapman	Park District Maintenance Coordinator	Project Team
Dave Sizemore	Engineer III	Project Team
John Kane	Crafts Supervisor	Project Team
Rick Powelson	Playground Programs	Project Team

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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- 38. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 39. When a material scope change is identified and reported.
- 40. 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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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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Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Transfer from original project documents including Technology Qualifications Report, Business Case and Project Plan.	2/3/14	Bing Subelbia	Data update	4 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:

- 29) External service benefits: Improving the quality or quantity of services provided to the public
- 30) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 31) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 32) 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.

26. Describe why you expect the proposed IT investment to produce the benefit(s).
27. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
28. What is the current baseline for this measure?
29. What is the target for this measure? (How much improvement will this project achieve?)
30. 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.

31. Describe why you expect the proposed IT investment to produce the benefit(s).
32. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
33. What is the current baseline for this measure?
34. What is the target for this measure? (How much improvement will this project achieve?)
35. 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.

11. 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.

Please note that this project is in its final stages of completion. The project went LIVE on April 1, 2013, and is currently in warranty period expiring July 31, 2014. Narrative entries are from original Technology Qualifications and Business Case Reports, with applicable updates.

The Division used a 25-year old custom software application (R:BASE) to support parks and related facilities maintenance management. This application is vital to division operations, as it is employed to process over 2,200 work orders annually, manage an average stores inventory valued at over \$60,000, and facilitate approximately \$4.3 million in annual vendor payments. R:BASE is a legacy system that has far exceeded its useful life. The system was extremely unstable. It crashed on a regular basis – compromising data integrity and requiring significant downtime for recoveries and frequent local backups. Additionally, it lacked some significant functionality – perpetuating many manual, paper-intensive work processes that give rise to data errors and delay necessary maintenance. In short, the system served as an impediment, rather than an enabler, to division staff. As a result, the Division sought a replacement solution to reliably support maintenance workers in doing their jobs more effectively and help management make more informed, timely decisions.

12. 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 original risk identified for this project was that the existing R:BASE system may fail before a replacement system is fully implemented, resulting in permanent data loss and significant, manual- and paper-intensive process workarounds. To mitigate the risk of system failure prior to implementation of a replacement system – and to minimize the impact on other division information assets should the system fail – the Division upgraded the R:BASE application servers, in both Seattle and Renton, from shared servers to dedicated workstations.

In 2012, mid-way through the implementation of Lucy, the replacement system, Rbase started to fail and required more maintenance than usual. Instead of investing more time and effort on maintaining the Rbase system, Parks made a decision to inactivate it and implement a manually driven workflow to sustain our data collection until Lucy was fully implemented.

Because we were aware of this risk and it was our biggest fear, we were prepared with an alternative plan and were able to continue meeting our business needs. Additionally, as part of the implementation of Lucy, we had already gathered electronic data thru 2011, and were only capturing manual records from 2012. After Lucy went LIVE, 2012 data from the manual documents were entered into 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 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 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

Metric Description	Metrics	Baseline	Target	Actual
A. Replace the legacy Parks maintenance management system with a fully relational database that employs web-based technology design architecture, including user-friendly screens, reports and query capability.	Processing Time annual savings.	<ol style="list-style-type: none"> Substantially reduced risk for system problems and failures. Improved accessibility with appropriate security and privacy controls. Business process improvements due to data being captured just once and shared 	<ol style="list-style-type: none"> Eliminate system downtimes to maintenance windows only Provide system access via web browser. Access is configured around Windows Login authorization and Lucity System Administration Management. Eliminate 	<ol style="list-style-type: none"> 75% accomplished. Tracking and reviewing current system errors, and working with Lucity vendor to address. 100% accomplished 75% accomplished. 25% will be addressed

			<p>in order to reduce duplication of effort and potential for error.</p> <p>4. Improved performance over a Wide Area Network, Online work requests and supply requests that staff can submit electronically instead of entering manually</p> <p>5. A centralized database in one location.</p> <p>6. Less costly system changes or enhancements.</p> <p>7. Strategic objectives 1.8 and 4.2 of the Strategic Technology Plan (2006-2008) have been met: 1.8 – Standardized Data Retrieval, 4.2 – Strengthen Information Privacy Practices in the Agencies.</p>	<p>duplicate data entry and duplicate data storage</p> <p>4. Provide access from all Parks offices</p> <p>5. Use the KCIT data center</p> <p>6. Follow KCIT best practices for change management and release to operations</p> <p>7. To replace a failing system which performs the primary business management functions for the division. To replace a system that has obsolete technical support; programmers are who have historical knowledge of this highly customized system are no longer available. To adhere to several objectives on</p>	<p>through interfacing effort.</p> <p>4. 100%accomplished.</p> <p>5. 100% accomplished</p> <p>6. 100% accomplished</p> <p>7. 100%accomplished</p>
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				the King County Strategic Technology Plan 2009-2012. See table below.	
B. Develop interface that effectively passes required information between Lucy and the County's Oracle EBS System.	Data Entry time per record.	8. Amount of data gathered. 9. Number of staff addressing each record in Lucy.	8. Access to robust reporting. 9. Price of Service	0% accomplished. Parks is investigating flat file interfacing and web services options.	

DNRP / WTD - West Section Control System Replacement

IT Project Benefits Achievement Plan (Version 2)

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

- 33. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 34. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 35. To establish accountability for identifying and achieving benefits
- 36. 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.

King County Department/Agency Name	DNRP/WTD
Project Title	West Section Control System Replacement
EBS Project Number	1038125, 1114374 & 1114376

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: Christie True, DNRP Department 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
Kathy Loland	Section Manager/WTD	Sponsor
Dan Grenet	Section Manager/WTD	Sponsor/Customer
Randy Smith	Supervisor/WTD	Customer
Steve Zamperin	Supervisor/WTD	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:

41. To support initial project request during "gate two" phase of conceptual review.
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Revised per Council	10/14/13	Ann Grothe	Revised, changed to new	2 hours

Request

format

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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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 #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.

13. 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 plan operations, timely replacement is necessary to avoid Ecology permit violations.

14. 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

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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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DOA - Accounting System Update

IT Project Benefits Achievement Plan (Version 2)

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King County Department/Agency Name	Assessments
Project Title	DOA Acctg System Update
EBS Project Number	1117788

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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

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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.

Section 6. Description of Project Benefits

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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.

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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.

31. *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.*

32. *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?*

33. *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.*

34. *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.*

35. *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.

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).*

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 3rd 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.

15. *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.*

16. *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.

6. *Describe why you expect the proposed IT investment to reduce costs?*
7. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
8. *What is the current baseline?*
9. *What is the target for this measure? (How much savings will this project achieve)*
10. *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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DOA - Electronic Valuation Notices

IT Project Benefits Achievement Plan (Version 2)

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

- 41. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 42. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 43. To establish accountability for identifying and achieving benefits
- 44. 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.

King County Department/Agency Name	Assessments
Project Title	KCIT DOA Electronic Val Notice
EBS Project Number	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:

- 51. To support initial project request during “gate two” phase of conceptual review.
- 52. For the annual Benefits report that PSB compiles.
- 53. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 54. When a material scope change is identified and reported.
- 55. 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	Provided updates based upon PSB comments	15 min

Camarda

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:

- 41) External service benefits: Improving the quality or quantity of services provided to the public
- 42) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 43) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 44) 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.

36. *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.

37. *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.

38. *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)

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

10% in first full year of implementation.

40. *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.

- 36. *Describe why you expect the proposed IT investment to produce the benefit(s).*
- 37. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
- 38. *What is the current baseline for this measure?*
- 39. *What is the target for this measure? (How much improvement will this project achieve?)*
- 40. *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.

- 17. *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.*
- 18. *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.

11. 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.

12. 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.

13. 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.

14. 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.

15. *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
<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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DOA - Tablet PC Replacement

IT Project Benefits Achievement Plan (Version 2)

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

- 45. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 46. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 47. To establish accountability for identifying and achieving benefits
- 48. 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.

King County Department/Agency Name	Assessments
Project Title	KCIT Assessors Tablet PC Replacement
EBS Project Number	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

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:

- 56. To support initial project request during “gate two” phase of conceptual review.
- 57. For the annual Benefits report that PSB compiles.
- 58. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 59. When a material scope change is identified and reported.
- 60. 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,</i>	<i>Date this docume</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</i>	<i>How long did it take to complete or</i>

<i>project implementation, or project completion.</i>	<i>nt was updated</i>		<i>indicate new. If nothing has changed, indicate "review only".</i>	<i>revise the form at this stage?</i>
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.

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:

- 45) External service benefits: Improving the quality or quantity of services provided to the public
- 46) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 47) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 48) 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.

41. Describe why you expect the proposed IT investment to produce the benefit(s).
42. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
43. What is the current baseline for this measure?
44. What is the target for this measure? (How much improvement will this project achieve?)
45. 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).

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.
- 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
- When is the benefit likely to be achieved?
 - Phase 1 in 2014,
 - Phase 2 in 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.

19. *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.*

20. *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.

16. *Describe why you expect the proposed IT investment to reduce costs?*

17. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

18. *What is the current baseline?*

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

20. *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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

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DOA - Property Tax Assessment Appeal Project

IT Project Benefits Achievement Plan (Version 2)

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

- 49. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 50. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 51. To establish accountability for identifying and achieving benefits
- 52. 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.

King County Department/Agency Name	Council, Board of Appeals/Equalization
Project Title	Property Tax Assessment Appeal Project
Project Number	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:

- 61. To support initial project request during “gate two” phase of conceptual review.
- 62. For the annual Benefits report that PSB compiles.
- 63. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 64. When a material scope change is identified and reported.
- 65. 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?
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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

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:

- 49) External service benefits: Improving the quality or quantity of services provided to the public
- 50) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 51) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 52) 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.

46. 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.

47. 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.

48. 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).

49. 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.

50. 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.

- 41. Describe why you expect the proposed IT investment to produce the benefit(s).
- 42. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 43. What is the current baseline for this measure?
- 44. What is the target for this measure? (How much improvement will this project achieve?)
- 45. 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.*

- 21. 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
- 22. 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.

21. Describe why you expect the proposed IT investment to reduce costs?
22. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
23. What is the current baseline?
24. What is the target for this measure? (How much savings will this project achieve)
25. 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"> <i>10 days processing time</i> <i>10 percent of purchases are receiving discount</i> <i>Savings of \$100,000</i> 	<ul style="list-style-type: none"> <i>1 day processing time</i> <i>30 percent of purchases are receiving prompt payment discounts</i> <i>\$400,000 savings</i> 	<ul style="list-style-type: none"> <i>2 day processing time</i> <i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>

This project successfully released eAppeals version 1.3 (latest update) and measured adoption/usage rate of 31.59% as of January 2014.

DOT - Transit Customer Information Systems Refresh

IT Project Benefits Achievement Plan (Version 2)

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

- 53. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 54. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 55. To establish accountability for identifying and achieving benefits
- 56. 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.

King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Transit Customer Information Systems Refresh
EBS Project Number	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)

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:

- 66. To support initial project request during “gate two” phase of conceptual review.
- 67. For the annual Benefits report that PSB compiles.
- 68. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 69. When a material scope change is identified and reported.
- 70. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 53) External service benefits: Improving the quality or quantity of services provided to the public
- 54) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 55) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 56) 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.

51. Describe why you expect the proposed IT investment to produce the benefit(s).
52. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
53. What is the current baseline for this measure?
54. What is the target for this measure? (How much improvement will this project achieve?)
55. 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.

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

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

48. What is the current baseline for this measure?

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

50. 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.

23. 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.

24. *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.

- 26. Describe why you expect the proposed IT investment to reduce costs?
- 27. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 28. What is the current baseline?
- 29. What is the target for this measure? (How much savings will this project achieve)
- 30. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

			<i>savings</i>

DOT - HASTUS Employee Performance Module (EPM)

IT Project Benefits Achievement Plan (Version 2)

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

- 57. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 58. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 59. To establish accountability for identifying and achieving benefits
- 60. 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.

King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	HASTUS Employee Performance Module (EPM)
EBS Project Number	

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:

- 71. To support initial project request during "gate two" phase of conceptual review.
- 72. For the annual Benefits report that PSB compiles.
- 73. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 74. When a material scope change is identified and reported.
- 75. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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 Report	03/20/14	Ray Burgess	Revised per feedback	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:

- 57) External service benefits: Improving the quality or quantity of services provided to the public
- 58) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 59) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 60) 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.

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

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

58. What is the current baseline for this measure?

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

60. 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.

51. 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.

52. 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.

53. 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.

54. *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.

55. *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. This module of the HASTUS system is expected to be in full production by Quarter 1 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.

25. 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.

26. 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.

31. Describe why you expect the proposed IT investment to reduce costs?

32. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

33. What is the current baseline?

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

35. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

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DOT – HASTUS Upgrade

IT Project Benefits Achievement Plan (Version 2)

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

- 61. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 62. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 63. To establish accountability for identifying and achieving benefits
- 64. 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.

King County Department/Agency Name	Department of Transportation/Transit
Project Title	HASTUS Upgrade
EBS Project Number	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:

- 76. To support initial project request during “gate two” phase of conceptual review.
- 77. For the annual Benefits report that PSB compiles.
- 78. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 79. When a material scope change is identified and reported.
- 80. 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>
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

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:

- 61) External service benefits: Improving the quality or quantity of services provided to the public
- 62) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 63) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 64) 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.

- 61. Describe why you expect the proposed IT investment to produce the benefit(s).
- 62. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 63. What is the current baseline for this measure?
- 64. What is the target for this measure? (How much improvement will this project achieve?)
- 65. 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.

56. Describe why you expect the proposed IT investment to produce the benefit(s).
57. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
58. What is the current baseline for this measure?
59. What is the target for this measure? (How much improvement will this project achieve?)
60. 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.

27. 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.

28. 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.

Please respond to each question listed below rather than provide a summary.

36. Describe why you expect the proposed IT investment to reduce costs?

37. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

38. What is the current baseline?

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

40. 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.

Metric Description	Metrics	Baseline	Target	Actual

DOT – Maximo Upgrade

IT Project Benefits Achievement Plan (Version 2)

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

- 65. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 66. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 67. To establish accountability for identifying and achieving benefits
- 68. 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.

King County Department/Agency Name	King County International Airport
Project Title	Maximo Upgrade
Project Number	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?

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
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?

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:

- 81. To support initial project request during “gate two” phase of conceptual review.
- 82. For the annual Benefits report that PSB compiles.
- 83. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 84. When a material scope change is identified and reported.
- 85. 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	2013	Gary Tripp	Added the additional budget of \$278,640 received in the 2013-14 budget ordinance.	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:

- 65) External service benefits: Improving the quality or quantity of services provided to the public
- 66) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 67) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 68) 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.

66. Describe why you expect the proposed IT investment to produce the benefit(s).
67. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
68. What is the current baseline for this measure?
69. What is the target for this measure? (How much improvement will this project achieve?)
70. 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.

61. 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.
62. 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.
63. 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.

64. *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.

65. *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.

29. *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.*

30. *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.

- 41. Describe why you expect the proposed IT investment to reduce costs?
- 42. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 43. What is the current baseline?
- 44. What is the target for this measure? (How much savings will this project achieve)
- 45. 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"> • <i>10 percent of purchases are receiving discount</i> • <i>Savings of \$100,000</i> 	<p><i>processing time</i></p> <ul style="list-style-type: none"> • <i>30 percent of purchases are receiving prompt payment discounts</i> • <i>\$400,000 savings</i> 	<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>
<p>Benefits have not been achieved because the project has not started.</p>				

DOT - On-Board Systems/Communication Center System (OBS/CCS)

IT Project Benefits Achievement Plan (Version 2)

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

- 69. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 70. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 71. To establish accountability for identifying and achieving benefits
- 72. 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.

<p>King County Department/Agency Name</p>	<p>Department of Transportation (DOT)/Transit Division</p>
<p>Project Title</p>	<p>On-Board Systems/Communication Center System (OBS/CCS)</p>

EBS Project Number

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:

- 86. To support initial project request during “gate two” phase of conceptual review.
- 87. For the annual Benefits report that PSB compiles.
- 88. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 89. When a material scope change is identified and reported.
- 90. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 69) External service benefits: Improving the quality or quantity of services provided to the public
- 70) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 71) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 72) 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.

