IT Benefits Report for year ending 2015

Office of Performance, Strategy and Budget

Prepared: April 2016
Revised: July 26, 2016

Executive Summary

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

In calendar year 2015, the formatting and versioning of the BAP has remained mainly stable with only minor updates to better align with other governance efforts, and agencies, departments, and projects are growing more comfortable with using the document. This has translated directly to higher quality documents used in the governance process, including the 2017/2018 budget request process.

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

- **Determining what the benefits of a project are and communicating that to an audience without a shared background was significantly more difficult than first imagined.** Departments and agencies continue to struggle with the different viewpoint of the project from the business-centric view to a wider audience. Additional training and examples should help to mitigate this in the future.

- **Evaluation difficulties.** Even with the vastly improved efforts during 2015, a number of projects continue to report that even with the various examples from the budget and those examples included in the instructions of the document itself, that determining the “right answer” was very difficult. In many cases a number of meetings and draft revisions were required in order to get to a document that was considered final. Many projects were unable to create documents that didn’t require extensive modifications. As above, additional training and examples should help to mitigate this in the future.

- **Formatting versus content.** A number of projects reported that completing the benefits achievement plan was hindered by formatting, either in the document itself or from evaluator requests, where content was unchanged. In the future, additional training and examples should help, as well as keeping the document version fixed. However, the

standard formatting brings significant ease to those reviewing multiple projects. Additionally, reviewer training is much more efficient if a standard format has been followed for multiple benefits.

- **Time commitments required for the benefits process are significant.** The time spent by Performance, Strategy and Budget (PSB) staff, Council staff, and department/agency/project staff to complete the governance surrounding benefits reporting has been greater than anticipated. An initial estimate of two hours for project staff to complete an initial BAP was likely off by an order of magnitude. Additionally, review time from both PSB and Council staff was significant. This commitment improved in most cases during 2015, but significant amounts of time were still spent in review and refinement by some agencies and departments. Larger and more complex projects took significantly more time to prepare satisfactory documents compared to smaller projects, which is to be expected due to the scope and complexity of larger projects.

- **A wide range of benefits are being realized.** Beyond simple cost savings (which in past years were the only benefit recognized in many cases) IT projects are documenting a vast array of benefits for agencies, staff, and the public as benefits from the various IT projects. Efficiencies, expanded service capacity, higher morale, more timely delivery, higher quality service as well as cost reductions are being delivered to the public, KC agencies and departments, and internal staff. The documentation of these benefits will be a valuable outcome as the process matures and agencies report on the benefits of completed projects.

- **Agencies are interested in the benefits process.** Agencies, departments, and project staff do see the potential benefits in the benefits reporting process and are eager to do what they can to better explain the value proposition that they are bringing to the table with their projects.

- **Reporting of actual results from the project is still a new task.** Agencies, departments, and project staff have not consistently reported on completed projects in the past. This process will be a learning process for the county as a whole, as agencies and departments are accountable for reporting on the benefits they actually achieved from the various IT projects undertaken. Additional work on defining common metrics would likely be helpful in attempting to compare benefits across projects, but there would be substantial difficulty in attempting a “one size fits all” approach.

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

High level analytics:

With all the IT projects approved in the county, several questions on overall benefits can be asked. The first is of all the projects approved in the county IT project portfolio, how many are underway, how many have completed in the past year, and how many have yet to start? The summary table below answers that question.

	Number	% of total
Not started	6	9.2%
Underway	45	69.2%
Closed	14	21.5%

The second question often asked about the IT project portfolio is, what type of benefits are these projects trying to achieve? When we look at the 4 different types of benefits into which IT projects are categorized, we see the results in the table below.

	Number	% of total
Benefits Category 1 - Public Benefit	11	16.9%
Benefits Category 2 - Internal Improvements	25	38.5%
Benefits Category 3 - Maintaining Service	27	41.5%
Benefits Category 4 - Cost Savings	2	3.1%

Index and individual BAPs:

The following pages have an index of the projects, their current status, benefits category, and page number in the report.

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

List of Technology Projects in 2015 Annual BAP Report

Department	Project	Project Status	Benefit Cat	Page
Assessments	Assessors Tablet PC Replacement	Closed	2	139
	Electronic Valuation Notice	Underway	4	147
Adult & Juvenile Detention	RMS Employee Interface	Underway	2	47
	Distributed Antenna Network (DAN)	Underway	2	37
Council	High Definition Upgrade	Closed	3	31
Community & Human Services	Financial System	Underway	2	57
	Designated Mental Health Professionals (DMHP) & Public Safety Project	Underway	2	65
Permitting & Environmental Review	Permit Integration	Underway	1	337
Executive Office	Budget System Project Information Center (PIC) 2014 Modifications	Underway	2	387
Executive Services	RALS Anthem for Sept 2014 Update-Council rev 11-3 JS edits	Underway	1	95
	RALS Archive Collection Management	Closed	1	87
	NEOGOV evaluation and/or replacement with another ATS	Underway	2	77
	PeopleSoft 9.2 Upgrade	Closed	3	21
	BI Reporting and Analytics`	Underway	3	9
District Court	Unified Case Management System	Underway	2	353
Natural Resources & Parks	West Section Control System Replacement	Underway	3	125
	Parks Facility Scheduling System Replacement	Underway	3	117
	WTD IBIS Replacement	Underway	3	129
Transportation	ADA Broker Equipment	Closed	1	173
	Capital Management and Reporting System	Underway	2	181
	Data Infrastructure Replacement Project	Underway	3	199

	HASTUS Employee Performance Module	Not Started	2	207
	HASTUS Planning Module	Not Started	2	215
	HASTUS Upgrade	Underway	3	225
	M5 Yard Manager – Dispatch Replacement	Underway	3	231
	Mobile Ticketing Pilot Project	Underway	2	239
	On-Board Systems/Communication Center System	Underway	3	259
	ORCA Replacement Planning	Underway	3	267
	P&F Timekeeping via EAM	Underway	2	277
	Real-Time Information Signs	Underway	1	313
	Real-Time Improvements Project	Not Started	1	285
	Regional Fare Coordination System (ORCA System)	Underway	1	295
	Replacement for 4.9 Wireless Network and Mobile Access Routers	Underway	3	249
	Rider Information Systems – TABS	Underway	3	305
	Transit Customer Information Systems Refresh	Underway	3	191
	Transit Signal Priority Equipment	Underway	2	329
	Maximo Upgrade	Underway	2	155
	Vanpool Information System Modernization	Underway	3	321
	Roads Comprehensive Asset & Maintenance Management	Closed	2	163
	Election Management System Replacement Project	Underway	2	373
Elections	Overseas and Service Voters Ballot Delivery System	Closed	3	381
Information Technology	800 MHz Trunked Radio System Sprint/Nextel Rebanding	Underway	3	429
	Administration Building Re-Wire Project	Closed	3	397
	Business Continuity	Closed	2	437
	Business Empowerment & User Mobility	Closed	3	451
	Countywide Telephony System Replacement/Unified	Underway	3	421
	Enhance Wireless Connectivity	Not Started	3	479
	Enterprise Customer Relations Management Expansion	Underway	1	471
	Hosted Environment – Phase III Cloud Implementation	Closed	4	459

	Mainframe Application Migration	Underway	3	495
	Exchange to Office 365	Underway	3	487
	Puget Sound Emergency Radio Network Project	Underway	3	503
	Systems Management	Closed	2	513
	Westin Network Connection Upgrade	Underway	3	405
	Workstation Standardization Project	Closed	2	523
	IP Fax Service Project	Underway	3	413
	KCIT Regional Aerials Project	Underway	3	531
Prosecuting Attorney's Office	Integrated Document Exchange Project	Underway	2	571
	Prosecutor Case Management Project (PbK)	Underway	3	581
Public Health	PH-HIT Improvement Project	Underway	1	611
	Jail Health Digitizing X-Rays	Not Started	3	345
	Jail Health eMAR	Closed	2	621
	eCBD/CAD Interface at NORCOM	Closed	3	591
	eCBD/CAD Interface at Valley Communications	Not Started	1	641
	Systemwide Enhanced Network Design Project	Underway	1	631
	Regional Emergency Medical Dispatch & Telecommunicator-	Underway	2	599
Judicial Administration	SRP/ Case Management System/ ECR Core	Underway	3	105
	The Scheduling Project (ATLAS)	Underway	2	545
Sheriff's Office	Regional Mobile Identification Project	Closed	2	537
	IRIS TESS Replacement	Underway	3	553
	Wireless CAD	Underway	1	563

IT Project Benefits Achievement Plan

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

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

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

King County Department/Agency Name	Department of Executive Services / Business Resource Center
Project Title	ERP BI/Analytics Project – BAP includes the entire Project Benefits Achievement Plan
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.

Ken Guy, Director of FBOD
Nancy Buonanno Grennan, Division Director, HRD
Carmel Call, Director of BRC
Jonathan Swift, Deputy Director, PSB

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
Carmel Call	Director of BRC	Project Sponsor
Cheryl Lee	Chief Accountant	FBOD Business Owner
Marjorie Mills	BRC Shared Services Manager	IT Manager: supporting upgrades to Reporting, DBA services and BRC coordination of hardware/infrastructure replacement
Rita Popp	Enterprise Resource Planning Project Manager, DES - BRC	Program Manager
Laura Federighi	Administrative Services Manager – Transportation	Product Evaluation Team – Agency Representative
Jim Walsh	Section Manager - PSB	Product Evaluation Team – PSB Representative & Hyperion System Owner
Phillip Browning	HR Systems Manager	Product Evaluation Team – HRD Representative
Greg Brant	Enterprise Architect, Department	Product Evaluation Team – KCIT Representative

		of IT	
	Tishelle Betterman	Oracle EBS Systems Manager	Oracle EBS System Owner
	Brent Veenstra	IT Manager – KCIT	Product Evaluation Team – KCIT Representative
	Mike Betschart	IT Manager – BRC PeopleSoft	PeopleSoft System Owner
	Mark Foote	BFO IV - Transportation	Product Evaluation Team – Agency Representative
	DeWayne Pitts	Chief Financial Officer – Public Safety	Product Evaluation Team – Agency Representative
	Max Foster	Business & Finance Officer IV – Natural Resources & Parks	Product Evaluation Team – Agency Representative
	Eben Sutton	Controller – Public Health	Product Evaluation Team – Agency Representative

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	5/26/2015	Rita Popp	New, initial draft	3 hours

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

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

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

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

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

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

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

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

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

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

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

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

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

Omnibus Request - Requirements Gathering May 2015

The project Omnibus budget request includes activities to identify the BI/Analytics business drivers and priority requirements from each agency as well as capture an accurate baseline and measured target benefits.
Clear detailed requirements and priorities will also support detailed scoping and approach for BI/Analytics product acquisition and implementation activities. The detailed requirements and priorities have a target due date of October 31, 2015 and are not finalized at the time of the mid-

biennium budget request. An update to this document will be provided upon completion of approved scope for the ERP BI Project.