71. Describe why you expect the proposed IT investment to produce the benefit(s).
72. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
73. What is the current baseline for this measure?
74. What is the target for this measure? (How much improvement will this project achieve?)
75. 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.

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

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

68. What is the current baseline for this measure?

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

70. 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.

31. 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 requires 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.

32. 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.

46. Describe why you expect the proposed IT investment to reduce costs?
47. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
48. What is the current baseline?
49. What is the target for this measure? (How much savings will this project achieve)
50. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DOT - Radio AVL Replacement (RAVL)

IT Project Benefits Achievement Plan (Version 2)

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

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

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King County Department/Agency Name	Transportation/Transit
Project Title	Radio AVL Replacement (RAVL)
EBS Project Number	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?

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:

- 91. To support initial project request during “gate two” phase of conceptual review.
- 92. For the annual Benefits report that PSB compiles.
- 93. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 94. When a material scope change is identified and reported.
- 95. 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	Ray DeLaCruz	New, initial draft	2 hours
Annual Report	2/14/2014	Jill Krecklow	Modified benefits discussion	.50 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:

- 73) External service benefits: Improving the quality or quantity of services provided to the public
- 74) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 75) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 76) 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.

76. Describe why you expect the proposed IT investment to produce the benefit(s).
77. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
78. What is the current baseline for this measure?
79. What is the target for this measure? (How much improvement will this project achieve?)
80. 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.

71. Describe why you expect the proposed IT investment to produce the benefit(s).
72. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
73. What is the current baseline for this measure?
74. What is the target for this measure? (How much improvement will this project achieve?)
75. 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.

33. 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.

34. 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.

51. Describe why you expect the proposed IT investment to reduce costs?
52. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
53. What is the current baseline?
54. What is the target for this measure? (How much savings will this project achieve)
55. 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.

Metric Description	Metrics	Baseline	Target	Actual
<ul style="list-style-type: none"> Compliance with all FCC regulations and requirements applicable to the new system 	<ul style="list-style-type: none"> Amount of Interference and other operational problems due to change in FCC regulations 	<ul style="list-style-type: none"> No noticeable interference in the old system 	<ul style="list-style-type: none"> No noticeable interference in the new system 	<ul style="list-style-type: none"> No noticeable interference in the new system
<ul style="list-style-type: none"> Meet FCC compliance deadline by 2013 	<ul style="list-style-type: none"> Implement FCC requirements by 2013. 	<ul style="list-style-type: none"> No baseline for this metric 	<ul style="list-style-type: none"> System in place by 2013 	<ul style="list-style-type: none"> System in place by 2013

DOT - Real Time Information Signs

IT Project Benefits Achievement Plan (Version 2)

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

- 77. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 78. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 79. To establish accountability for identifying and achieving benefits
- 80. 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.

King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Real Time Information Signs
EBS Project Number	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:

- 96. To support initial project request during “gate two” phase of conceptual review.
- 97. For the annual Benefits report that PSB compiles.
- 98. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 99. When a material scope change is identified and reported.
- 100. 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	1/6/14	Kathleen McMurray	Initial Report	3 hours
Budget Process Update	2/10/14	Kathleen McMurray	Updates per feedback from Council 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:

- 77) External service benefits: Improving the quality or quantity of services provided to the public
- 78) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 79) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 80) 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.

81. *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.

82. *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.

83. *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.

84. *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.

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

Upon implementation of the signs for each RapidRide line. Lines A – D 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.

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

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

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

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

80. *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.

35. 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.
36. 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.

56. Describe why you expect the proposed IT investment to reduce costs?
57. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
58. What is the current baseline?
59. What is the target for this measure? (How much savings will this project achieve)

60. *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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

RapidRide lines A, B, C and D 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 transportation services	Success will be measured using customer surveys. Customers of each RapidRide line will be asked how satisfied they are with the signs.	No baseline number available	Over 50% of customers are satisfied with the signs.	Summary of customer satisfaction (details below): Line A: 69% satisfied Line B: 73% satisfied Line C: 70% satisfied Line D: 67% satisfied Line E: TBD ⁴

Percent satisfied on most recent survey for each line:

RapidRide Line	Survey Date	Period of Operation ⁵	Percent Satisfied ⁶
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

⁴ Customer surveys for the E Line will be conducted Summer 2014.

⁵ Period of Operation is the length of time the line was in operation when the survey took place

⁶ Percent Satisfied includes those who responded either 'Very Satisfied' or 'Satisfied'

DOT - Regional Fare Coordination System (ORCA System) Enhancements

IT Project Benefits Achievement Plan (Version 2)

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

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

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King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Regional Fare Coordination System (ORCA System) Enhancements
EBS Project Number	

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	Budget Analyst

Manager/DOT Transit
Division

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:

- 101. To support initial project request during “gate two” phase of conceptual review.
- 102. For the annual Benefits report that PSB compiles.
- 103. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 104. When a material scope change is identified and reported.
- 105. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 81) External service benefits: Improving the quality or quantity of services provided to the public
- 82) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 83) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 84) 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.

86. *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.

87. *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.

88. *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 (3rd 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 1st Quarter 2011)

89. *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%

90. *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.

81. 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.

82. 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.

83. 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.

84. 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.

85. 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.

37. *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.

38. *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.

61. *Describe why you expect the proposed IT investment to reduce costs?*
- University of Washington Element.** Surveys that are currently done every 2 years to determine UW transit usage will no longer be needed.
 - Operations Enhancement Element.** Legacy POS system will no longer be needed.
 - King County Employee Card Element.** Avoids support of multiple building access and ORCA cards for KC employees.
62. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
- University of Washington Element.** Surveys will no longer be needed. Cost savings.
 - Operations Enhancement Element.** Legacy POS system will no longer be needed. Cost savings.
 - King County Employee Card Element.** Separate building access card will not be needed.
63. *What is the current baseline?*
- University of Washington Element.** \$42,000 every 2 years
 - Operations Enhancement Element.** \$18,000 per year
 - King County Employee Card Element.** \$386,000 over 5 year life cycle.
64. *What is the target for this measure? (How much savings will this project achieve)*
- University of Washington Element.** \$42,000 every 2 years
 - Operations Enhancement Element.** \$18,000 per year
 - King County Employee Card Element.** \$386,000 over 5 year period
65. *When is the cost reduction likely to be achieved?*
- University of Washington Element.** June 2015.
 - Operations Enhancement Element.** Estimated to be June 2016 (two years after implementation).
 - 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
<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"> <i>10 days processing time</i> <i>10 percent of purchases are receiving discount</i> <i>Savings of \$100,000</i> 	<ul style="list-style-type: none"> <i>1 day processing time</i> <i>30 percent of purchases are receiving prompt payment discounts</i> <i>\$400,000 savings</i> 	<ul style="list-style-type: none"> <i>2 day processing time</i> <i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>

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
<i>King County (KC) Employee ORCA Use</i>	<i>Total ORCA Boardings by KC Employees for June to October of each Year.</i>	<i>0</i>	<i>691,673</i>	<i>691,673 (all KC transit trips converted to ORCA with the King County Employee Card Element)</i>
<i>University of Washington (UW) ORCA Boardings</i>	<i>Total ORCA Boardings by UW Employees in October of each Year.</i>	<i>0</i>	<i>1,422,677</i>	<i>1,422,677 (all UW transit trips converted to ORCA with the University of Washington Card Element)</i>
<i>Installation of a repository of detailed ORCA transaction data rather than having the data unavailable for future study.</i>	<i>Installation of a repository of detailed ORCA transaction data.</i>	<i>No data repository exists.</i>	<i>Data repository is created and collecting data.</i>	<i>Data repository is created and collecting data</i>

DOT - Rider Information Systems (RIS) – Bus Tracker

IT Project Benefits Achievement Plan (Version 2)

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

- 85. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 86. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 87. To establish accountability for identifying and achieving benefits
- 88. 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.

King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Rider Information Systems (RIS) – Bus Tracker
EBS Project Number	

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,	Sponsor

	DOT Transit Division	

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:

- 106. To support initial project request during “gate two” phase of conceptual review.
- 107. For the annual Benefits report that PSB compiles.
- 108. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 109. When a material scope change is identified and reported.
- 110. 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

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:

- 85) External service benefits: Improving the quality or quantity of services provided to the public
- 86) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 87) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 88) 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.

91. Describe why you expect the proposed IT investment to produce the benefit(s).
92. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
93. What is the current baseline for this measure?
94. What is the target for this measure? (How much improvement will this project achieve?)
95. 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.

86. Describe why you expect the proposed IT investment to produce the benefit(s).
87. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
88. What is the current baseline for this measure?
89. What is the target for this measure? (How much improvement will this project achieve?)
90. 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.

39. 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 3rd 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.

40. 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 3rd 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.

66. Describe why you expect the proposed IT investment to reduce costs?

67. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

68. What is the current baseline?

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

70. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	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.

DOT - Rider Information Systems (RIS) – Interactive Voice Response (IVR)

IT Project Benefits Achievement Plan (Version 2)

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

- 89. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 90. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 91. To establish accountability for identifying and achieving benefits
- 92. 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.

King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Rider Information Systems (RIS) – Interactive Voice Response (IVR)
EBS Project Number	

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:

- 111. To support initial project request during “gate two” phase of conceptual review.
- 112. For the annual Benefits report that PSB compiles.
- 113. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 114. When a material scope change is identified and reported.
- 115. 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

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:

- 89) External service benefits: Improving the quality or quantity of services provided to the public
- 90) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 91) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 92) 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.

96. Describe why you expect the proposed IT investment to produce the benefit(s).
97. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
98. What is the current baseline for this measure?
99. What is the target for this measure? (How much improvement will this project achieve?)
100. 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.

91. Describe why you expect the proposed IT investment to produce the benefit(s).
92. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
93. What is the current baseline for this measure?
94. What is the target for this measure? (How much improvement will this project achieve?)
95. 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.

41. 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.

42. 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.

71. Describe why you expect the proposed IT investment to reduce costs?
72. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
73. What is the current baseline?
74. What is the target for this measure? (How much savings will this project achieve)
75. 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"> <i>10 days processing time</i> <i>10 percent of purchases are receiving discount</i> <i>Savings of \$100,000</i> 	<ul style="list-style-type: none"> <i>1 day processing time</i> <i>30 percent of purchases are receiving prompt payment discounts</i> <i>\$400,000 savings</i> 	<ul style="list-style-type: none"> <i>2 day processing time</i> <i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>

DOT - Rider Information Systems (RIS) – TABS

IT Project Benefits Achievement Plan (Version 2)

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

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

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King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Rider Information Systems (RIS) – TABS
EBS Project Number	

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:

- 116. To support initial project request during “gate two” phase of conceptual review.
- 117. For the annual Benefits report that PSB compiles.
- 118. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 119. When a material scope change is identified and reported.
- 120. 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

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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	2/14/2014	Jill Krecklow	Initial Report	1 hour
Annual Report	03/20/14	Kathleen McMurray	Revised per feedback	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:

- 93) External service benefits: Improving the quality or quantity of services provided to the public
- 94) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 95) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 96) 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

X 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.

- 101. Describe why you expect the proposed IT investment to produce the benefit(s).
- 102. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 103. What is the current baseline for this measure?
- 104. What is the target for this measure? (How much improvement will this project achieve?)
- 105. 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.

- 96. Describe why you expect the proposed IT investment to produce the benefit(s).
- 97. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 98. What is the current baseline for this measure?
- 99. What is the target for this measure? (How much improvement will this project achieve?)
- 100. 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.

- 43. 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.

44. *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.

76. *Describe why you expect the proposed IT investment to reduce costs?*

77. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

78. *What is the current baseline?*

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

80. *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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DOT - RCAMM (Roads Comprehensive Asset Management System)

IT Project Benefits Achievement Plan (Version 2)

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

- 97. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 98. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 99. To establish accountability for identifying and achieving benefits
- 100. 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.

King County Department/Agency Name	DOT/ROADS
Project Title	RCAMM (Roads Comprehensive Asset Management System)
EBS Project Number	1111822

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: Harold Taniguchi DOT 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
Brenda Bauer	Division Director/Roads	Project Sponsor

Jay Osborne	SBOS Manager/Roads	Project Vision and Oversight
Harry Clark	IT Supervisor/Roads	Business and Technical Oversight
Stephanie MacLachlan	RCAMM Project Manager/Roads	Project Manager
Mike Crippen	Technical Lead/Roads	Business and Technical 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:

- 121. To support initial project request during “gate two” phase of conceptual review.
- 122. For the annual Benefits report that PSB compiles.
- 123. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 124. When a material scope change is identified and reported.
- 125. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Transfer from Original CBA/QBC	10/23/13	Mike Crippen	Migrate from original	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:

- 97) External service benefits: Improving the quality or quantity of services provided to the public
- 98) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 99) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 100) 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.

106. Describe why you expect the proposed IT investment to produce the benefit(s).
107. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
108. What is the current baseline for this measure?
109. What is the target for this measure? (How much improvement will this project achieve?)
110. 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.

101. Describe why you expect the proposed IT investment to produce the benefit(s).
Our current asset and work management processes, electronic record keeping and supporting technology are inadequate to ensure that we are making the best investment and resourcing decisions to maintain, operate and preserve the King County road system. A significant impact of this deficiency is that the Road Services Division (RSD)

has been unable to meet programmed maintenance goals in some areas, resulting in a deferred maintenance backlog that is growing at an estimated \$1-2 Million per year. A growing deferred maintenance backlog is resulting in accelerating rates of deterioration to RSD's infrastructure assets.

As shown in a September 2012 Lean Event, the Division has discovered that the more than 50 independent information silos that contain work and asset data are fragmented and paper dependent, error prone, redundant and limited in their ability to report effectively. The impacts of these problems are significant and include:

- customer service lags,
- repeat investigative work,
- loss of productivity at all levels of the organization,
- greater liability exposure,
- and excessive records research for information requests

The RCAMM project will address these deficiencies by further evaluating our current business processes and technology, identifying improvements and delivering changes that are practical and deliver quantifiable benefits to the County.

Computerized maintenance management systems (CMMS), also known as enterprise asset management (EAM) systems, are an obvious system solution. Through a recent options analysis process the Division has identified that the features of GIS integration, service request tracking, work order management, mobile access, key performance indicator display, work programming & budgeting, web-based citizen service requests and read-only interfaces with financial and HR systems are required. These are core features of modern CMMS systems and will provide a solid foundation upon which to build future enhancements.

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

The majority of the benefits are efficiency based and can be characterized by reduced time spent to respond to and track service requests, research asset inventory, manage work orders, reporting and financial management and information request research.

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

The QBC sub team conducted 21 information gathering interviews with staff to identify inefficiencies in processes and system inadequacies. Through these interviews the team captured information about time spent performing tasks within the categories indicated above. The team then validated these baseline estimates to ensure that they were representative of the status quo.

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

The team then considered the % of efficiency that could be gained given the implementation plan proposed. These then became the target values.

The audit method for a net benefit estimate will be to revisit the workgroups that provided the initial estimates of effort after the point at which the efficiency gain is expected. The Division will use similar methods for measuring the future state to ensure consistency.

The tangible benefits that will result in cost reduction such as reduced overtime, printing costs and system O&M which will easily be measured using the financial system.

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

The quantitative business case for the RCAMM system implementation yields a positive return on investment, with a seven-year internal rate of return 29%. The net present value of the cumulative cost benefit is estimated at \$987K.

Most of the tangible benefits of RCAMM system implementation fall into the cost avoidance category. These cost avoidance benefits are productivity enhancements resulting use of improved information systems. They are made up of relatively small time increments spread across many staff. In aggregate, these productivity enhancements amount to \$4 Million over the seven-year business case analysis. Hard cost savings benefits amount to an estimated \$266K over this time period.

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.

45. 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.

46. 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.

81. Describe why you expect the proposed IT investment to reduce costs?

82. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

83. What is the current baseline?

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

85. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DOT - Data Infrastructure Replacement Project

IT Project Benefits Achievement Plan (Version 3)

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

- 101. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 102. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 103. To establish accountability for identifying and achieving benefits
- 104. 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.

King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Data Infrastructure Replacement Project
EBS Project Number	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:

- 126. To support initial project request during “gate two” phase of conceptual review.
- 127. For the annual Benefits report that PSB compiles.
- 128. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 129. When a material scope change is identified and reported.
- 130. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 101) External service benefits: Improving the quality or quantity of services provided to the public
- 102) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 103) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 104) 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.