Mid-Biennium Request – Proof of concept, data governance and stewardship November 2015

The efforts in completing a proof of concept with Oracle Business Intelligence products, conducting data readiness and remediation, and establishing data governance has long term value and benefits for King County. It identifies both business policy, process and system improvements in EBS, PeopleSoft & Hyperion (ERP source systems). This work is value add regardless of a BI product implementation. BI consulting resources are required to continue to augment BRC staff team as well as provide the expertise and guidance to lead the initial planning and scoping work. The mid-biennium budget request will fund the ERP BI/Analytics Project from January 1, 2016 through December 31, 2016.

Supplemental / Biennium Request – Software Acquisition and Implementation
The Supplemental / Biennium request is for the product acquisition and implementation including training, communication and change management.

Benefit #1. Faster, more accurate answers with better quality data for improved visibility and productivity. Improve and automate the existing very manual data manipulation and report production processes to eliminate the errors in the current agency produced excel reports.

Management will have improved visibility into material events and financial and budget performance across the agencies. Data transparency and more timely, accurate and consistent information will support proactive decisions, increase the speed to respond to emerging situations, and mitigate the risk of inaccurate compliance reporting to external agencies.

For example: Automate the Schedule of State Financial Assistance (SSFA) and the Schedule of Expenditures of Federal Awards (SEFA) reports by reducing the manual hours and error correction rework by agencies and Central Finance. By providing automated pre-defined supporting SSFA/SEFA reports and ad hoc analysis capabilities to the agencies and Central services staff they will have accurate information from the start of the SSFA/SEFA process. This will enable them to focus their analytical skills on the content and correction of the information before it is published.

Benefit #2. Improve operational efficiencies by reducing and removing the need for business analysts to manually extract and manipulate information from the three ERP systems to produce their regular operational and performance exception reports and their mission critical reports.

Provide a user friendly, self-service reporting solution that will provide unified data for EBS, PeopleSoft and Hyperion. There is no reporting solution that unifies data from these systems today. Currently King County Financial, HR and Budget analysts spend over 10,000 hours per month just preparing their own data silos by manually extracting and manipulating information from these systems. Reports are then manually produced, formatted and distributed from these data silos.

In addition, with the proposed solution and the availability of integrated data it is expected

agencies will be able to redirect much of the time saved to data-led information discovery and more value added work. Some examples of these value-added activities are:

FBOD:

- Increase time spent training staff on allowable costs and other compliance rules to prevent audit findings, questioned costs to pay back federal grantors and decrease risk of reduction in future grant funding
- Increase time spent on researching, testing and implementing allowable cost schedules and other functionality that currently is not robustly used (if at all) that could increase the accuracy of the SEFA report
- Increase time spent on conducting internal audits of federally-funded programs.
- Reduce our reliance on contracted internal auditor whose work ensures a high-quality SEFA

HRD:
Automated reports on the number of hours STT (Short Term Temporary) employees have historically worked in various areas; their testing scores and their availability will provide robust data to place the most qualified applicants in the best work groups. Analysts can spend their time identifying and placing the returning employees. Time saved can be used to revise testing and interview practices and better analyze how to place new STT's to align with their current needs and skills.

Agencies:

Labor/Employee Hours & Cost by Project – King County uses this detail information for a variety of purposes, including billing calculations, third party invoicing and project cost analyses. Not all expenses are eligible for capital project grants which are reimbursed to the agency from the state or federal governments. If expenses are not correctly charged to capital grant projects, agency reimbursement of costs may be impacted. Analysts need time to monitor as well as access to timely, accurate data that will provide them the opportunity to analyze both the quantitative and qualitative causes of variances in cost re-imbursements.

Benefit #3. Improve diversity hiring in the county. HRD's experience is that currently, it is very challenging and time consuming for managers to pull data showing where diversity falls off in the recruitment process. In a recent example, it took several weeks. Because managers are pulling from various sources and have varying degrees of skills with our systems, this also leads to inconsistent reporting across agencies. BI will enable automatically pulling this information at any time for reporting from individual departments.

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

B1: A survey of financial analysts and Central finance staff will be used to determine if the quality and accuracy of the data from the agencies in the now automated reports has improved. The survey will capture information both generally : "do you think the information quality has improved and is more accurate in the BI automated Agency reports" and in regards to specific reports such as SSFA and SEFA: " were fewer error correction cycles required to get the SSFA/SEFA correct." ; "were there fewer internal audit issues identified" .

The questionnaire will also ask users their degree of satisfaction on system ease-of-use.

Survey questions will also ask finance managers the extent to which the BI tool has been used to provide new analyses and insight to support senior level decision making. , including whether staff are in fact using the powerful analytical capacity of this tool in ways they could not have done before to inform key decisions related to their business operations and ERP source system data.

B2: A survey will be used to collect information from departments and central service agencies on how they are using the additional time saved from the implementation of the BI solution. The survey will collect the amount of time that was re-directed to value add activities; what those activities are; and what business value and improvements are being gained through those value add activities.

FBOD: Questionnaire will ask to what extent they were able to redirect hours towards the value added work they had hoped to perform , including but not limited to:

- Increased time spent training staff on allowable costs and other compliance rules to prevent audit findings, questioned costs to pay back federal grantors and decrease risk of reduction in future grant funding
- Increased time spent on researching, testing and implementing allowable cost schedules and other functionality that currently is not robustly used (if at all) that could increase the accuracy of the SEFA report
- Increased time spent on conducting internal audits of federally-funded programs
- Reduced reliance on contracted internal auditor whose work ensures a high-quality SEFA

HRD: Questionnaire will ask to what extent staff is able to redirect hours towards the value added work they had hoped to perform, including but not limited to revised testing and interview practices and better analysis of how to place new STT's to align with their current needs and skills and match with business needs.

Agencies: Questionnaire will ask: "were they able to get their cost reimbursement variance reports generated within the 5 days before the end of the month" and "did the analysts perform the cost variance analysis and research "during that period.

B3: Survey will measure HRD diversity hiring analysis by asking: "did the HRD analysts spend time analyzing diversity fall off reasons" and "did HRD improve their diversity rate?"

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

B1 Baseline:

Larger agencies spend over 120-150 hours per agency to prepare their SSFA/SEFA and go through an average of 5 error correction cycles with central finance. Central Finance spends a minimum of approximately 320 - 400 hours/year on SSFA/SEFA preparation, review, error correction, technical assistance and internal audit issues coordination of SSFA/SEFA review processes.

Based on feedback from the BI Analytic workshops and the response from a FBOD 2013 'Listening Tour' with King County agencies, the users are 'very dissatisfied' with Discoverer ease-of-use.

B2 Baseline:

Currently King County Financial, HR and Budget analysts spend over 10,000 hours per month manually extracting, manipulating information from these systems.

FBOD value-added activities current baseline:

- Increase time spent training staff on allowable costs and other compliance rules to prevent audit findings, questioned costs to pay back federal grantors and decrease risk of reduction in future grant funding – 10hrs/month spent now
- Increase time spent on researching, testing and implementing allowable cost schedules and other functionality that currently is not robustly used (if at all) that could increase the accuracy of the SEFA report – 0 (zero time spent on this now)
- Increase time spent on conducting internal audits of federally-funded programs. – 0 (zero time spent on this now – contracted out)
- Reduce our reliance on contracted internal auditor whose work ensures a high-quality SEFA - 8 weeks of contractor time plus 30k /year

HRD value-added activities current baseline:

- Currently spend 2.5 months on collecting data and performing limited STT placement analysis.

Agency value-added activities current baseline:

- Currently, analysts receive reports 60 days late. Qualitative "why" variance analysis is limited and information is too late to take up front corrective action.

B3 Baseline:

The current King County rate of diversity is 34.3%. Manual creation of diversity report is several weeks. Diversity fall off reason analysis very limited.

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

B1 Target:

The target for determining if the quality and accuracy of the data from the agencies has improved will be if the response to the survey questions from the agency financial analysts and Central finance indicate: 80% of the responses were positive that the quality of the data in the agency produced reports had improved; there was a reduction of at least 80% in the number of error-correction cycles they had to execute when producing the SSFA/SEFA financial reports; and there

was a reduction of at least 75% in the number of internal audit issues identified.

The target for determining system "ease-of-use" is if 75 % of respondents respond 'satisfied' for ease-of-use on the new reporting solution.

The target for recognizing the ability to fully utilize the analytic capabilities of the tool is if 50% of the respondents respond 'satisfied' for ability to utilize tool's analytic capability in the first year in production and if 75% of the respondents respond 'satisfied' for ability to utilize the tool's analytic capability by year 2 in production.

B2 Target:

Reduce the manual effort required to produce EBS, PeopleSoft & Hyperion data related to operating, management and executive reports by 50%.

FBOD targets for each of the following:

- Increase time spent training staff on allowable costs and other compliance rules to prevent audit findings, questioned costs to pay back federal grantors and decrease risk of reduction in future grant funding – increase time allotted by 50%
- Increase time spent on researching, testing and implementing allowable cost schedules and other functionality that currently is not robustly used (if at all) that could increase the accuracy of the SEFA report – increase time allotted to at least 10 hours/month.
- Increase time spent on conducting internal audits of federally-funded programs – increase time allotted to at least 10 hours/month
- Reduce our reliance on contracted internal auditor whose work ensures a high-quality SEFA – eliminate the need for the contractor and the 30K cost.

HRD targets:

- Target is to reduce data preparation cycle to 2.5 weeks to collect data and thus increase analyst time spent revising testing and interviewing practices and conducting better analysis of how to place new STT's to align with their current needs and skills.

Agencies targets:

- Target is to receive reports at least 5 days before end of month so reasons for variances can be detected and preventive/correction actions can be taken by the analysts thus ensuring timely and proper cost re-imbursement to the County. Analysts responded positively to performing proactive variance analysis during this period.

B3 Target:

Providing automated diversity reports on demand and analysts performing research on the agencies' information showing where diversity falls off in the recruitment process will help improve the diversity hiring rate. It is expected that with this proactive oversight that the diversity rate can be increased to achieve the 38.5% target set by HRD.

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

B1: The goal of realizing faster, more accurate reporting with 50% better quality agency data; a 50% reduction in number of error correction cycle; and75% fewer internal audit issues is expected to occur during the first year after the BI solution is placed in production. An additional 30% data quality improvement and 30% reduction in error correction cycles are expected in year 2.

The goal for system ease of use is to realize a 'satisfied' response from 75% of the users in 2 years.

B2: The goal is to realize the 50% reduction in time spent doing manual data manipulation within 1 year after BI solution is in production. The goal to achieve the targets identified by FBOD, HRD, and major agencies is within 1 year after BI solution is in production.

B3: HRD achieving their diversity target will likely require 2 years from when BI solution placed into production.

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.*

Replace the Oracle Discoverer ad-hoc reporting tool for EBS data because it is going off support from Oracle in 2017. Implementing a new Business Intelligence (BI) product as soon as possible will provide King County the continued ability to obtain information out of the EBS application and mitigate the risk of Discoverer tool system failure and/or potential financial audit findings.

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

The probability the risk is high. Oracle requires that routine patches be applied to the EBS applications. As new patch release sets are applied to the EBS applications, the risk of the Discoverer tool becoming incompatible with the Oracle applications increases. It is estimated that by 2017 the Discoverer tool will

be incompatible with future release patch sets.