111. Describe why you expect the proposed IT investment to produce the benefit(s).
112. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
113. What is the current baseline for this measure?
114. What is the target for this measure? (How much improvement will this project achieve?)
115. 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.

106. Describe why you expect the proposed IT investment to produce the benefit(s).
107. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
108. What is the current baseline for this measure?
109. What is the target for this measure? (How much improvement will this project achieve?)
110. 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.

47. 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.

48. *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.

- 86. Describe why you expect the proposed IT investment to reduce costs?
- 87. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 88. What is the current baseline?
- 89. What is the target for this measure? (How much savings will this project achieve)
- 90. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

			<i>savings</i>

DOT - Wireless Transit Signal Priority (TSP)

IT Project Benefits Achievement Plan (Version 2)

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

- 105. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 106. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 107. To establish accountability for identifying and achieving benefits
- 108. 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.

King County Department/Agency Name	Department of Transportation (DOT)/Transit Division
Project Title	Wireless Transit Signal Priority (TSP)
EBS Project Number	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:

- 131. To support initial project request during “gate two” phase of conceptual review.
- 132. For the annual Benefits report that PSB compiles.
- 133. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 134. When a material scope change is identified and reported.
- 135. 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</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</i>	<i>How long did it take to complete or revise the</i>

<i>implementation, or project completion.</i>			<i>changed, indicate "review only".</i>	<i>form at this stage?</i>
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

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:

- 105) External service benefits: Improving the quality or quantity of services provided to the public
- 106) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 107) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 108) 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.

- 116. Describe why you expect the proposed IT investment to produce the benefit(s).
- 117. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 118. What is the current baseline for this measure?
- 119. What is the target for this measure? (How much improvement will this project achieve?)
- 120. 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.

- 111. Describe why you expect the proposed IT investment to produce the benefit(s).
- 112. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

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

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

115. *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.

49. *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.*

50. *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.

91. 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.

92. 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.

93. 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.

94. 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.

95. 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:

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 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

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.

Metric Description	Metrics	Baseline	Target	Actual
<i>Cost Avoidance. 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>	<i>This Cost Avoidance 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>	<i>The cost of purchasing and installing RF tag readers at 200 TSP intersections would have been approximately <u>\$7,000,000.</u></i>	<i>The cost of the Wireless TSP Project was <u>\$295,000.</u></i>	<i>Cost Avoidance. The Wireless TSP solution was implemented for <u>\$295,000.</u> This represented a potential Cost Avoidance 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 Cost Avoidance, not an actual cost savings because Transit likely would have installed fewer than 200 TSP intersections with the old technology.</i>

DPER (among others) - Permit Integration

IT Project Benefits Achievement Plan (Version 2)

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

- 109. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 110. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 111. To establish accountability for identifying and achieving benefits
- 112. 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.

King County Department/Agency Name	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
Project Title	Permit Integration
Project Number	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)
Kevin Workman	RES Supervisor DES/ Real Estate Services	PI Management Committee Operational oversight and management (franchise permitting)
Chris Wierzbicki	Deputy Director DOT/ Road Services	PI Management Committee Operational oversight and management (development & ROW permitting)
John Taylor	Assistant Division Director DNRP/Water and Land	PI Management Committee Operational oversight and management

	Resources	(development & XXXX?)
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	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:

- 136. To support initial project request during “gate two” phase of conceptual review.
- 137. For the annual Benefits report that PSB compiles.
- 138. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 139. When a material scope change is identified and reported.
- 140. 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)

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.

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>
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

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:

- 109) External service benefits: Improving the quality or quantity of services provided to the public
- 110) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 111) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 112) 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.

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

The PI project charter focuses on the delivery of services to citizens and businesses. Services include:

- Development permitting
- Code enforcement
- Business licensing
- Franchise permitting
- ROW permitting
- Special use permitting

Although Permit Integration (PI) project has been built around the replacement of several legacy systems, the PI project and service delivery improvement encompass all aspects of customer services. Specific achievements include:

DPER Customer Service Center improvements:

- Improved application readiness for review through a pre-screening service (PSS)
- Customer wait times displayed in permit center

New online services:

- Permit and license status for all programs

- Permit inspection scheduling for building and fire permits (IVR access as well)
- Code enforcement requests

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.

122. *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.

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

Direct measurement of available online permit types issued online in 2013.

Percentage of DPER permit fixed fees versus hourly fees in 2012.

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

The 2014 YE target percentage of online permits is 30%.

The 2014 beginning year target of permit fixed fees is 100%.

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

Online permits - During or before the end of 2014.

Fixed permit fees – January 1, 2014 (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.

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.

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

The implemented vendor solution includes an integrated web transaction portal, IVR interface and mobile data connections.

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

Ability implement to mobile services for use by field staff.

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

The previous amalgamation of permit systems did not have a COTs solution for mobile field access.

119. *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.

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

By the end of 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.

51. 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 XXXX and is expected to be de-supported beginning in YYYY.

The life-cycle for the new web-enabled solution is expected to be ZZZZ or longer.

The new system supports five distinct program areas:

- Development permits
- Business licenses
- Code enforcement
- Franchise permits
- ROW permits
- Special use permits

52. 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.

- 96. Describe why you expect the proposed IT investment to reduce costs?
- 97. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 98. What is the current baseline?
- 99. What is the target for this measure? (How much savings will this project achieve)
- 100. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				<i>savings</i>
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DPH - eCBD/CAD Interface at NORCOM

IT Project Benefits Achievement Plan (Version 2)

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

- 113. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 114. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 115. To establish accountability for identifying and achieving benefits
- 116. 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.

King County Department/Agency Name	Public Health – Seattle and King County Emergency Medical Services Division
Project Title	eCBD/CAD Interface at NORCOM
Project Number	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	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:

- 141. To support initial project request during “gate two” phase of conceptual review.
- 142. For the annual Benefits report that PSB compiles.
- 143. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 144. When a material scope change is identified and reported.
- 145. 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

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:

- 113) External service benefits: Improving the quality or quantity of services provided to the public
- 114) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 115) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 116) 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.

126. Describe why you expect the proposed IT investment to produce the benefit(s).
127. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
128. What is the current baseline for this measure?
129. What is the target for this measure? (How much improvement will this project achieve?)
130. 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.

121. Describe why you expect the proposed IT investment to produce the benefit(s).
122. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
123. What is the current baseline for this measure?

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

125. *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.

53. *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.*

North East King County Regional Public Safety Communication Agency (NORCOM) provides Fire/EMS dispatching to the North and East regions of King County, outside city of Seattle. NORCOM dispatchers use Criterria Based Dispatch (CBD) Guidelines to triage EMS calls to 9-1-1. NORCOM is currently using an CBD Software (eCBD)/Tri Tech interface developed in 2006. In 2008, NORCOM decided to purchase a new Computer Aided Dispatch (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.

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. Average life cycle replacement of CAD is 6-8 years.

This proposal is now to update the current eCBD and Tri Tech interface due to changes in technology. The functionality of the interface that NORCOM dispatchers have been using now for 7 years must be maintained. This allows NORCOM to provide excellent call processing and triage of medical calls to 9-1-1. Use of the eCBD Software and CAD Interface also allows EMS Division and NORCOM staff access to call processing data and reports. This functionality and efficiency that we currently enjoy must be maintained.

54. *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

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.

101. Describe why you expect the proposed IT investment to reduce costs?
102. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
103. What is the current baseline?
104. What is the target for this measure? (How much savings will this project achieve)
105. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DPH - eCBD/CAD Interface at Valley Communications

IT Project Benefits Achievement Plan (Version 2)

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

- 117. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 118. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 119. To establish accountability for identifying and achieving benefits
- 120. 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.

King County Department/Agency Name	Public Health – Seattle and King County Emergency Medical Services Division
Project Title	eCBD/CAD Interface at Valley Communications
Project Number	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
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Conceptual review	2/14/14	Linda Culley	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:

- 117) External service benefits: Improving the quality or quantity of services provided to the public
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system failures
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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.

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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.

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.

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

130. *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.

55. *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.*

56. *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.*

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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.

- 106. Describe why you expect the proposed IT investment to reduce costs?
- 107. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 108. What is the current baseline?
- 109. What is the target for this measure? (How much savings will this project achieve)
- 110. 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 of prompt payment	Processing Time annual savings, and percentage of purchases receiving prompt payment	<ul style="list-style-type: none"> • 10 days processing time • 10 percent of purchases are receiving discount 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts 	2 day processing time 20 percent of purchases are receiving prompt payment

<i>discounts.</i>	<i>discounts</i>	• <i>Savings of \$100,000</i>	• <i>\$400,000 savings</i>	<i>discounts \$200,000 savings</i>
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DPH / JHS - Jail Health Services Electronic Medication Administration

IT Project Benefits Achievement Plan (Version 2)

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

- 121. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 122. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
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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.

King County Department/Agency Name	Public Health/Jail Health Services
Project Title	Jail Health Services Electronic Medication Administration Project
Project Number	

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: Judy MacCully, Public Health Regional Administrator, Jail Health 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:

Name	Title / Agency	Project Role
Harjinder Sandhu	Pharmacist / JHS	Process Owner
Payshan Lee	Pharmacist / JHS	Process Owner
Sean Dumas;	Nursing Supervisor/JHS	Process Owner
Patrick Kuritz	Nursing Supervisor/JHS	Process Owner
Danotra McBride	PPM IV	Project Manager



Kaizen Event Team: Pharmacy, Nursing, Medical and Psych JHS Staff and Lean facilitators

Back row: Mike Zdravecky; Harjinder Sandhu; Aisha Whittaker; Sandy Macdonald; Jennifer Jones-Vanderleest; Cynthia Ta (behind Melissa) Dean Webb; Sean Dumas; Patrick Kuritz; Greg Burnworth; Jeremy Valenta **Front row:** Mike Schroeder; Ghia Coloma; Glenn Lirman; Sharon Rederford; Payshan Lee; Becky Berry; Kathy Woodruff; Danotra McBride

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:

- 151. To support initial project request during “gate two” phase of conceptual review.
- 152. For the annual Benefits report that PSB compiles.
- 153. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 154. When a material scope change is identified and reported.
- 155. 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>
Funding Release	12/09/2013	Judy MacCully	Migrated data from approved project materials to the New Benefits Achievement Plan Version 2	2 hours
Project Implementation	12/13/2013	Judy MacCully	5-day Medication Management Kaizen Event that occurred November 4th – November 8th, 2013.	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:

- 121) External service benefits: Improving the quality or quantity of services provided to the public
- 122) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 123) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 124) 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.

131. Describe why you expect the proposed IT investment to produce the benefit(s).
132. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
133. What is the current baseline for this measure?
134. What is the target for this measure? (How much improvement will this project achieve?)
135. 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.

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

Once the eMAR system is implemented, the JHS medication administration process will include technology enabled, streamlined steps for the preparation, administration, and documentation of medications. Removing the non-valued added steps will then allow a reallocation of the staff time to activities that add value to our patients. Clinicians and administrative staff will have more timely and improved access to the medication records along with improved accuracy and readability of medication administration data. In November 2013 JHS held a 5-day medication Kazien Event which served as a way of creating a foundation for an improved future state for medication management and the integration of the eMar technology to meet customer (our patient) needs. The expectation

going into the event was **“To improve the overall process efficiency with higher first pass quality, with a more consistent, reliable, and connected production system that results in a 50% reduction in administrative non-value added activities.”**

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

There are four areas where JHS expects to see measurable and demonstrated improvement. They include: a reduction in Pharmacy Technician staff time to print and organize paper Medication Administration Records; a reduction in Administrative Specialist II staff time to scan and perform quality assurance on scanned paper MAR; a reduction in nursing hours preparing for medication pass including time spent by nurses to review paper MARs for errors and patient refusals, comparing paper MARs with patient lists, and flagging MARs for narcotics; and, a reduction in the time it takes medical and psychiatric providers to retrieve paper MARs and adjust scanned images in order to review scanned MARs.

A draft measurement plan was a deliverable from the Kaizen Event. The collection of the data and reporting on the measurement plan is the responsibility of the process owners: the site Pharmacy Supervisors and site Nursing Supervisors. The process owners are finalizing the measurement plan and this BAP will be updated as the information is available during the project implementation phases.

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

The following are the baseline measures collected at the development of the business case: Pharmacy Technician staff spend approximately 521 hours/year to print and organize paper MARs;

Administrative Specialist II staff spend 935 hours/year to scan and perform quality assurance on scanned paper MARs;

Nurses dedicate approximately 2,600 hours/year to review paper MARs in preparation for the med pass;

Medical and Psychiatric Providers spend about 380 hours per year retrieving and adjusting images of MARs for their clinical review.

The process walks taken as a part of the Kaizen Event recorded an overall process time from Provider Order to Med Administration of 323 min with a total of 42 steps. Of those 11 steps or

26% were value added.

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

The target for the printing and organizing of the paper MAR (Pharm Tech) and the scanning of the paper MAR into the EHR (Administrative Staff) is zero.

The Nurse time should be reduced by 80% as they move to a more efficient method for med pass preparation. Provider (both Medical and Psychiatric) time initially will be reduced by 50% since they will have to access the Medication Administration application to look up and review the record. Eventually the time will be further reduced when the history of medication administration is moved into the EHR and becomes part of the patient's medical record.

The expectation from the Kaizen event was that there would be a 50% reduction in non-value added and administrative tasks in the medication management process.

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

Within 30 days of implementation JHS will realize the above benefits. Currently JHS plans to Go-Live in April 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.

57. *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.*

58. *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.

111. Describe why you expect the proposed IT investment to reduce costs?
112. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
113. What is the current baseline?
114. What is the target for this measure? (How much savings will this project achieve)
115. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DPH / EMS - EMIRF (Electronic Medical Incident Report Form) Application Replacement

IT Project Benefits Achievement Plan (Version 2)

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

- 125. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 126. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 127. To establish accountability for identifying and achieving benefits
- 128. 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.

King County Department/Agency Name	Department of Public Health – Seattle & King County (PHSKC), Emergency Medical Services (EMS) Division, Medic One (Section)
Project Title	EMIRF (Electronic Medical Incident Report Form) Application Replacement
EBS Project Number	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:

- 156. To support initial project request during “checkpoint #2” phase of conceptual review.
- 157. To inform the annual Benefits Report that PSB compiles.
- 158. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 159. When a material scope change is identified and reported.
- 160. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	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

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:

- 125) External service benefits
- 126) Internal service benefits
- 127) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 128) Reduced cost to produce services

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 – improvement to the quality or quantity of services provided to the public
- Category #2: Internal service benefits – improvement to the 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 (internal or external)

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.

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137. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
138. What is the current baseline for this measure?
139. What is the target for this measure? (How much improvement will this project achieve?)
140. 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 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 also improve access to data in the emergency department when and where needed.

In addition, after this project is implemented, King County will have direct access to patient outcome data directly through the ESO data repository. Patient outcome data is used by DPH's EMS Quality Improvement (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.

With these factors in mind, this project will achieve two benefits that will improve quality of service for our King County constituents: 1) ability to transmit pre-hospital data en route to the receiving hospital in advance of the patient's arrival and 2) ability to obtain patient outcome data directly from the ESO data exchange. There are no added benefits related to paramedics completing forms more quickly, or getting back in service more rapidly.

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

The proposed benefit measures are outputs due to limited ability to measure true service quality benefits. Improved quality of service (i.e. improved emergency medical patient care) is extremely difficult to measure due to the various contributing factors associated with improved patient outcomes. Using patient outcomes as the unique measurable benefit from this project has limited validity as it implies a cause-and-effect relationship. However, excluding the possible contributing effect of providing pertinent patient information to a hospital prior to arrival or accessing patient outcome data is equally deficient. The data received in advance of a patient's arrival will enable hospitals to prepare for the patient's arrival and to begin treatment more expediently. In any emergency medical situation, every second counts and advance preparation can mean the difference between an optimal, positive patient outcome, and a less desirable outcome (e.g., permanent disability, death).

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.

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B2):

EMS quality improvement staff will track the number of patient outcomes obtained directly from the data exchange. A benefit will be achieved when a patient outcome record is retrieved from the ESO data repository. This benefit will be achieved when EMS QI staff reports a reduced lag time in receiving patient outcome data. The benefit will be achieved when EMS QI staff identifies that upon a patient record being closed at the hospital, the data is immediately accessible via the ESO ePCR SaaS application.