If FBOD and agencies no longer have access to an ad hoc reporting tool like Discoverer, there is the high risk of not being about to ensure the timeliness and the validity of financial data included in key financial reports including: the Comprehensive Annual Financial Report (CAFR); the Schedule of Expenditure of Federal Awards (SEFA); and the Schedule of State Financial Assistance (SSFA). These financial reports provide the foundation for required state and federal audits, federal grant awards, and the County's triple A bond rating. Without any ad hoc reporting capability, the probability of this risk occurring is very likely.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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 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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	7/22/13	Mike Betschart	New, initial draft	3 hours
Review Only	5/21/14	Harry Trumble	No changes	.25 hours
Year-end Update	12/28/15	Mike Betschart	Updated to reflect Benefits Achievement	1 hour
Updated to reflect responses to Council questions	6/16	Jenny Giambattista		.25

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

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   - *Testing Framework: Target defect rate less than 2% of modifications*

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

5. *When is the benefit likely to be achieved?*
    - *Reduction of defects – after upgrade stabilization (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.*

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

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

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

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

Continued support provides the following at no cost:

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

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

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

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

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

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

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

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

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

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

3. *What is the current baseline?*

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

Benefits presented in priority order.

Continued vendor support.
The main driver of the PeopleSoft upgrade was that vendor support for the 9.0 release level was ending in 2015. This meant that payroll tax rates in the system would have become inaccurate causing incorrect tax amounts to be withheld.

12/28/2015 - In so far as the system has been upgraded to release 9.2 using PeopleTools 8.53, King County is now using a fully supported version of the system. Further, given that Oracle's stated direction regarding PeopleSoft Update Manager is to continuously update 9.2 it is unclear whether another major PeopleSoft upgrade will be required. Using the PeopleSoft Update Manager, the King County support team intends to apply a "full" release set and PeopleTools upgrade to the system at least annually, but not less than once every two years .This is in accordance with Oracle recommendations (Document 1641843.2, Best Practices / Maintenance Strategies).

PeopleSoft automated Testing Framework solution.
This feature adds value by providing automated testing functionality, which helps 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.

12/28/2015 – As of this writing, there have been 1155 Vendor updates and 102 King County custom modifications introduced to either correct existing defects or enhance functionality. To date, the count of defects introduced into production has been 15. This benefit has been achieved.

New application release set methodology
This feature allows an increase in the frequency of applying feature packs and minimizing length of future upgrades. Reduces the need to resolve issues through custom development. This new feature allows the support team to meet changing business needs more rapidly by enabling us to apply PeopleSoft supplied application updates with greater frequency and regularity.

12/28/2015 – As of the writing of this update, seven PUM Release Sets have been applied, including a "full" Release Set in May of 2015, which brought the code line current. This benefit has been achieved.

Replacing 9.0 modifications with new 9.2 delivered functionality
This activity will simplify future application updates. The current 9.0 version of PeopleSoft contained

customizations unique to King County. The newer version of PeopleSoft provides new and more robust features unavailable in the current version.

12/28/2015 – the original baseline established in this document was by modified object (most granular level of detail). Analysis conducted by the systems integrator (Sierra Cedar), documented in the "FITGAPIDP_Findings" document was done at the component level (collection of pages & associated records). These findings detail that out of 854 custom components, that 321or 38% of custom components were retired.This benefit has been achieved.

Access to information using Workcenter / dashboarding functionality. *These features were nonexistent in the 9.0 version of PeopleSoft. These features provide 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.*

12/28/2015 – As of this writing, no Workcenter or dashboarding functionality has been introduced. This was assessed as a low priority for the business in 2015, but there is an expectation that the payroll Workcenter will be implemented in 2016.

Metric Table:

Metric Description	Metrics	Baseline	Target	Actual
Ensure continued vendor support	*Upgrade from version 9.0 to 9.2*	• *9.0*	• *9.2*	• *9.2*
PeopleSoft Test Framework	*Defects introduced into production as a percentage of modifications made to production*	• *2% of Modifications*	• *<2% of Modifications*	• *1.2% of Modifications*
Release Set Application	*Count of PUM releases applied*	• *0 Releases*	• *2 Releases*	• *7 Releases*
Reduction of customizations	*Count of customizations*	• *0% reduction in customizations*	• *customization reduction by 5%*	• *38% reduction in customization*
Enabling workcenter or dashboard functionality	*Number of workcenters or dashboards implemented*	• *0*	• *> 0*	• *0*

Information from 6/16 response to Council staff questions

The dashboard 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. The Workcenter functionality allows the grouping of functions on one page

IT Project Benefits Achievement Plan (Version 2)

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For assistance in completing this form, please contact your PSB analyst.

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

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

King County Department/Agency Name	King County 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~~, Carolyn Busch, Chief of Staff to King County Council

Section 3. Who is involved in developing the BAP?

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

Name	Title / Agency	Project Role
Carolyn Busch ~~Michael Woywod~~	Chief of Staff	
James Burns	Station Manager	
Jenny Giambattista	Legislative Analyst	Review team for the BAP

Section 4. When should the BAP be started, updated and completed?

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

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

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

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

Section 5. How long will it take to complete the BAP?

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

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Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
Annual Review	3/13/2015	Cheryl Boudreau	Annual Review	20 minutes
Annual Review	6/20/16	Jenny Giambattista	Close out	20 minutes

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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.

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

2. ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)***
   We will measure improved quality by whether we are broadcasting in high definition.

3. ***What is the current baseline for this measure?***
   We are currently broadcasting in standard definition

4. ***What is the target for this measure? (How much improvement will this project achieve?)***
   The target is broadcasting in high definition

5. ***When is the benefit likely to be achieved?***
   We expect to be broadcasting in high definition by April 14 2015. This is the date Comcast is required to provide the HD Channel.