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.

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B2):

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?)*

Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital (B1): KCM1's target goal is to achieve 100% of all transported patient cases (approximately 7,500 cases per year).

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B2): KCM1's target goal is to electronically retrieve patient outcome data from 100% of all transported patient cases (approximately 7,500 cases per year).

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.

Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange (B2):

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.

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

116. *Describe why you are proposing to upgrade or replace existing technology. Please include the 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.

117. *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.*

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?*

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.

2. *How will you measure the cost reduction or cost avoidance? (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.

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.

3. *What is the current baseline?*

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.

4. *What is the target for this measure? (How much savings 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.

5. *When is the cost reduction 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.

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 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"> • 10 days processing time • 10% of purchases are receiving discount • \$100,000 savings 	<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
<i>Reduced time spent by nurses to review paper MARs for errors and patient refusals, compare MARs with patient lists, and flag MARs for narcotics</i>	<i>Reduction in nursing hours preparing for medication pass</i>	2,600 hours/year	0 hours/year	100 hours
<i>Reduced time to print and organize paper MARs</i>	<i>Reduction in Pharmacy Technician staff time</i>	521 hours/year	0 hours/year	0 hours
<i>Reduced time to scan and perform quality assurance on scanned paper MARs</i>	<i>Reduction in Administrative Specialist II staff time</i>	935 hours/year	0 hours/year	0 hours

	<i>Reduced time for medical and psychiatric providers to retrieve paper MARs and adjust scanned images in order to review scanned MARs</i>	<i>Minutes to retrieve and adjust images of MARs</i>	<i>380 hours/year</i>	<i>0 hours/year</i>	<i>0 hours</i>

DPH – Health Information Technology (HIT)

**IT Project Benefits Achievement Plan (Version 2)
12/31/2013**

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

- 129. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 130. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 131. To establish accountability for identifying and achieving benefits
- 132. 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.

King County Department/Agency Name	Department of Public Health
Project Title	PH-HIT Improvement Project
Project Number	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.

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. 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
Cindy West	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
Marcy Maurer	Operations Manager, CHS	Steering Committee Member
Ben Sanders	Medical Director	Steering Committee Member
Cristin Burris	PPM IV	HIT Project
Jeff Boudreau	PPM III	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:

- 161. To support initial project request during “gate two” phase of conceptual review.
- 162. For the annual Benefits report that PSB compiles.
- 163. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 164. When a material scope change is identified and reported.
- 165. 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	

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:

- 129) External service benefits: Improving the quality or quantity of services provided to the public
- 130) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 131) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 132) 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 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 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.

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 see by a provider will have clinical summaries provided after office visits.

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-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.

136. *Describe why you expect the proposed IT investment to produce the benefit(s).*
 Availability of complete patient records/health information for clinical decision making
137. *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.
138. *What is the current baseline for this measure?*
 66%
139. *What is the target for this measure? (How much improvement will this project achieve?)*
 99%
140. *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.

59. *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.
60. *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.

- 118. *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 outlined in the Meaningful Use Standards criteria. If Public Health does not implement the system we will not receive the funds.
- 119. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
Receipt of payment.
- 120. *What is the current baseline?*
N/A. PHSKC is not currently meeting Meaningful Use criteria.
- 121. *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.
- 122. *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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DPH / JHS - Digital X-Ray

IT Project Benefits Achievement Plan (Version 2)

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

- 133. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 134. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 135. To establish accountability for identifying and achieving benefits
- 136. 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.

King County Department/Agency Name	Department of Public Health – Seattle & King County (PHSKC), Jail Health Services (JHS) Division
Project Title	DPH KCIT JHS Digital X-Ray
Project Number	1111943

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, Public Health

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
Thomas Thompson	Business Operations Manager, Jail Health Services Division	Project Manager
Casey Cassidy	IT Manager, King County Information Technology Department (KCIT-PH)- Public Health	IT Project Manager
Tracie Jacinto	IT Business Analyst, KCIT-PH	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:

- 166. To support initial project request during “gate two” phase of conceptual review.
- 167. For the annual Benefits report that PSB compiles.
- 168. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 169. When a material scope change is identified and reported.
- 170. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Project implementation	1/7/2014	Tracie Jacinto	New, initial draft	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:

- 133) External service benefits: Improving the quality or quantity of services provided to the public
- 134) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 135) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 136) 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.

141. Describe why you expect the proposed IT investment to produce the benefit(s).
142. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
143. What is the current baseline for this measure?
144. What is the target for this measure? (How much improvement will this project achieve?)
145. 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.

141. Describe why you expect the proposed IT investment to produce the benefit(s).
142. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
143. What is the current baseline for this measure?
144. What is the target for this measure? (How much improvement will this project achieve?)
145. 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.

61. 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 replace outdated, 25-year old computed radiology (CR) x-ray equipment at both the King County Correctional Facility (KCCF) and Maleng Regional Justice Center (MRJC) with digital x-ray equipment. The 25+ years of productive use for this x-ray equipment, far exceeded the expected life of this type of technology. JHS will implement a modern digital x-ray system that will result in cost savings for JHS and will not rely on environmentally hazardous chemical-based film processing that can be operated by King County JHS nursing staff versus contracted radiology staff. The average life cycle replacement for digital x-ray technology is approximately 20 to 25 years.

Digital x-ray equipment will allow JHS to perform follow-up orthopedic X-rays in-house at King County's correctional facilities where the patient is currently being housed. Thus, this project reduces the inherent security risks and costs associated with securely transporting inmates in-and-out of the facility to a non-secured environment. This improves JHS clinical systems infrastructure and transforms a common business practice, patient X-rays, to a more streamlined and efficient process and allows for images to be stored with the patient's other clinical information in the Electronic Health Record.

62. 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 will allow King County to meet regulatory compliance to provide healthcare to inmates. This project will also reduce the risk of inmate escape incidents and the risk of injury to DAJD corrections officers during the transport process from the County's correctional facilities to the hospital. Per the Department of Juvenile and Adult Detention:

Transporting inmates is among the most dangerous, but necessary assignment for a corrections officer. While a majority of prisoner transports are accomplished without incident, prisoners have escaped killing or injuring an officer, injured themselves or been killed, harmed, or killed innocent citizens. On average there were 309 escapes reported annually in the United States.

- 84% of the incidents, the prisoner escaped from the back seat of the caged vehicle.
- 12% of the prisoners were injured and 3% were killed.
- 12% of the officers were injured and less than 1% of the officers were killed as a result of the incident.

The transport process represents some inmate's last and best chance for escape.

Additionally, a prisoner injured during a transport may claim a Fourth Amendment right violation for

the misuse of restraints, excessive use of force, and a failure to provide medical care. Additional examples include: an estate of a deceased prisoner may file a lawsuit against the department for the wrongful death of a prisoner during transport; or a lawsuit may be filed by a citizen who was harmed or killed due to a prisoner escape during transport. Some federal courts have held that the transporting department is liable for a prisoner's behavior during an escape from a transport or an injury incurred during the transport process.

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.

123. *Describe why you expect the proposed IT investment to reduce costs?*

Acquiring digital x-ray equipment at both sites will improve internal operations by enhancing business processes which will reduce or eliminate the following costs:

- Cost to purchase chemicals and x-ray film: ~\$5,000 per year
- Cost to transport inmates from correctional facilities to hospitals for follow-up x-rays: ~\$20,500 to transport approximately 155 inmates; which includes up to three hours of Court Detail transport time, transport preparation, transport, and return

124. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

JHS will monitor the supplies and professional services expenses associated with providing x-rays to patients. A benefit will be achieved if JHS incurs little to no costs associated with the two items listed above

125. *What is the current baseline?*

- Cost to purchase chemicals and x-ray film: ~\$5,000 per year
- Transport inmates from correctional facilities to hospitals for follow-up x-rays: ~\$20,500 per year

to transport approximately 155 inmates; which includes up to three hours of Court Detail transport time, transport preparation, transport, and return

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

JHS targets that it will avoid incurring the following costs

- Cost to purchase chemicals and x-ray film: ~\$5,000 per year
 Transport inmates from correctional facilities to hospitals for follow-up x-rays: ~\$20,500 per year

127. *When is the cost reduction likely to be achieved?*

JHS anticipates that these benefits will be achieved by Q4 2014, immediately after the project is completed and the digital x-ray equipment is being fully utilized at both correctional facilities.

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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<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"> • <i>10 days processing time</i> • <i>10 percent of purchases are receiving discount</i> • <i>Savings of \$100,000</i> 	<ul style="list-style-type: none"> • <i>1 day processing time</i> • <i>30 percent of purchases are receiving prompt payment discounts</i> • <i>\$400,000 savings</i> 	<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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DPH / MEO - Life Events Web Portal (LEWP)

IT Project Benefits Achievement Plan (Version 2)

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

- 137. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 138. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 139. To establish accountability for identifying and achieving benefits
- 140. 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.

<p>King County Department/Agency Name</p>	<p>Department of Public Health – Seattle and King County (PHSKC) King County Medical Examiner’s Office (KCMEO)</p>
<p>Project Title</p>	<p>Life Events Web Portal (LEWP)</p>
<p>Project Number</p>	<p>0</p>

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, Public Health Director / Health 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
Colin Jones	Project/Program Manager DPH / Prevention / KCMEQ	Project Sponsor
Robbie Gaskin	Project/Program Manager DPH / Prevention / Vital Statistics	Project Sponsor
Ron Bishop	IT Business Analyst KCIT-PH	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:

- 171. To support initial project request during “gate two” phase of conceptual review.
- 172. For the annual Benefits report that PSB compiles.
- 173. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 174. When a material scope change is identified and reported.
- 175. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: Funding release	11/1/13	Jack Smith	Changed the metrics we will measure	2 hours
Annual Report	02/07/14	Robbie Gaskin	New	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:

- 137) External service benefits: Improving the quality or quantity of services provided to the public
- 138) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 139) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 140) 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.

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

This project is designed to increase customer service by creating an online portal for customers of county services around birth and death events. It will provide an interface that streamlines customer service, especially to organizations and customers that are regular users of our services, by providing a consistent, online, common place to: report deaths; request burial and cremation reviews; request and purchase medical examiner reports; and request and purchase birth and death certificates. It will also provide an internal e-commerce solution that has been a consistent request from the public customer base in Vital Statistics. On a daily basis we turn down customers that would like to use their credit card to purchase reports or certified copies of birth and death certificates.

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

The ability to report deaths online, resulting in customer service benefits and increased documentation of the information provided to death investigators.

The ability to request and order disposition authorizations online, using a credit card, debit card, or current accounts receivable credit account (funeral homes).

The ability to order medical examiner reports online directly from King County, using a credit or debit card.

The ability to order birth and death certificates online directly from King County, using a credit or debit card.

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

Currently, King County does not provide any of the services online and the baseline is zero. A private company offers online sales of vital records, provides the information to King County for processing as if it was a paper record, and charges up to a 62% service fee for the service. This project will create a way for our customers to access our services directly, but we will continue to accept orders however they are received, including from the private company.

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

The death reporting target is 50% of deaths reported via the web portal.

The disposition authorization review target is 90% requested via the web portal.

The medical examiner report sales target is 50% requested via the web portal.

The certificate sales target is 50% of existing mail order and third party online sales handled via the web portal. In addition we expect new sales as a result of offering e-commerce as a payment method.

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

We expect these benefits to be achieved within 5 years of 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.

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

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

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

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

150. *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.

63. 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.

64. 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.

128. Describe why you expect the proposed IT investment to reduce costs?

129. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

130. What is the current baseline?

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

132. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

DPH – System-wide Enhanced Network Design (SEND)

IT Project Benefits Achievement Plan (Version 2)

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

- 141. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 142. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure

- 143. To establish accountability for identifying and achieving benefits
- 144. 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.

King County Department/Agency Name	Public Health – Seattle & King County/EMS Division
Project Title	Systemwide Enhanced Network Design (SEND) Project
EBS Project Number	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:

- 176. To support initial project request during “gate two” phase of conceptual review.
- 177. For the annual Benefits report that PSB compiles.

- 178. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 179. When a material scope change is identified and reported.
- 180. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 141) External service benefits: Improving the quality or quantity of services provided to the public
- 142) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 143) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 144) 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.

151. 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.

152. *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.

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.

153. *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.

154. *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.

155. *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.

151. 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.

152. *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.

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.

153. *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.

154. *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).

155. *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.

65. 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.

66. 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.

- 133. Describe why you expect the proposed IT investment to reduce costs?
- 134. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 135. What is the current baseline?
- 136. What is the target for this measure? (How much savings will this project achieve)
- 137. 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"> • 10 days processing time • 10 percent of purchases are 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving 	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>receiving discount</i> • <i>Savings of \$100,000</i>	<i>prompt payment discounts</i> • <i>\$400,000 savings</i>	<i>prompt payment discounts</i> <i>\$200,000 savings</i>
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KCC – KCTV High Definition Upgrade

IT Project Benefits Achievement Plan (Version 2)

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

- 145. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 146. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 147. To establish accountability for identifying and achieving benefits
- 148. 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.

King County Department/Agency Name	King County Television
Project Title	High Definition Upgrade
Project Number	

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, 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
Michael Woywod	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:

- 181. To support initial project request during “gate two” phase of conceptual review.
- 182. For the annual Benefits report that PSB compiles.
- 183. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 184. When a material scope change is identified and reported.
- 185. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 145) External service benefits: Improving the quality or quantity of services provided to the public
- 146) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 147) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 148) 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.

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

Upgrading to high definition from digital will produce a better quality picture. High definition is the industry standard and viewers expect to see high definition.

157. 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.

158. What is the current baseline for this measure?

We are currently broadcasting in standard definition

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

The target is broadcasting in high definition

160. When is the benefit likely to be achieved?

We expect to be broadcasting in high definition by X date.

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.

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

While this project will cut production time and man hours, t

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

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

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

160. *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.

67. *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.

68. *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.

- 138. Describe why you expect the proposed IT investment to reduce costs?
- 139. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 140. What is the current baseline?
- 141. What is the target for this measure? (How much savings will this project achieve)
- 142. 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"> • 10 days processing time 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of 	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"> • <i>10 percent of purchases are receiving discount</i> • <i>Savings of \$100,000</i> 	<p><i>purchases are receiving prompt payment discounts</i></p> <ul style="list-style-type: none"> • <i>\$400,000 savings</i> 	<p><i>20 percent of purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i></p>
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KCE / PSB - Budget System Project Information Center 2014 Modifications

IT Project Benefits Achievement Plan (Version 2)

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

- 149. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 150. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 151. To establish accountability for identifying and achieving benefits
- 152. 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.

<p>King County Department/Agency Name</p>	<p>Office of Performance, Strategy and Budget</p>
<p>Project Title</p>	<p>Budget System Project Information Center 2014 Modifications</p>
<p>EBS Project Number</p>	<p>1121753</p>

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
Mike Morrison	Capital Program Administrator/PSB	Coordinator
Sid Bender	Capital Manager/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
David Hartwell	Project Manager/Roads Services	Roads Services Data Integration Coordinator – Budgeting and Quarterly Reporting
Tina Rogers	Manager/Capital Oversight Manager/King County Auditor	(This portion of the work will be addressed at a later date) Requirements Advisory - Risk Scoring Migration -Access/Excel to SQL - Ord, 16764
Nori Catabay	Sustainability Manager/King County	(This portion of the work will be addressed at a later date) Requirements Advisory – Green Building Ordinance
Dennis Matthews	Developer, KCIT	Advisory – SQL Programming Development

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:

- 186. To support initial project request during “gate two” phase of conceptual review.
- 187. For the annual Benefits report that PSB compiles.
- 188. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 189. When a material scope change is identified and reported.
- 190. 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	10/25/13	See Section 3	Revision required for new BAP format	4 hours draft/16 hours including participant review

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:

- 149) External service benefits: Improving the quality or quantity of services provided to the public
- 150) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 151) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 152) 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.

- 161. Describe why you expect the proposed IT investment to produce the benefit(s).
- 162. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 163. What is the current baseline for this measure?
- 164. What is the target for this measure? (How much improvement will this project achieve?)
- 165. 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.

161. *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 capital project oversight and training for agencies.