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

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

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

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

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

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

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

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

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

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

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

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

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

1. ***Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.***
   The primary benefit of this project is the upgrade of outdated standard definition technology to the industry standard of high definition. Most of the current equipment is approximately 7-8 years old and will need replacing soon so it seems more prudent to replace the older equipment with high definition rather than standard definition.

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

Category #4: Reduced cost to produce service (external or internal) or cost avoidance
This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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

This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

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

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

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

Section 7. Benefit Achievement Summary

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	*Processing Time annual savings, and percentage of purchases receiving prompt payment*	• *10 days processing time* • *10% of purchases are receiving discount* • *$100,000 savings*	• *1 day processing time* • *30% of purchases are receiving prompt payment discounts* • *$400,000 savings*	• *2 day processing time* • *20% of purchases are receiving prompt payment discounts* • *$200,000 savings*

prompt payment discounts.	*discounts*			

Project closed 3/31/15. Expected benefit of broadcasting in HD was achieved on time and HD broadcasting began on April 16, 2015

The original scope of the project included not only upgrading the HD equipment and casework but also the lighting and Audio Visual system in the Council Chambers. At the end of July 2014 the apparent first choice vendor withdrew themselves from consideration during final contract negotiations. The project team immediately assessed the viability of the second vendor and entered into contract negotiations. These negotiations proved to be successful however the primary reason they had been the second place vendor was due to their bid being $250,000 more than the first place vendor. The lighting and audio visual upgrades were removed from the scope to meet available budget.

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	Distributed Antenna network (DAN) Phase II
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: William Hayes~~Claudia Balducci~~, Director, Department of Adult & Juvenile Detention

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

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

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

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

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

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

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

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

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

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

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Budget Process	7/9/13	Mike Holland	New, initial draft	2 hours
Budget Process	8/15/2013	Mike Holland	Per evaluation feedback from Council Analysis, moved benefits from Category #2 or Category #3. Also provided additional information about the current "dead spot" in KCCF and how many of them will be addressed by this project.	3 hours
Budget Process	10/25/2013	Scott Lackey, John Slomnicki	Reformatted to the new v.2 BAP doc format	2 hours
Change of IT PM	6/1/2014	Scott Peterson	New KCIT PM Assignment	30 min
BAP Review	2/12/2015	Mike Holland, Scott	2015 BAP Review – NO CHANGES	30 min

			Peterson		
	BAP Review	1/26/2016	Mike Holland, Scott Peterson	2016 BAP Review – Change is scope – Reflects change in Benefits. See section 6 Category #2	30 min

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

UPDATE: 1/26/2016 – Project had to reduce scope due to funding restrictions. The project will upgrade the DAS on floors 5, 6, and 7 only in this phase II.

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

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

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

   The goal of the DAJD KCCF Distributed Antenna Network (DAN) *Phase II* project is to provide 800 MHz staff radio coverage ~~throughout the remaining floors (floors 4-12)~~ on floors 5, 6 and 7 of the King County Correctional Facility.

   ~~Once completed, the entire facility would have seamless radio coverage throughout all floors, including the elevators and emergency stairwells. Also, depending on the extent of the implementation, additional customer groups will be served as well. Potentially the Seattle Police~~

~~Department, King County Sherriff's office staff, Seattle Firefighters, and other King County law enforcement agencies could also leverage the enhanced coverage due to the Phase II head end changes.~~ [NEW 1/26/2016] Once completed, floors 5, 6, and 7 will be updated with the current radio frequency system as floors 1, 2 and 3. The remaining floors, 8-12 and the tie into the Seattle Simulcast will need to be included in the Phase III request.

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

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

   We will know if these benefits have been achieved if radio coverage is available in all locations on floors ~~4 through 12~~ [NEW 1/26/2016] 5-7 and if we have the capacity to support the additional user groups mentioned above.

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

   There is currently no reliable radio coverage throughout floors ~~4 through 12~~ [NEW 1/26/2016] 5-7 and the user groups mentioned above cannot be supported due to capacity issues.

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

   The benefit will be achieved when radio coverage is available on floors ~~4 through 12~~ [NEW 1/26/2016] 5-7 as well as the related stairwells and elevators.

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

   Full radio coverage on floors ~~4 through 12~~ [NEW 1/26/2016] 5-7 is anticipated by Q4 / 2016.

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

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

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

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

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

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

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

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

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

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

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

3. *What is the current baseline?*

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

Metric Description	Metrics	Baseline	Target	Actual
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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

UPDATE: 1/26/2016 – Project had to reduce scope due to funding restrictions. The project will upgrade the DAS on floors 5, 6, and 7 only in this phase II.

IT Project Benefits Achievement Plan (Version 2)

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King County Department/Agency Name	Department of Adult and Juvenile Detention
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:
William Hayes, DAJD 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.
Cynthia McNabb	DAJD DSM-H/R	Ensure changes in leave management processes and reporting are consistent with management objectives. As a key business representative for DAJD FMLA/Light Duty/Leave Management LEAN event, incorporate LEAN outcomes where appropriate in application process design.
David Weirich	DAJD-ITR/Admin Captain	Evaluate workload impacts on leave, annual processing of staff assignments. Provide feedback during development and rollout of project products

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

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

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1. To support initial project request during "gate two" phase of conceptual review.
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Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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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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2014 Budget process	10/25/13	Don DiJulio	Required replacement of 2013 Benefit Realization Report with a new form	10 hours