Who will be able to reinvest their time? Primarily, the PSB capital program administrator, who has over 25 years 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 improved user satisfaction because more user friendly interface, better permissions, and a better interface with EBS data.

162. *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.

153. *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.

69. *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. Ominibus submissions

2. Supply data to GIS based public website located at 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.

70. 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.*

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

143. *Describe why you expect the proposed IT investment to reduce costs?*
144. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
145. *What is the current baseline?*
146. *What is the target for this measure? (How much savings will this project achieve)*
147. *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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCE / PSB - Project Information Center Report Migration

IT Project Benefits Achievement Plan (Version 2)

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

- 154. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 155. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 156. To establish accountability for identifying and achieving benefits
- 157. 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.

King County Department/Agency Name	Performance Strategy and Budget
Project Title	Project Information Center Report Migration
Project Number	1121286

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.

Jonathon Swift

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
James Walsh		PSB Tech Group Manager
Sid Bender		PSB CIP Manager
Hans Erickson		WTD Project Information and Budgeting Supervisor
Mike Morrison		PSB Project Lead
Glenn Evans		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:

- 191. To support initial project request during “gate two” phase of conceptual review.
- 192. For the annual Benefits report that PSB compiles.
- 193. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 194. When a material scope change is identified and reported.
- 195. 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 Benefits Report	3/24/14		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:

- 153) External service benefits: Improving the quality or quantity of services provided to the public
- 154) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 155) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 156) 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.

166. Describe why you expect the proposed IT investment to produce the benefit(s).
167. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
168. What is the current baseline for this measure?
169. What is the target for this measure? (How much improvement will this project achieve?)
170. 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.

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

Reports will be available in a single online SQL reporting Services Interface, and will be published and made available for historical purposes.

Prior systems utilized excel and multiple data sources, while the current reports use a single data source.

164. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- a. *Users of the reports filled out surveys about the current reports, which were collected at the beginning of the project. Responses were recorded and averaged.*
 - b. *At the end of the project, a new survey will be conducted.*

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

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

A 20% improvement in user responses is the target.

167. *When is the benefit likely to be achieved? Beginning in late 2015, after all reports have been successfully migrated and training 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.

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71. *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.*

72. *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

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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.

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Benefit Achievement Summary

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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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<p><i>2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings</i></p>
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KCIT - 800 MHz Trunked Radio System Sprint/Nextel Rebanding

IT Project Benefits Achievement Plan (Version 2)

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<p>King County Department/Agency Name</p>	<p>KCIT</p>
<p>Project Title</p>	<p>800 MHz Trunked Radio System Sprint/Nextel Rebanding</p>
<p>Project Number</p>	<p>347302</p>

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?

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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?

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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.

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.

- 171. Describe why you expect the proposed IT investment to produce the benefit(s).
- 172. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 173. What is the current baseline for this measure?
- 174. What is the target for this measure? (How much improvement will this project achieve?)
- 175. 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.

168. Describe why you expect the proposed IT investment to produce the benefit(s).
169. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
170. What is the current baseline for this measure?
171. What is the target for this measure? (How much improvement will this project achieve?)
172. 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.

73. 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.

74. 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.

153. Describe why you expect the proposed IT investment to reduce costs?
154. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
155. What is the current baseline?
156. What is the target for this measure? (How much savings will this project achieve)
157. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

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.

KCIT - Administration Building Re-Wire

IT Project Benefits Achievement Plan (Version 2)

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

162. To achieve a clear understanding and focus on the benefits of a project prior to its beginning

- 163. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 164. To establish accountability for identifying and achieving benefits
- 165. 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.

King County Department/Agency Name	KCIT
Project Title	Administration Building Re-Wire Project
EBS Project Number	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

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:

- 201. To support initial project request during “gate two” phase of conceptual review.
- 202. For the annual Benefits report that PSB compiles.
- 203. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 204. When a material scope change is identified and reported.
- 205. 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	9/9/2013	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

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:

- 161) External service benefits: Improving the quality or quantity of services provided to the public
- 162) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 163) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 164) 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.

- 176. Describe why you expect the proposed IT investment to produce the benefit(s).
- 177. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 178. What is the current baseline for this measure?
- 179. What is the target for this measure? (How much improvement will this project achieve?)
- 180. 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.

173. 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.

174. 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.

175. What is the current baseline for this measure?

The current cat3 wiring is documented at 10Mb maximum throughput

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

The target is 80% increase in network capacity. Currently the connection speed is 10Mb. After the project is complete, the standard connection speed will be 100mb with a maximum speed of 1Gb.

177. 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.

75. 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.

76. 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.

158. 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)

159. 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 an additional free cable per location.

160. 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.

- 161. *What is the target for this measure? (How much savings will this project achieve)*
30-50% off the cost to run new cables.
- 162. *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:

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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCIT - Business Continuity

IT Project Benefits Achievement Plan (Version 2)

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

- 166. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 167. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 168. To establish accountability for identifying and achieving benefits
- 169. 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.

King County Department/Agency Name	King County Information Technology
Project Title	Business Continuity
Project Number	

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	Operating Budget Manager

	Manager/KCIT	
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:

- 206. To support initial project request during “gate two” phase of conceptual review.
- 207. For the annual Benefits report that PSB compiles.
- 208. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 209. When a material scope change is identified and reported.
- 210. 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		

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:

- 165) External service benefits: Improving the quality or quantity of services provided to the public
- 166) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 167) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 168) 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.

181. Describe why you expect the proposed IT investment to produce the benefit(s).
182. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
183. What is the current baseline for this measure?
184. What is the target for this measure? (How much improvement will this project achieve?)
185. 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.

178. *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.

179. *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".

180. *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

181. *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**

182. *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**

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.

77. 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.

78. 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.

- 163. Describe why you expect the proposed IT investment to reduce costs?
- 164. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 165. What is the current baseline?
- 166. What is the target for this measure? (How much savings will this project achieve)
- 167. 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
<ul style="list-style-type: none"> • Alternate Data Center (ADC) 	Establish and implement alternate facility	<ul style="list-style-type: none"> • No physical location is available 	<ul style="list-style-type: none"> • Facility established by September 2007 	Facility established June 2008 and turned over to operations June 2008
<ul style="list-style-type: none"> • Network 	Establish network connection to	<ul style="list-style-type: none"> • No physical facility 	<ul style="list-style-type: none"> • Establish connection by 	Facility had network connectivity

	Connectivity for the Alternate Data Center	<i>alternate facility</i>		<i>October 2007</i>	<i>in June 2008 and was turned over to operations June 2008</i>
	<ul style="list-style-type: none"> Mainframe recovery services via SunGard 	<i>Establish a contract with SunGard</i>	<ul style="list-style-type: none"> No current contract 	<ul style="list-style-type: none"> Establish contract by August 2007 	<i>Contract established in March 2008 and turned over to operations September 2008</i>
	<ul style="list-style-type: none"> Quick-ship equipment via Agility 	<i>Establish a Quick-ship contract with Agility Services</i>	<ul style="list-style-type: none"> No current contract 	<ul style="list-style-type: none"> Establish contract by October 2007 	<i>Contract established in April 2008 and turned over to operations September 2008</i>
	<ul style="list-style-type: none"> Emergency Notification System (ENS) 	<i>Application for use of service</i>	<ul style="list-style-type: none"> Currently not registered to use service 	<ul style="list-style-type: none"> Establish registration, input information, and test for use by December 2006 	<i>Registration completed June 2007 Initial test completed August 2007 Turned over to operations April 2010</i>
	<ul style="list-style-type: none"> Government Emergency Telecommunications Service (GETS) 	<i>Application for use of service</i>	<ul style="list-style-type: none"> Currently not registered to use service 	<ul style="list-style-type: none"> Establish registration September 2007 	<i>Registration complete June 2007 and turned over to operations November 2007</i>
	<ul style="list-style-type: none"> Wireless Priority Services 	<i>Application for use of service</i>	<ul style="list-style-type: none"> Currently not registered to use service 	<ul style="list-style-type: none"> Establish registration September 2007 	<i>Registration complete June 2007 and turned over to operations</i>

	(WPS)				November 2007
	<ul style="list-style-type: none"> Information Technology Emergency Management Response Plan (EMRP) 	<i>Create an Emergency Management Response Plan</i>	<ul style="list-style-type: none"> Currently no plan exists 	<ul style="list-style-type: none"> 	<p>Plan was written and tested in August 2007 was turned over to operations in April 2010</p>
	<ul style="list-style-type: none"> Networker Backup and Recovery Services 	<i>Establish a secondary backup system</i>	<ul style="list-style-type: none"> No system exists 	<ul style="list-style-type: none"> October 2007 	<p>Implemented June 2008 was turned over to operations June 2008</p>
	<ul style="list-style-type: none"> Active Directory and Exchange 	<i>Implement a secondary Exchange environment and extend the production Active Directory environment into the ADC</i>	<ul style="list-style-type: none"> No System exists 	<ul style="list-style-type: none"> October 2007 	<p>Implemented December 2007 was turned over to operations August 2008</p>
	<ul style="list-style-type: none"> ❖ Disaster Recovery Exercises 	<i>Conduct Disaster Recovery Exercises</i>	<ul style="list-style-type: none"> Currently no exercises are being conducted 	<ul style="list-style-type: none"> October 2007 	<p>A single exercise was conducted, in 2008; A Testing Training and Exercise Program is scheduled for completion December 2016</p>
	<ul style="list-style-type: none"> ❖ KCIT Testing, Training & 	<i>Create for KCIT an industry</i>	<ul style="list-style-type: none"> Currently there is no TT&E 	<ul style="list-style-type: none"> December 2016 	

Exercise Program	standard Testing, Training & Exercise program (TT&E)	Program		
❖ Individual Disaster Recovery Plans	Create Disaster Recovery Plans for the Essential IT Components	• Currently no Disaster Recovery Plans Exist	• October 2007	DR Plans are inadequate; Business Continuity Plans are scheduled for completion December 2016
• Business Continuity Plans	Create Business Continuity Plans for IT Components in support of department and agency Essential Services defined in COOP	• Currently there are minimal components of a Business Continuity Plans;	• December 2016	
• Operating Budget	Establish a Business Continuity operating budget	• There was no Business Continuity Program	• October 2007	Budget established 432024
• Countywide IT Business Continuity Policy and Guidelines	Establish a policy	• There was no Policy	• October 2007	The current policy is not clear and concise;
• King County IT Business Continuity	Current policy is not clear and concise on what department and agencies	•	• December 2014	

<p>uity Policy & Guidelines</p>	<p><i>need to do</i></p>			
<ul style="list-style-type: none"> • CoCo Interoperable Communications System 	<p><i>Alternate communication system</i></p>	<ul style="list-style-type: none"> • <i>No current system in place</i> 	<ul style="list-style-type: none"> • <i>December 2006</i> 	<p><i>October 2007 pilot was terminated. Not a viable solution</i></p>
<ul style="list-style-type: none"> • 		<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	
<ul style="list-style-type: none"> • 		<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • 	

KCIT - Business Empowerment & User Mobility (BEUM)

IT Project Benefits Achievement Plan

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

- 170. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 171. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 172. To establish accountability for identifying and achieving benefits
- 173. 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.

<p>King County Department/Agency Name</p>	<p>KCIT</p>
<p>Project Title</p>	<p>Business Empowerment & User Mobility (BEUM)</p>
<p>Project Number</p>	<p>1117291</p>

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
Jayne Pendergast	DCIO	Project Sponsor
Bob Micielli	IT Enterprise Manager III	Steering Committee Member
John Storch	Enterprise Manager III	Steering Committee Member
Ralph Johnson	Chief Information Security/Privacy Officer	Steering Committee Member
Lori Dickneite	Engineering Supervisor	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:

- 211. To support initial project request during “gate two” phase of conceptual review.
- 212. For the annual Benefits report that PSB compiles.
- 213. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 214. When a material scope change is identified and reported.
- 215. 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>
Funding Release	08-30-13	Lloyd Jordan	New, initial draft	.5 hrs
Project Implementation	02-12-14	Lloyd Jordan	Review Only	.5 hrs

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:

- 169) External service benefits: Improving the quality or quantity of services provided to the public
- 170) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 171) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 172) 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.

186. Describe why you expect the proposed IT investment to produce the benefit(s).
187. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
188. What is the current baseline for this measure?
189. What is the target for this measure? (How much improvement will this project achieve?)
190. 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.*

79. 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.

80. *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.

- 168. Describe why you expect the proposed IT investment to reduce costs?
- 169. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 170. What is the current baseline?
- 171. What is the target for this measure? (How much savings will this project achieve)
- 172. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCIT - Unified Communications

IT Project Benefits Achievement Plan (Version 2)

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

- 174. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 175. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 176. To establish accountability for identifying and achieving benefits
- 177. 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.

King County Department/Agency Name	KCIT
Project Title	Countywide Telephony System Replacement/Unified Communications
Project Number	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:

- 216. To support initial project request during “gate two” phase of conceptual review.
- 217. For the annual Benefits report that PSB compiles.
- 218. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 219. When a material scope change is identified and reported.
- 220. 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</i>	<i>Date this</i>	<i>Who did the document</i>	<i>A brief summary of what changed in the document. If</i>	<i>How long did it take to</i>

<i>release, annual report, project implementation, or project completion.</i>	<i>document was updated</i>	<i>updates?</i>	<i>this is an initial draft, please indicate new. If nothing has changed, indicate "review only".</i>	<i>complete or revise the form at this stage?</i>
Project Implementation	3/4/2014	Christine Chou	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:

- 173) External service benefits: Improving the quality or quantity of services provided to the public
- 174) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 175) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 176) 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.

191. *Describe why you expect the proposed IT investment to produce the benefit(s).*
192. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
193. *What is the current baseline for this measure?*
194. *What is the target for this measure? (How much improvement will this project achieve?)*
195. *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.

6. *Describe why you expect the proposed IT investment to produce the benefit(s).*
7. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
8. *What is the current baseline for this measure?*

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

10. *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.

81. *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

82. *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.

173. *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.

174. *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.

175. *What is the current baseline?*

Current baseline is the 2015 PSQ Countywide voice charges: 6,680,037 (excluding agency specific needs)

176. *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

177. *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:

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 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings



King County

King County Information Technology

King County Executive Office

CNK-EX-0600

401 Fifth Avenue, Suite 600

Seattle, WA 98104

206-263-7887 Fax 206.296.7608

TTY Relay: 711

June 20, 2014

To: Jennifer Giambattista, Senior Legislative Analyst
King County Council

From: John Arthur Wilson, Special Projects Manager
King County Information Technology

Re: **BAP Addendum on UC/Lync Customer Satisfaction**

This is a brief memo outline proposed BAP measurements for the UC/Lync project focusing on customer satisfaction. In late March 2014, we sent out a countywide survey on UC/Lync. We received 1,200 responses on a wide range of Unified Communications topics. The survey was designed to gauge customer satisfaction, identify problem areas with existing deployments, and shine a light on a path forward in terms of training and staging of future deployments to increase customer satisfaction.

Going forward, our goals are two-fold: measure customer satisfaction related to resolution of a discrete set of core problems – call quality, dropped calls, call audio delay, and call transfers – and track customer satisfaction with the array of Lync features, such as Instant Messaging, Presence, Lync Meeting, video conferencing, and phone calls.

Project Quality issues

- Connectivity
- Call Quality
- Call Pick Up Audio Delay
- Dropped Calls
- Call Transfers

Lync Function and Features & User Satisfaction Levels

- Instant Messaging
- Lync Conferencing
- Video Conferencing
- Desktop/Document Sharing
- Peer-to-Peer Calling
- Enterprise External Calling

BAP LYNC ADDENDUM

2

Here are results from the March 31 survey:

Tools	Zero problems	1 - 2 problems	6 or more problems	Zero Problems 7/15 Target	Zero Problems 7/16 Target
Content/Desktop Sharing	86.2%	10.4%	3.4%	90.000%	95.000%
Online Meetings	83.8%	13.2%	2.9%	85.000%	98.000%
Call Transfers	72.8%	16.9%	10.3%	80.000%	85.000%
Dropped Calls	52.9%	31.7%	15.5%	80.000%	90.000%
Call Pick-Up Audio	50.8%	22.2%	27.0%	80.000%	85.000%
Call Quality	46.5%	32.8%	20.7%	85.000%	90.000%
Connectivity	41.1%	51.4%	7.5%	90.000%	95.000%

Service	Satisfied	Dissatisfied	7/15 Target ¹	7/16 Target
Instant Messaging	92%	8%	92%	95%
Online Meetings	85%	15%	90%	95%
Presence Status	85%	15%	85%	90%
Conference Calls	84%	16%	90%	95%
Voice Messages	81%	19%	85%	90%
Video Conferencing	76%	24%	80%	85%
Lync Mobile App	69%	31%	75%	85%
Lync phone for voice calls	69%	31%	80%	90%

Each set of measures would be fine tuned to the issue, function or feature. For example, connectivity should be at 90.000% after the project wraps at the end of 2015. Call quality and dropped calls should a year from now be at 80 to 85% without network or device problems. The audio delay, call transfers, online meetings and desktop sharing should all be in the 80 to 90% range within a year. Many of these will directly relate to infrastructure improvements that have been underway this year.

In terms Lync services, such as Instant Messaging, Online Meetings and such, we would like to have customer satisfaction levels near 90% within a year. These items are more dependent upon user education and adoption. Communication styles tend to be very personal. Some folks readily embrace all the features of UC/Lync. Others simply want a phone. Dial it. Answer it. That's it. So there may be some features that never get much higher than 80%.

We propose conducting another countywide survey in Fall 2014, and another in mid-2015 and mid-2016, using the same core questions from the baseline survey although we will narrow the survey scope. We will also use a new customer satisfaction tool to follow closely on the heels of present deployments to gauge customer satisfaction and quickly tackle any issues.

¹ Target represents respondents declaring themselves satisfied or somewhat satisfied on four-point scale.

KCIT - Data Center Relocation 2008

IT Project Benefits Achievement Plan (Version 2)

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

- 178. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 179. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
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King County Department/Agency Name	DES/ FMD – project owner KCIT – IT project support
Project Title	Data Center Relocation 2008
Project Number	377219/377220

Section 2. Business Owner Accountability

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Adding Facility Management Division’s (Business Owner and Project Owner) Cost Savings document on their behalf.

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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:

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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

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:

- 177) External service benefits: Improving the quality or quantity of services provided to the public
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- 180) 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.

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200. 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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15. 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.

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83. 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.

84. 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

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Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

savings

Adding Facility Management Division's (Business Owner and Project Owner) Cost Savings document on their behalf.



Facilities_Management_Division_Savings_

KCIT - KCCF Distributed Antenna Network

IT Project Benefits Achievement Plan (Version 2)

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- 182. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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**King County
Department/Agency Name**

Project Title

Project Number

KCIT

KCCF Distributed Antenna Network

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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

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:

- 226. To support initial project request during “gate two” phase of conceptual review.
- 227. For the annual Benefits report that PSB compiles.
- 228. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 229. When a material scope change is identified and reported.
- 230. 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:

- 181) External service benefits: Improving the quality or quantity of services provided to the public
- 182) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 183) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 184) 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.

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

This project will help ensure that radio communications used by King County's police, detention officers and security personnel on floors 1-3 within the KCCF will be un-interruptible within current constraints.

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

When radio communication by King County's police, detention officers and security personnel are available throughout KCCF floors 1-3.

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

Radio communication is not reliable on floors 1-3 of KCCF.

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

The target is to provide reliable radio communication coverage on floors 1-3 of KCCF.

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

As soon as the network is completed and commissioned.

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.

- 16. *Describe why you expect the proposed IT investment to produce the benefit(s).*
- 17. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
- 18. *What is the current baseline for this measure?*
- 19. *What is the target for this measure? (How much improvement will this project achieve?)*
- 20. *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.

- 85. *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.*
- 86. *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.

183. Describe why you expect the proposed IT investment to reduce costs?
184. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
185. What is the current baseline?
186. What is the target for this measure? (How much savings will this project achieve)
187. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

King County has a legal obligation to ensure the highest level of safety to the public. Uninterruptible radio communications are one of the key foundations to ensuring public safety. The King County Correctional Facility use radios every day and there are 800MHz signals that are not readily available in the building. These signals are critical to the life safety operations. The distributed antenna network will provide the radio coverage for the three floors in the KCCF.

KCIT - Enterprise Document Management System

IT Project Benefits Achievement Plan (Version 2)

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

- 186. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 187. To update projected benefits of the project as it moves through stages of project approval,

- implementation, and post-project closure
- 188. To establish accountability for identifying and achieving benefits
- 189. 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.

King County Department/Agency Name	KCIT – Business Applications
Project Title	Enterprise Document Management System
Project Number	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.

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

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:

- 231. To support initial project request during “gate two” phase of conceptual review.

- 232. For the annual Benefits report that PSB compiles.
- 233. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 234. When a material scope change is identified and reported.
- 235. 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>
Benefits Achievement	3/5/2014	Donna Frisk	This is the first draft, since BAPS were not in place when the project began.	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:

- 185) External service benefits: Improving the quality or quantity of services provided to the public
- 186) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 187) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 188) 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.

- 206. Describe why you expect the proposed IT investment to produce the benefit(s).
- 207. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 208. What is the current baseline for this measure?
- 209. What is the target for this measure? (How much improvement will this project achieve?)
- 210. 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.

21. *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.
22. *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.
23. *What is the current baseline for this measure?* Two customers ... which was implemented by the project.
24. *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.
25. *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.*

87. *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.*

88. *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.

- 188. Describe why you expect the proposed IT investment to reduce costs?
- 189. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 190. What is the current baseline?
- 191. What is the target for this measure? (How much savings will this project achieve)
- 192. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

			<i>savings</i>
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KCIT - Hosted Environment – Phase III Cloud Implementation

IT Project Benefits Achievement Plan (Version 2)

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

- 190. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 191. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 192. To establish accountability for identifying and achieving benefits
- 193. 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.

King County Department/Agency Name	King County Information Technology
Project Title	Hosted Environment – Phase III Cloud Implementation
EBS Project Number	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:

- 236. To support initial project request during “gate two” phase of conceptual review.
- 237. For the annual Benefits report that PSB compiles.
- 238. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 239. When a material scope change is identified and reported.
- 240. 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</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>

<i>completion.</i>			<i>only</i> ".	<i>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

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:

- 189) External service benefits: Improving the quality or quantity of services provided to the public
- 190) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 191) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 192) 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.

211. Describe why you expect the proposed IT investment to produce the benefit(s).
212. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
213. What is the current baseline for this measure?
214. What is the target for this measure? (How much improvement will this project achieve?)
215. 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.

26. 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.

27. *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.

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

Physical servers typically take 10 to 12 weeks to deploy into the King County data center.

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

Standard Virtual Environment server requests take 48 hours.

30. *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.

89. *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.

90. *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.

193. *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.

194. *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:

Server Hosting Cost Avoidance

Server Hosting Cost Avoidance	Number of VMs	Cost Avoidance	VM Cost	Benefit
Actual Hosted Environment VMs 2013	211	\$1,476,367	\$ 658,531	\$817,836

Server Procurement/Hardware Cost Avoidance

Server Procurement Cost Avoidance	Number of VMs	Cost Avoidance	Per VM Project Cost	Benefit
Actual Hosted Environment VMs 2013	211	\$ 1,688,000	\$1,167,46	\$520,53

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195. *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.

196. *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)

- Hosted environment cost per server = \$5,533
(total project cost before contingency (\$4,609,243)/# of VMs expected at end of 2015 (833))

197. *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 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:

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"> 10 days processing time 10 percent of 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are 	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>purchases are receiving discount</i> • <i>Savings of \$100,000</i>	<i>receiving prompt payment discounts</i> • <i>\$400,000 savings</i>	<i>are receiving prompt payment discounts</i> <i>\$200,000 savings</i>
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KCIT - Executive Branch IT Reorganization

IT Project Benefits Achievement Plan (Version 2)

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

- 194. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 195. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 196. To establish accountability for identifying and achieving benefits
- 197. 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.

King County Department/Agency Name	KCIT
Project Title	Executive Branch IT Reorganization
Project Number	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
Trevor 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:

- 241. To support initial project request during “gate two” phase of conceptual review.
- 242. For the annual Benefits report that PSB compiles.
- 243. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 244. When a material scope change is identified and reported.
- 245. 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,</i>	<i>Date this docume</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</i>	<i>How long did it take to complete or</i>

<i>project implementation, or project completion.</i>	<i>nt was updated</i>		<i>indicate new. If nothing has changed, indicate "review only".</i>	<i>revise the form at this stage?</i>
Project Completion	3/4/2014	Christine Chou	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:

- 193) External service benefits: Improving the quality or quantity of services provided to the public
- 194) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 195) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 196) 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.

216. *Describe why you expect the proposed IT investment to produce the benefit(s).*
217. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
218. *What is the current baseline for this measure?*
219. *What is the target for this measure? (How much improvement will this project achieve?)*
220. *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.

This project is almost completed, please see benefit summary

31. *Describe why you expect the proposed IT investment to produce the benefit(s).*
32. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
33. *What is the current baseline for this measure?*
34. *What is the target for this measure? (How much improvement will this project achieve?)*

35. *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.

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91. *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.*

92. *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

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

- 198. Describe why you expect the proposed IT investment to reduce costs?
- 199. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 200. What is the current baseline?
- 201. What is the target for this measure? (How much savings will this project achieve)
Tangible benefits (excluding cost avoidance):
- 202. When is the cost reduction likely to be achieved?

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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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	Processing Time annual savings, and percentage of purchases	<ul style="list-style-type: none"> • 10 days processing time • 10 percent of purchases are 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving 	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"> • Savings of \$100,000 	<i>prompt payment discounts</i> <ul style="list-style-type: none"> • \$400,000 savings 	<i>are receiving prompt payment discounts</i> \$200,000 savings
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Metric Description	Metrics	Baseline	Target	Actual
<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"> • Completion of IT consolidation • Establishment of IT Service Center • Establishment of server standardization • Establishment of workstation standardization • Standardized IT rates for services provided by Executive branch IT 	<ul style="list-style-type: none"> • Decentralized IT organization • Sporadic IT help desk • Various servers platforms • Various workstations platforms • Prior to KCIT reorg, only part of IT had rates • Total IT cost in the Executive branch were not known 	<ul style="list-style-type: none"> • One IT organization in Executive branch • Servers consolidation and standardization • Centralized IT service center • Standardized workstation platform • Produce one set of IT rates for services provided by the Executive branch IT • Produce efficiency in delivering IT services • Established IT rates and methodology in the Executive branch 	<ul style="list-style-type: none"> • Efficiency achieved in 2007 – 2010, <u>resulting in \$8.5M savings and 22 positions reduction (please see attached 2010 savings document)</u> • IT consolidation in June 2011 • KCIT started with rates by services in the 2013/2014 budget based on demands • Moving to standard virtual environment as part of servers standardization effort <u>produces \$7.6M in cost avoidance savings from 2012 - 2015</u>

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KCIT - IA Infrastructure Improvement Program

IT Project Benefits Achievement Plan (Version 2)

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

- 198. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 199. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 200. To establish accountability for identifying and achieving benefits
- 201. 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.

King County Department/Agency Name	King County Department of Information Technology
Project Title	IA Infrastructure Improvement Program
Project Number	

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:

- 246. To support initial project request during “gate two” phase of conceptual review.
- 247. For the annual Benefits report that PSB compiles.
- 248. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 249. When a material scope change is identified and reported.
- 250. 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

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:

- 197) External service benefits: Improving the quality or quantity of services provided to the public
- 198) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 199) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 200) 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.

- 221. Describe why you expect the proposed IT investment to produce the benefit(s).
- 222. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 223. What is the current baseline for this measure?
- 224. What is the target for this measure? (How much improvement will this project achieve?)
- 225. 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.

- 36. Describe why you expect the proposed IT investment to produce the benefit(s).
- 37. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 38. What is the current baseline for this measure?
- 39. What is the target for this measure? (How much improvement will this project achieve?)
- 40. 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.

93. 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 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

94. 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.

203. *Describe why you expect the proposed IT investment to reduce costs?*
204. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
205. *What is the current baseline?*
206. *What is the target for this measure? (How much savings will this project achieve)*
207. *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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCIT - Integrated Document Exchange Project (IDX)

IT Project Benefits Achievement Plan (Version 2)

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- 202. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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- 205. To ensure that benefits are achieved

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King County Department/Agency Name	King County Prosecuting Attorney's Office, Criminal Division
Project Title	Integrated Document Exchange Project (IDX)

Project Number	1111938
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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?

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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?

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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

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: 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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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.

41. *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.

42. 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.

43. *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.

44. *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.

45. *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.

95. *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.*
96. *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.

208. *Describe why you expect the proposed IT investment to reduce costs?*
209. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
210. *What is the current baseline?*
211. *What is the target for this measure? (How much savings will this project achieve)*
212. *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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCIT - Intranet Redesign – Migration to SharePoint

IT Project Benefits Achievement Plan (Version 2)

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

- 206. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 207. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 208. To establish accountability for identifying and achieving benefits
- 209. 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.

King County Department/Agency Name	KCIT
Project Title	Intranet Redesign – Migration to SharePoint
Project Number	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

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:

- 256. To support initial project request during "gate two" phase of conceptual review.
- 257. For the annual Benefits report that PSB compiles.
- 258. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 259. When a material scope change is identified and reported.
- 260. 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

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:

- 205) External service benefits: Improving the quality or quantity of services provided to the public
- 206) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 207) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 208) 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.

231. Describe why you expect the proposed IT investment to produce the benefit(s).
232. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
233. What is the current baseline for this measure?
234. What is the target for this measure? (How much improvement will this project achieve?)
235. 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.

46. Describe why you expect the proposed IT investment to produce the benefit(s).
47. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
48. What is the current baseline for this measure?
49. What is the target for this measure? (How much improvement will this project achieve?)
50. 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.

97. 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 efficiency among King County employees. This project will consolidate the various county intranet environments and update from 1998 web technologies to a website SharePoint 2013 platform, which will provide a central location where employees can access the communications, resources, and applications needed to work productively. The 2013 SharePoint Platform is the current version and would expect a version upgrade from Microsoft in 2016 at the earliest. Enhancements and other functionality tools would be reviewed before any upgrades or changes would be made to the intranet site. The enterprise intranet will be accessible to all King County employees and will become the platform for executive communications and collaboration across departments.

98. 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.

- 213. *Describe why you expect the proposed IT investment to reduce costs?*
- 214. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
- 215. *What is the current baseline?*
- 216. *What is the target for this measure? (How much savings will this project achieve)*
- 217. *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</i>	<i>Processing Time annual savings, and percentage of</i>	<ul style="list-style-type: none"> <i>• 10 days processing time</i> <i>• 10 percent of</i> 	<ul style="list-style-type: none"> <i>• 1 day processing time</i> <i>• 30 percent of purchases are</i> 	<ul style="list-style-type: none"> <i>2 day processing time</i> <i>20 percent of</i>

<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> • <i>Savings of \$100,000</i>	<i>receiving prompt payment discounts</i> • <i>\$400,000 savings</i>	<i>purchases are receiving prompt payment discounts \$200,000 savings</i>
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KCIT - Mainframe Application Migration

IT Project Benefits Achievement Plan (Version 2)

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

- 210. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 211. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 212. To establish accountability for identifying and achieving benefits
- 213. 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.

King County Department/Agency Name	King County Information Technology
Project Title	Mainframe Application Migration
Project Number	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:

- 261. To support initial project request during “gate two” phase of conceptual review.
- 262. For the annual Benefits report that PSB compiles.
- 263. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 264. When a material scope change is identified and reported.
- 265. 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>
Project Implementation	3/5/14	Andy Hill	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:

- 209) External service benefits: Improving the quality or quantity of services provided to the public
- 210) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 211) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 212) 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.

236. Describe why you expect the proposed IT investment to produce the benefit(s).
237. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
238. What is the current baseline for this measure?
239. What is the target for this measure? (How much improvement will this project achieve?)
240. 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.

51. Describe why you expect the proposed IT investment to produce the benefit(s).
52. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
53. What is the current baseline for this measure?
54. What is the target for this measure? (How much improvement will this project achieve?)
55. 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.

99. 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.

100. *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.