	2014 1st Qtr Budget Suppl	12/04/13	Don DiJulio	Reviewed only	.25 hours
	2014 Annual BAP Reporting	3/9/2014	Don DiJulio	Updated to reflect change in project scope – no IVR phone option; Re-categorized to internal service benefit.	.75 hours
	2015 Annual BAP Reporting	2/5/2015	Don DiJulio	Reviewed – Sec#3, New DSM-H/R and updated planned implementation date, from Oct 2014 to 2nd Qtr. 2015	.25 hours
	2016 Annual BAP Reporting	2/10/16	Don DiJulio	Reviewed-Sec#6,5 when benefits to be achieved	.5 hours

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

   Operational business needs of DAJD cannot be met by leave entry directly into to PeopleSoft timesheets for a number of reasons. The leave information impacts assignment schedules and

assignment backfill needs of operational sections. Most effective and efficient information flow is derived from leave entered directly into a scheduling system that interfaces with the central payroll system. DAJD has implemented and maintained this efficient information flow since the late 1980's. In addition, most of DAJD payroll information is derived from its scheduling system, the Roster Management System (RMS), to include work hours and schedules, overtime rate determinations for excess hours worked, assignment premiums and holiday accruals among others.

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

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

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. Application is currently being piloted by 2 DAJD divisions. Plan is to complete implementation to all divisions by June 2016.

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

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

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

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

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

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

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

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

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

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

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

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

3. *What is the current baseline?*

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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

Information Technology 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 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 Performance, Strategy, and Budget Analyst.

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

Section 2. Business Owner Accountability

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

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

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

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

Name	Title / Division	Project Role
Esther Wu	Business and Finance Officer IV – DDD	Subject Matter Expert
August Mecl	Project Manager III – DDD	Project Lead
Louis Lok	Program Evaluator – DDD	Subject Matter Expert
Kendra Hinger	Business and Finance Officer II – DDD	Subject Matter Expert
Sandy Ou	Fiscal Specialist II – DDD	Subject Matter Expert
Susy Stremel	Employment Program Manager III - DDD	Subject Matter Expert
Magan Cromar	Early Intervention Program Manager III - DDD	Subject Matter Expert
Scott Leonard	Employment Program Manager III - DDD	Subject Matter Expert
Wendy Harris	Early Intervention Program Manager III - DDD	Subject Matter Expert
Katherine Festa	Program Manager I - DDD	Subject Matter Expert
Richard Wilson	School-to-Work Program Manager – DDD	Subject Matter Expert
Leslie Arai	King County Information Technology (KCIT) Project Manager	KCIT Project Manager

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

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

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

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

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

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

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

Revision History Table

Stage	Date	Revised By	Description	Duration
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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.”*	*How long did it take to complete or revise the form at this stage?*
Conceptual Review	7/02/2014	Joe Carter	Initial Draft	8 hours
Legislative Feedback	7/21/2014	Joe Carter	Revised draft	
Annual IT Benefits Update	2/25/2016	August Mecl	Updated Section 3	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 KCIT investments generally fit into the following four categories:

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

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

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

Primary project benefit? (Check only one)

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

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

☐ Category #3: Maintaining service levels by replacing or upgrading older technology.

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

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

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

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

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

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

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

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

   A decrease in the time contractors spend on billings

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

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

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

   The current baseline Is 9 hours per provider per month

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

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

   .

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

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

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

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

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

Example: *The Active Directory Consolidation project is part of an overall effort to promote KCIT standardization. This project will make the current management of user accounts, applications, and devices easier for KCIT administrators in Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync,*

SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

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

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

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

Benefit A:

Decrease in processing times

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

Benefit B:

Timely and more automated reports

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

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

Benefit C:

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

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

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

Benefit A: Decrease in processing times

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

Benefit B: Timely reports and new automated reports

- We will measure timely reports and new automated reports by measuring how long it

takes to produce monthly fiscal program and management reports and whether we can produce new reports automatically

Benefit C: Improved Program Outcomes

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

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

Benefit A: Decrease in processing times

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

Benefit B: Timely reports and new automated reports

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

Benefit C: We will measure Improved Program Outcomes by measuring

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

4. What is the target for this measure?

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

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

Benefit B: Timely reports and new automated reports

- We will be able to produce monthly fiscal program and management reports in 4 days
- We will be able to produce the following new automated reports
  - Monthly functional program report
  - Contract consideration versus expenditure
  - Demographic reports
  - Outcome reports

Benefit C: The target for Improved Program Outcomes will be

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

receiving a day program service, an increase of two percent

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

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

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

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.
Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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

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

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

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

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

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

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

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of 10 days to less than 1 day allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Annual report	01/24/14	Cherie Jones	New - Initial draft	6 hours
Updated	10/16/15	Diane Swanberg	Updated benefit achievement results.	
Updated	2/26/16	Diane Swanberg	Reviewed BAP update from 10/16/2015 to ensure it was still accurate. No changes were made.	1 hour

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

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

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

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

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

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

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

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.

2. *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.

3. *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 28 times in a 7-day period.

Baseline
28

4. *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.

Target
1

5. *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.

1. *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.

2. *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 <u>or</u> 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.

3. *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 <u>or</u> called the office to obtain case or resource information a total of 15 times in a 7-day period.

Prior to implementation of the DMHP Mobile Solution, staff spent an average of 60 minutes in the office during a client evaluation/outreach work shift.

Baseline
15

4. *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 1 occurrence in a 7-day period.

Target
1

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 18 minutes.

Target
18

5. *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.*

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

The 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.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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
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	28 times in a 7-day period	1 time in a 7-day period	11 times in a 7-day period. 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	15 times in a 7-day period	1 times in a 7-day period	10 times in a 7-day period 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	60 minutes	30% reduction or 18 minutes reduction	18% or 11 minutes reduction 6 months after implementation

The results reflect improvement in the areas identified as the stated goals continue to be the target. The adoption of the new technology presented some unique implementation challenges. Using the new technology was a significant departure from the usual business practice and highlighted difference in the staff's level of comfort transitioning from a historical paper based system to mobile applications. A tremendous amount of staff embraced the technology shift while maximizing the utility of making the information they needed more accessible. Other staff presented opportunities for leadership to craft and mold a training system to cater to those who had not historically utilized mobile information tools.

Once staff was trained there were some unanticipated on-going difficulties between our base applications and the Windows 8 operating system. These difficulties were eventually addressed with a roll back to Windows 7 operating system in February 2015. This also resulted in increased comfort and staff use.

Another challenge was the actual tablets themselves. There were issues both using the tablets in the field as well as connections to the permanent work station. There were issues with the wireless connectivity that prevented reliable use in the field. The results of the challenges led to a decision to replace the tablets with a laptops starting in August 2015, which is continuing to improve the utility of the project.

The opportunity to implement this project has been a great learning experience for the division and has led to streamlined ability to access imperative information in the field. Although there have been challenges, the positive movement in meeting our measures indicates the value and potential for achieving our goals. Recent equipment changes and an increased effort to better train staff in the use of the technology point to our meeting the desired goals and increased utilization of the technology going forward.

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	DES / Human Resources Division
Project Title	NEOGOV evaluation and/or replacement with another ATS System
Project Number	1124179

Section 2. Business Owner Accountability

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

Phillip Browning, Human Resources Systems Manager

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

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

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

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

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

actions:

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

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

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

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

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

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	6/9/14	Phillip Browning / Kendall LeVan Hodson	New, initial draft	2 hours
	9/10/14	Phillip Browning	Updates	2 hours
Budget process	3/1/16	Greg Felton	Updates	30 minutes

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

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

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

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

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

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

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

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

Benefit A:

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

Benefit B:

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

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

Benefit A:

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

Benefit B:

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

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

Benefit A:

- The amount of negative feedback was captured by the Applicant Tracking Systems (ATS) Review. This internal survey reflected that the applicant experience was poor. There were common complaints from applicants that the system was not user friendly; that features

within the system were not intuitive. In addition, our applicants were unsupported by NEOGOV for those portions of the applicant process that we do not have access to. Since the county does not have access to any of the applicant information entered into NEOGOV prior to the applicant's submission of their application, should they run into technical difficulty prior to submission, we are unable to provide assistance. NEOGOV's customer service has been historically poor.

Benefit B:

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

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

Benefit A:

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

Benefit B:

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

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

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

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

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

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

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

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

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

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

Benefit A: Recruiting Benefits

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

Benefit B: Talent Acquisition Management Potential

- Leveraging stored applicant and talent information to recommend qualified applicants for other related positions that were not hired initially. With an ATS that allows us to better track applicant details through the recruitment process (e.g. skillsets, strengths, experience, interview details), recruiters would be better positioned to look through an existing candidate pool of prior applicants that have desired skills needed in positions that the applicant did not initially apply for.
- Analytics that would help form training plans and initiatives in the future to develop our existing workforce to fill foreseeable gaps in talent left by future attrition projections. As our applicant pool grows, so will our ability to assess existing skillsets within our current employee base and potential applicant pool. This will become increasingly valuable in assessing gaps in needed skillsets. For example: if we are going to see employee turnover

of up to 46% in the next 5 years at the county, having a clear understanding of highly skilled positions that will become vacant, identifying up and coming or existing potential county wide, and looking to see clear gaps in the existing candidate pool. This will help us understand our development needs and recruiting challenges and will aid in putting us in a proactive situation.

Benefit C: Highly Skilled and Diverse of Applicant Pool

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

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

Benefit A: Recruiter Survey to Recruiter Group

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

Benefit B: Talent Acquisition Management

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

Benefit C: Applicant Pool Diversity

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

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

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

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

Benefit B: The current baseline for talent acquisition management is that this does not exist today. This would be new and needed functionality hoped to be provided by a new ATS that can capture this type of data.

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

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

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

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

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

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

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

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

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

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

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

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

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: *<u>Reduced cost to produce service</u>. 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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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.
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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Funding release	12/5/13	Carol Shenk	New, initial draft	3 hours
Annual Report	3/1/16	Carol Shenk	Post Implementation	.5 hours

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

X 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.~~

   2/29/16 Update: The site went live on 2/2/2016, and includes 200,000 database records describing the collection. Archives staff reviewed and performed quality control on database records and added physical descriptions, titles, and other information where missing in records. The Archives has publicized the site through a press release, through Twitter, in the Seattle Area Archivists' newsletter, through the Association of King County Heritage Organizations' news board, and

KCTV is producing a 5-minute piece on the Archives and the new search site. We anticipate it will take 10 months to achieve the expected benefits regarding customer use of the site.

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.*

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

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

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

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

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

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

3. *What is the current baseline?*

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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Example:

Metric Description	Metrics	Baseline	Target	Actual
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IT Project Benefits Achievement Plan (Version 2)

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

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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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	DES/RALS/Recorder's Office
Project Title	Recording System Replacement
Project Number	1124175

Section 2. Business Owner Accountability

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

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

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

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

Name	Title / Agency	Project Role
Jon Scherer	Section Manager, RO	SME for Recorder's Office business, Project contact
Norm Alberg	Division Director, RALS	Business Owner
Megan Pedersen	Deputy Director, RALS	On Special Duty not in RALS
Thea Thach	Supervisor, RO	Subject Matter Expert
Kathleen Baker	Supervisor, RO	Subject Matter Expert
Sean Bouffiou	Finance Manager, RALS	Steering Cmty Member
Syd Phillips	IT Business Analyst, KCIT	Business Analyst (during budget submittal process)
Margaret Brownell	DES IT SDM, KCIT	Steering Cmty