218. *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 2/3rd less than the current mainframe operating cost (\$3.3M vs. \$1M)

219. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

Starting in 2015 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

220. *What is the current baseline?*

\$3.3M

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

Savings will be \$2.3M

222. *When is the cost reduction likely to be achieved?* 2015

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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCIT - PSERN (Puget Sound Emergency Radio Network)

IT Project Benefits Achievement Plan (Version 2)

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

- 214. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 215. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 216. To establish accountability for identifying and achieving benefits
- 217. 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.

King County Department/Agency Name	KCIT
Project Title	PSERN (Puget Sound Emergency Radio Network) Project
EBS Project Number	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:

- 266. To support initial project request during “gate two” phase of conceptual review.
- 267. For the annual Benefits report that PSB compiles.
- 268. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 269. When a material scope change is identified and reported.
- 270. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 213) External service benefits: Improving the quality or quantity of services provided to the public
- 214) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 215) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 216) 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.

241. Describe why you expect the proposed IT investment to produce the benefit(s).
242. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
243. What is the current baseline for this measure?
244. What is the target for this measure? (How much improvement will this project achieve?)
245. 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.

56. Describe why you expect the proposed IT investment to produce the benefit(s).
57. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
58. What is the current baseline for this measure?
59. What is the target for this measure? (How much improvement will this project achieve?)
60. 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.

101. 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.

102. *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.

- 223. Describe why you expect the proposed IT investment to reduce costs?
- 224. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 225. What is the current baseline?
- 226. What is the target for this measure? (How much savings will this project achieve)
- 227. 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"> • 10 days processing time • 10 percent of 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are 	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> • <i>Savings of \$100,000</i>	<i>receiving prompt payment discounts</i> • <i>\$400,000 savings</i>	<i>purchases are receiving prompt payment discounts \$200,000 savings</i>
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KCIT - Sobieski Mountain Tower Repair

IT Project Benefits Achievement Plan (Version 2)

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

- 218. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 219. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 220. To establish accountability for identifying and achieving benefits
- 221. 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.

King County Department/Agency Name	KCIT
Project Title	Sobieski Mountain Tower Repair
Project Number	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:

- 271. To support initial project request during “gate two” phase of conceptual review.
- 272. For the annual Benefits report that PSB compiles.
- 273. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 274. When a material scope change is identified and reported.
- 275. 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>

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:

- 217) External service benefits: Improving the quality or quantity of services provided to the public
- 218) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 219) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 220) 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.

246. Describe why you expect the proposed IT investment to produce the benefit(s).
247. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
248. What is the current baseline for this measure?
249. What is the target for this measure? (How much improvement will this project achieve?)
250. 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.

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

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

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

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

65. *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.

103. *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 will report annually for the next five years on up-time levels.

104. *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.

228. *Describe why you expect the proposed IT investment to reduce costs?*
229. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
230. *What is the current baseline?*
231. *What is the target for this measure? (How much savings will this project achieve)*
232. *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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

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 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.

KCIT - South Loop Microwave Replacement

IT Project Benefits Achievement Plan (Version 2)

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

- 222. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 223. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 224. To establish accountability for identifying and achieving benefits
- 225. 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.

King County Department/Agency Name	KCIT / Radio Communications Services
Project Title	South Loop Microwave Replacement
Project Number	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:

- 276. To support initial project request during “gate two” phase of conceptual review.
- 277. For the annual Benefits report that PSB compiles.
- 278. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 279. When a material scope change is identified and reported.
- 280. 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

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:

- 221) External service benefits: Improving the quality or quantity of services provided to the public
- 222) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 223) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 224) 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.

251. Describe why you expect the proposed IT investment to produce the benefit(s).
252. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
253. What is the current baseline for this measure?
254. What is the target for this measure? (How much improvement will this project achieve?)
255. 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.

66. Describe why you expect the proposed IT investment to produce the benefit(s).
67. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
68. What is the current baseline for this measure?
69. What is the target for this measure? (How much improvement will this project achieve?)
70. 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.

105. *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.

106. *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.

- 233. *Describe why you expect the proposed IT investment to reduce costs?*
- 234. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
- 235. *What is the current baseline?*
- 236. *What is the target for this measure? (How much savings will this project achieve)*
- 237. *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</i>	<i>Processing Time annual savings, and percentage of</i>	<ul style="list-style-type: none"> <i>• 10 days processing time</i> <i>• 10 percent of</i> 	<ul style="list-style-type: none"> <i>• 1 day processing time</i> <i>• 30 percent of purchases are</i> 	<i>2 day processing time 20 percent of</i>

<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> • <i>Savings of \$100,000</i>	<i>receiving prompt payment discounts</i> • <i>\$400,000 savings</i>	<i>purchases are receiving prompt payment discounts</i> <i>\$200,000 savings</i>
<p>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.</p>				

KCIT - Systems Management

IT Project Benefits Achievement Plan (Version 2)

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

- 226. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 227. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 228. To establish accountability for identifying and achieving benefits
- 229. 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.

King County Department/Agency Name	KCIT
Project Title	Systems Management
EBS Project Number	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:

- 281. To support initial project request during “gate two” phase of conceptual review.
- 282. For the annual Benefits report that PSB compiles.
- 283. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 284. When a material scope change is identified and reported.
- 285. 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>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 225) External service benefits: Improving the quality or quantity of services provided to the public
- 226) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 227) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 228) 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.

256. Describe why you expect the proposed IT investment to produce the benefit(s).
257. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
258. What is the current baseline for this measure?
259. What is the target for this measure? (How much improvement will this project achieve?)
260. 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.

71. 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. *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. *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 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. *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.

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

- 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

73. What is the current baseline for this measure?

We will use current Metrics as captured in the 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.

5. When is the benefit likely to be achieved? We expect to start seeing some benefits in the middle of 2014 once we have the training and some processes in place for Major Incident Reduction. The metrics will really show the results after a process has been in place for a year (mid 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.

107. 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.

108. 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.

238. Describe why you expect the proposed IT investment to reduce costs?
239. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
240. What is the current baseline?
241. What is the target for this measure? (How much savings will this project achieve)
242. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> • 2 day processing time • 20 percent of purchases are receiving prompt payment discounts • \$200,000 savings

Metric Description	Metrics	Baseline	Target	Actual
<i>Reduce major incident causing technology outages.</i>	<i>Number of incidents per year</i>	<ul style="list-style-type: none"> • 42 incidents per year 	<ul style="list-style-type: none"> • 29 incidents per year 	
<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"> • 3.4 hours 	<ul style="list-style-type: none"> • 2.4 hours 	
<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"> • 5,013 calls per year 	<ul style="list-style-type: none"> • 3,509 calls per year 	
<i>Ability to track issues related to planned changes</i>	<i>Availability of metrics</i>	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • Reporting metrics one year after project implementation 	

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KCIT - 2FA Project (AKA CJIS Advanced Authentication)

IT Project Benefits Achievement Plan (Version 2)

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

- 230. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 231. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 232. To establish accountability for identifying and achieving benefits
- 233. 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.

King County Department/Agency Name	King County Department of Information Technology
Project Title	2FA Project (AKA CJIS Advanced Authentication)
Project Number	1116899

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
Ralph Johnson	Chief Information Security and Privacy Officer	Business Owner
David Curtiss	Project Manager	Project Manager

Mike Holland	IT Service Delivery Manager, DAJD	Key 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:

- 286. To support initial project request during “gate two” phase of conceptual review.
- 287. For the annual Benefits report that PSB compiles.
- 288. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 289. When a material scope change is identified and reported.
- 290. 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>
Initial Report	3-4-14	Ralph Johnson	Created initial BAP	2 hours

Initial Report	3-4-14	Mike Holland	Reviewed	30 minutes
Initial Report	3-4-14	David Curtiss	Reviewed	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:

- 229) External service benefits: Improving the quality or quantity of services provided to the public
- 230) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 231) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 232) 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.

261. Describe why you expect the proposed IT investment to produce the benefit(s).
262. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
263. What is the current baseline for this measure?
264. What is the target for this measure? (How much improvement will this project achieve?)
265. 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.

74. Describe why you expect the proposed IT investment to produce the benefit(s).
75. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
76. What is the current baseline for this measure?
77. What is the target for this measure? (How much improvement will this project achieve?)
78. 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.

109. *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.*

Advanced authentication is a policy requirement established by the FBI Criminal Justice Information Services (CJIS) security policy for all staff, both law enforcement and supporting non-law enforcement staff with access or potential access to NCIC (National Crime Information Center) data.

Advanced Authentication provides for additional security to the typical user identification and authentication of login ID and password, such as: biometric systems, user-based public key infrastructure (PKI), smart cards, software tokens, hardware tokens, paper (inert) tokens, or "Risk-based Authentication" that includes a software token element comprised of a number of factors, such as network information, user information, positive device identification (i.e. device forensics, user pattern analysis and user binding), user profiling, and high-risk challenge/response questions.

The intent of AA is to meet the standards of two-factor authentication. Two-factor authentication employs the use of two of the following three factors of authentication: something you know (e.g. password), something you have (e.g. hard token), something you are (e.g. biometric). The two authentication factors shall be unique (i.e. password/token or biometric/password but not password/password or token/token).

This project is not an upgrade or replacement to existing technology but one of compliance with externally imposed requirements.

110. *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.*

Non-compliance with this CJIS requirement could result in King County being denied access to CJIS and NCIC FBI originating information through the State of Washington. Should this occur risks to persons such as Sheriff's Deputies, DAJD corrections officers, prosecuting attorneys and others would increase due to lack of information regarding potential criminals and their behaviors.

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.

243. Describe why you expect the proposed IT investment to reduce costs?
244. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
245. What is the current baseline?
246. What is the target for this measure? (How much savings will this project achieve)
247. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

There are no actual benefits to be measured as a result of compliance with this policy requirement. We either retain access to NCIC information or we do not.

KCIT - Web Re-Architecture

IT Project Benefits Achievement Plan (Version 2)

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

- 234. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 235. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 236. To establish accountability for identifying and achieving benefits
- 237. 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.

King County
Department/Agency Name

KCIT eGovernment Service

Project Title	Web Re-Architecture project
Project Number	1111935

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.

Frank Abe (Project Sponsor)

Nick Smith (eGovernment Service 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
Nick Smith	KCIT, eGovernment Service Manager	Service Owner
Beth Cheatham	KCIT, Lead Web Developer	Project team member, design
Alex Aragon	KCIT, Web Developer	Project team member, design
Jeff Hsu	KCIT, Sr. Application Developer	Project team member, technical
Dennis Matthew	KCIT, Sr. Application Developer	Project team member, technical
Ina Percival	KCIT, Business Analyst	Gather business requirements
Juliette Peze	KCIT, Project Manager	Manage project
Natasha Jones	Executive Office, Customer Service Director	Member of Steering Committee
Rhonda Berry	Assistant Deputy County Executive	Member of Steering Committee
Frank Abe	Executive Office, Director of Communications	Member of Steering Committee, project sponsor
Christine Lange	Executive Office, Deputy Director of Communications	Member of Steering Committee
Jason King	Council, Communication	Member of Steering Committee
Bill Kehoe	KCIT, CIO	Member of Steering Committee, project co-sponsor
James Apa Jeff Ing	DPH representatives	Member of Web Redesign Committee
Sherry Hamilton Mekala Kuduva	DCH representatives	Member of Web Redesign Committee
Fred Bentler Earl Krygier	DNRP representatives	Member of Web Redesign Committee

Anna Clemenger Stephanie Vitali (Roads) Mark Bilodeau (Transit) Michael Jenkins (GIS)	DOT representatives	Member of Web Redesign Committee
Cameron Satterfield Lyza Gatmayan (FBOD) Judi Chapman (HRD) Lynn Miller (OEM)	DES representatives	Member of Web Redesign Committee
Gina Pederson Don DiJulio	DAJD representatives	Member of Web Redesign Committee
David Reynolds	Superior Court representative	Member of Web Redesign Committee
Rob Ward	District Court representative	Member of Web Redesign Committee
Teresa Bailey Beth Taylor	DJA Representatives	Member of Web Redesign Committee
Lynn Sellick-Lane	PAO representatives	Member of Web Redesign Committee
Kim Laymen John Backman	DPER representatives	Member of Web Redesign Committee
Amy Tsai Simon Faretta	Council representatives	Member of Web Redesign Committee
Elisa Elliot Jim Hilmar	KCSO representatives	Member of Web Redesign Committee
Kim Van Ekstrom Kathy Gill	Election representatives	Member of Web Redesign Committee
Phil Sit Mai Trinh	Assessor representatives	Member of Web Redesign Committee
Christine Lange	Executive representative	Member of Web Redesign Committee

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:

- 291. To support initial project request during “gate two” phase of conceptual review.
- 292. For the annual Benefits report that PSB compiles.
- 293. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 294. When a material scope change is identified and reported.
- 295. 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>
BPA document	3/4/14	Juliette Peze	Project was closed in November 2013 – Project updated the new BPA template per request.	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:

- 233) External service benefits: Improving the quality or quantity of services provided to the public
- 234) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 235) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 236) 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.

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

The project expects to solve current web usability issues, and directly increase traffic to kingcounty.gov site.

The project will show it is meeting the above benefits by (1) presenting results to management of the several usability studies that will be done over the course of the project and by (2) having the eGovernment service owner monitoring traffic web analytics as part of operation once the project is completed.

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

The project will conduct several usability studies at key points of the project and measure improvement and success rate. A usability study is a systematic evaluation of a product, service or website with its target customers. A key aspect of usability is observing people while they use the product or website. Watching how they behave will give us insights into how to resolve any usability issues uncovered. Thus a usability study will not only discover usability problem but also provides recommendations on how to fix them and improve customers' experience.

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

A baseline will be established in November 2012 with the current website. This will provide the project team with baseline metrics and specific information for the redesign. The baseline results will include the following analysis of: (1) kingcounty.gov online survey, (2) kingcounty.gov user research findings (via google website analytics, crazy egg click analytics, quantcast, alexa and search logs), (3) 2010-2014 King County Strategic plan, (4) web redesign business requirements and (5) baseline usability study.

269. *What is the target for this measure? (How much improvement will this project achieve?)*
 The project is expecting to significantly increase kingcounty.gov usability from its 57% average task success rate to 75% or above (industry average).

270. *When is the benefit likely to be achieved?*
 The benefit will be achieved and measured when the last iteration of the redesign is being tested by the project final usability study scheduled for May 2013 (high fidelity study).
 Upon the results of this last study, the project team will have completed its final design and be ready for implementation and target go live in September 2013.

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.

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

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

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

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

83. *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.

111. 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.

112. 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.

- 248. Describe why you expect the proposed IT investment to reduce costs?
- 249. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 250. What is the current baseline?
- 251. What is the target for this measure? (How much savings will this project achieve)
- 252. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

This project successfully completed re-architecture of kingcounty.gov (i.e. new design and new information architecture) with the following results:

- The task success rate recorded by the high fidelity study conducted in May 2013 recorded 80% success rate from the baseline 57%.
- Perception of usability and satisfaction improved from respectively: (1) usability score moved from 56 to 83 (score of 100) and (2) satisfaction rate from 5.7 to 7.9 (rating of 10).
- User impressions of the website were positive, with use of word like “Easy to use”, “Useful”, “Efficient” and “Straight Forward”, compared to the baseline impression of “Governmental”, “Frustrating”, “Overwhelming” and “Complex”.
- Likelihood of recommending kingcounty.gov to a friend increase to: (1) 29% from 8% for promoters, (2) 67% from 42% for passives and (3) 50% from 14% for detractors. King County net promoter score moved from -42% to +15%, which is a significant shift.
- Our strategic value ratings (i.e. website reflecting our strategic value) also increased:
 - Professional: 4.1 from 3.5
 - Accountable 3.7 from 3.3
 - Collaborative: 4.6 from 3.3
 - Fair & Just: 4.2 from 3.3
 - Service oriented: 3.9 from 2.7
 - Results-focused: 3.8 from 2.7
 - Innovative: 4.1 from 2.3

KCIT - Workstation Standardization

IT Project Benefits Achievement Plan (Version 2)

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

- 238. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 239. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 240. To establish accountability for identifying and achieving benefits
- 241. 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.

King County

KCIT

Department/Agency Name	
Project Title	Workstation Standardization Project
EBS Project Number	1122018

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**
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
Belinda Rose	Customer Service Director, KCIT	Sponsor/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?

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:

- 296. To support initial project request during “gate two” phase of conceptual review.
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- 298. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 299. When a material scope change is identified and reported.
- 300. 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	9/12/13	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

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:

- 237) External service benefits: Improving the quality or quantity of services provided to the public
- 238) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 239) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 240) 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

X 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.

- 271. Describe why you expect the proposed IT investment to produce the benefit(s).
- 272. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 273. What is the current baseline for this measure?
- 274. What is the target for this measure? (How much improvement will this project achieve?)
- 275. 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.

84. 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.

85. 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.

86. 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 _____.

87. 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.

88. 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.

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.

113. *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.***
114. *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.

- 253. Describe why you expect the proposed IT investment to reduce costs?
- 254. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 255. What is the current baseline?
- 256. What is the target for this measure? (How much savings will this project achieve)
- 257. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

				savings

KCSC – E-Orders

IT Project Benefits Achievement Plan

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

- 242. To achieve a clear understanding and focus on the of the benefits of a project prior to its beginning
- 243. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 244. To establish accountability for identifying and achieving benefits
- 245. 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.

King County Department/Agency Name	Superior Court IT
Project Title	E-Orders
Project Number	377157

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: Steve Gustaveson, Manager of Juvenile Services

Business Owner Contact Information: 206 296-1132

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
Steve Gustaveson	Manager of Juvenile Services	Business Owner

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>
Final benefits report	2/11/14	Steve Gustaveson	New, initial draft	2 hours
Final benefits report	3/24/14	Steve Gustaveson	Revision	2 hours

Section 6. Description of Project Benefits

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.

276. Describe why you expect the proposed IT investment to produce the benefit.

A basic and critical function of King County Superior Court is to capture and memorialize judicial rulings in court orders that are filed in the publicly-available legal file. Juvenile hearings rely on a highly manual, paper-based system to capture the judge's ruling on each juvenile proceeding. This project will automate the multi-part paper, hand-written court order process that occurs as part of court hearing in the courtroom. This manual processing of in-court orders is cumbersome and inefficient and will be greatly streamlined by an automated approach that provides for electronic forms to be completed and filed in-court and then auto-routed. In addition, data from the hearing will be saved to

the database negating the need for staff to do data entry at a later time. These steps will result in a much more efficient process after orders are prepared because of the auto-docketing to the database and the electronic distribution of orders to the clerk, attorneys and others.

In addition, it is important to note that the court is transitioning from a paper-based court order process to an electronic process and this essentially means transitioning from a non-technological system to system that does rely on technology. The flexibility that this transition provides the court in modifying and disseminating orders and managing data from orders is very significant. Benefits include:

- Clean, accurate, readable orders - paper orders are handwritten and sometimes cannot be read.
- Auto Indexing allows eOrders to be quickly viewable in ECR
- Orders do not get misplaced and get filed with the court immediately. Prior to eOrders, original paper orders would be kept for a day to make copies for all the parties and sometimes accidentally not filed at all
- Cloning for multiple cases – many youth have multiple cases and the ability to “clone” an eOrder ensures completeness of youth’s record
- Immediate email distribution to detention, probation and attorneys
- The eOrder system verifies accuracy of court case number and uploads youth’s name, eliminating errors

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

The court will measure reduction in the following:

- a. cost of paper and multi-part forms;
- b. redundant data entry and data entry errors;
- c. time spent hand-writing orders during court hearings;
- d. time spent physically distributing copies;
- e. illegible orders due to hand-written, multi-part forms and
- f. costs associated with modification of orders without having to reorder expensive multi-part paper forms

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

See category 4(3) below.

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

See category 4(4) below.

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

The project will be deemed a success upon completion when the following criteria have been met:

- Forms are processed (filled out, confirmed by all parties, digitally signed and submitted to e-file) at completion of each hearing.
- Forms are successfully delivered electronically to all parties that need to receive them.
- The time spent on the in-court process of filling out the form and submitting it will roughly equal the paper-based counterpart.
- There will be a time saving in the overall order processing after it is signed and submitted.

When this project is completed it will provide the ability to complete, sign, file and distribute court orders electronically.

Some process improvements are being realized, but by mid-2014 the data entered on the order will be saved to the database and this single improvement will reduce staff docketing time after court. Some

multi-form cost savings are being realized and as additional court orders are incorporated into the eOrder process, additional cost savings will be realized.

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.

115. *Describe why you expect the proposed IT investment to produce the benefit.*
This project will reduce the need to buy multi-part forms.

116. *How will you measure the benefit? (How will you know if the benefit has been achieved?)*
We will measure by the reduction of the funds spent on multi-part forms.

117. *What is the current baseline for this measure?*
Cost of multi-part forms is about \$20,000 per year is one current baseline cost. Time spent by in-court staff to manage the paper process while performing other duties will be the baseline to measure the process improvements.

118. *What is the target for this measure? (How much improvement/savings will this project achieve?)*
Once fully implemented for all court orders, the court can eliminate the need for costly multi-part documents at a minimum cost of \$20,000 per year. Eliminates the need for printing of costly multi-part forms and when forms need to be modified, no outdated expensive forms is discarded.

119. *When is the benefit likely to be achieved?*
See category response 2(5) above.

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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

Metric Description	Metrics	Baseline	Target	Actual
<i>Deliver clean, accurate, and readable orders.</i>	<i>Orders produced in eOrders are filled out on the PC, rather than hand written on multi-part pre-printed paper orders.</i>	<ul style="list-style-type: none"> • Hand written orders with scribbles on the margins. • Some of the orders are six-parts, with the very last few copies being hardly legible. 	<ul style="list-style-type: none"> • Typed orders that are clean and legible. 	<i>eOrders are typed and available to be printed and electronically disseminated as needed.</i>
<i>E-filed orders are indexed and searchable in ECR.</i>	<i>The time between when an order is completed in court and signed to when it is available in ECR.</i>	<ul style="list-style-type: none"> • One or two day turn around time for manually e-file orders and available in ECR. • Sometimes there may be missed orders 	<ul style="list-style-type: none"> • Quick availability of e-filed orders in ECR. • E-filed order 	<i>E-filed orders are available to view within minutes by the court and parties.</i>

		<i>that do not get e-filed by mistake.</i>		
<i>Clone eOrders for multiple cases.</i>	<i>Time savings from manually filling out multiple orders in court.</i>	<ul style="list-style-type: none"> <i>Manually filling out multiple orders at 3 minutes per order.</i> 	<ul style="list-style-type: none"> <i>Auto-load of basic case data on templates, all checked fields replicated in multiple orders.</i> 	<i>Time savings of between 5 to 10 minutes per proceeding, and accuracy of data improved across all cloned orders.</i>
<i>Immediate distribution of e-filed orders.</i>	<i>Instead of hand delivering orders, e-filed digital copies of the order are sent through email.</i>	<ul style="list-style-type: none"> <i>Staff time saved from physically delivering orders.</i> 	<ul style="list-style-type: none"> <i>Efficiency gained by electronically distributing e-filed orders to detention, probation, and attorneys.</i> 	<i>Virtually no wait in receiving completed orders after the completion of each proceeding.</i>

KCSC - Electronic Social Files

IT Project Benefits Achievement Plan

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

- 246. To achieve a clear understanding and focus on the of the benefits of a project prior to its beginning
- 247. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 248. To establish accountability for identifying and achieving benefits
- 249. 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.

King County Department/Agency Name	Superior Court IT
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Project Title	Electronic Social Files
Project Number	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
Susan Waid	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:

- 301. To support initial project request during "gate two" phase of conceptual review.
- 302. For the annual Benefits report that PSB compiles.
- 303. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 304. When a material scope change is identified and reported.
- 305. 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:

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<i>Please use conceptual review, budget process, funding release, annual report,</i>	<i>Date this docume</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</i>	<i>How long did it take to complete or</i>

<i>project implementation, or project completion.</i>	<i>nl was updated</i>		<i>indicate new. If nothing has changed, indicate "review only".</i>	<i>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.

281. 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 – In Progress: Anticipated completion date May 2014. The Electronic Case Management System is still being developed. This includes the automated calculation of time on probation including tolling time on warrant status and ability to access some case information currently only available in other data systems.

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.

120. *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.

- f. **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.
- g. **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.

121. *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.

122. *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.

- 123. *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.
- 124. *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.

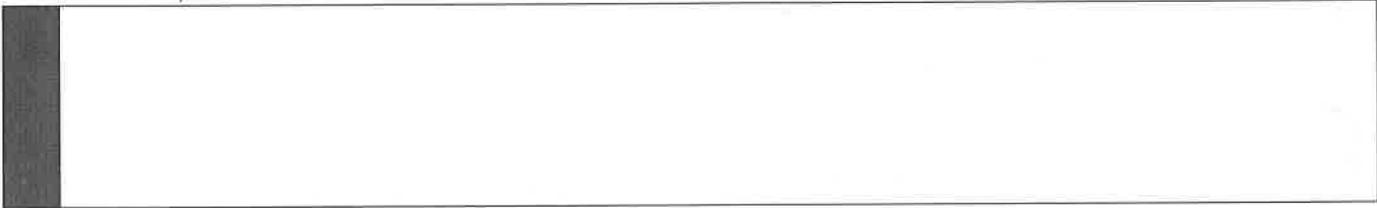
Example: This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings



KCSO - Regional Mobile Identification

IT Project Benefits Achievement Plan (Version 2)

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

- 250. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 251. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 252. To establish accountability for identifying and achieving benefits
- 253. 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.

King County Department/Agency Name	King County Regional AFIS Program (KCRA)
Project Title	Regional Mobile Identification Project
Project Number	

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	Project Manager

	IV, King County Regional AFIS	
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:

- 306. To support initial project request during "gate two" phase of conceptual review.
- 307. For the annual Benefits report that PSB compiles.
- 308. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
- 309. When a material scope change is identified and reported.
- 310. 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

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:

- 241) External service benefits: Improving the quality or quantity of services provided to the public
- 242) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 243) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 244) 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.

282. Describe why you expect the proposed IT investment to produce the benefit(s).
283. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
284. What is the current baseline for this measure?
285. What is the target for this measure? (How much improvement will this project achieve?)
286. 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.

89. 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.

90. 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.

91. 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.

92. 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.

93. *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.

125. *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.*

126. *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.

258. Describe why you expect the proposed IT investment to reduce costs?
259. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
260. What is the current baseline?
261. What is the target for this measure? (How much savings will this project achieve)
262. 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"> • 10 days processing time • 10 percent of purchases are receiving discount • Savings of \$100,000 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts • \$400,000 savings 	<ul style="list-style-type: none"> 2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCSO – Electronic Scheduling Project (ATLAS)

IT Project Benefits Achievement Plan (Version 2)

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

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

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King County Department/Agency Name	King County Sheriff's Office
Project Title	The Scheduling Project (ATLAS)
EBS Project Number	

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
Diana Landry	IT Supervisor II, Public Safety	Sr. Project Manager Technical Consultant
Janielee Amina Osborne	IT Project Manager	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:

- 311. To support initial project request during “gate two” phase of conceptual review.
- 312. For the annual Benefits report that PSB compiles.
- 313. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 314. When a material scope change is identified and reported.
- 315. 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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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

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:

- 245) External service benefits: Improving the quality or quantity of services provided to the public
- 246) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 247) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
- 248) 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.

287. Describe why you expect the proposed IT investment to produce the benefit(s).
288. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
289. What is the current baseline for this measure?
290. What is the target for this measure? (How much improvement will this project achieve?)
291. 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? 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.

127. *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.*

128. *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.

263. Describe why you expect the proposed IT investment to reduce costs?
264. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
265. What is the current baseline?
266. What is the target for this measure? (How much savings will this project achieve)
267. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

KCSO - IRIS/TESS Replacement

IT Project Benefits Achievement Plan (Version 2)

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

- 258. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 259. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 260. To establish accountability for identifying and achieving benefits
- 261. 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.

King County

King County Sheriff's Office

Department/Agency Name	
Project Title	IRIS/TESS 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.

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:

- 316. To support initial project request during “gate two” phase of conceptual review.
- 317. For the annual Benefits report that PSB compiles.
- 318. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 319. When a material scope change is identified and reported.
- 320. 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	2/11/14	Judy McDermott	Review existing project documents and compile into BAP	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:

- 249) External service benefits: Improving the quality or quantity of services provided to the public
- 250) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 251) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 252) 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.

292. Describe why you expect the proposed IT investment to produce the benefit(s).
293. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
294. What is the current baseline for this measure?
295. What is the target for this measure? (How much improvement will this project achieve?)
296. 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.

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

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

96. What is the current baseline for this measure?

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

98. 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.

129. 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.

- a. IRIS (Incident Reporting and Investigation System) – For criminal activity
- b. TESS (The Evidence Support System) – For evidence management
- c. EDMS (Electronic Documents Management System) – for scanned paper and PDF storage

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*
- *New: Ability to attach media files to case files*
- *New: Interfaces to local, state and regional data systems*
- *New: Full audit logs for case and evidence management*
- *New: Encoded and validated addressing*

130. *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.

- 268. Describe why you expect the proposed IT investment to reduce costs?
- 269. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
- 270. What is the current baseline?
- 271. What is the target for this measure? (How much savings will this project achieve)
- 272. 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"> • 10 days processing time • 10 percent of purchases are receiving discount 	<ul style="list-style-type: none"> • 1 day processing time • 30 percent of purchases are receiving prompt payment discounts 	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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KCSO - Wireless CAD Upgrade

IT Project Benefits Achievement Plan (Version 2)

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

- 262. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 263. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 264. To establish accountability for identifying and achieving benefits
- 265. 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.

King County Department/Agency Name	King County Sheriff's Office
Project Title	Wireless CAD Upgrade
Project Number	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

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
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?

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:

- 321. To support initial project request during “gate two” phase of conceptual review.
- 322. For the annual Benefits report that PSB compiles.
- 323. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 324. When a material scope change is identified and reported.
- 325. 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	2/3/14	Pat Butschli	New, initial Draft on benefit achievement plan format	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:

- 253) External service benefits: Improving the quality or quantity of services provided to the public
- 254) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 255) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 256) 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.

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.

(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 piece 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.

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.

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.

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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000

			<i>savings</i>

PAO - Prosecutor Case Management Project

IT Project Benefits Achievement Plan (Version 2)

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

- 266. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
- 267. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
- 268. To establish accountability for identifying and achieving benefits
- 269. 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.

King County Department/Agency Name	King County Prosecuting Attorney
Project Title	Prosecutor Case Management Project – PROSECUTORbyKarpel (PbK)
Project Number	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
Kassie Tadsen	Karpel Program Manager - KCPAO	Project Manager
Erin Ehlert	Assistant Chief – Criminal Division - PAO	Sponsor
Daniel Clark	Assistant Chief – Criminal Division - PAO	Sponsor
Mark Buening	Finance Manager - PAO	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:

- 326. To support initial project request during “gate two” phase of conceptual review.
- 327. For the annual Benefits report that PSB compiles.
- 328. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
- 329. When a material scope change is identified and reported.
- 330. 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</i>	<i>Date this</i>	<i>Who did the document</i>	<i>A brief summary of what changed in the document. If</i>	<i>How long did it take to</i>

<i>release, annual report, project implementation, or project completion.</i>	<i>document was updated</i>	<i>updates?</i>	<i>this is an initial draft, please indicate new. If nothing has changed, indicate "review only".</i>	<i>complete or revise the form at this stage?</i>
Example: Conceptual review	7/1/13	Jack Smith	New, initial draft	2 hours
Example: 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

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:

- 257) External service benefits: Improving the quality or quantity of services provided to the public
- 258) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
- 259) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
- 260) 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.

- 297. Describe why you expect the proposed IT investment to produce the benefit(s).
- 298. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
- 299. What is the current baseline for this measure?
- 300. What is the target for this measure? (How much improvement will this project achieve?)
- 301. 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.

- 99. 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.

100. *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.

101. *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.

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

An overall satisfaction rating of 70% would be a success.

103. *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.

131. 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.

132. 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.

273. Describe why you expect the proposed IT investment to reduce costs?
274. How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)
275. What is the current baseline?
276. What is the target for this measure? (How much savings will this project achieve)
277. 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"> 10 days processing time 10 percent of purchases are receiving discount Savings of \$100,000 	<ul style="list-style-type: none"> 1 day processing time 30 percent of purchases are receiving prompt payment discounts \$400,000 savings 	2 day processing time 20 percent of purchases are receiving prompt payment discounts \$200,000 savings

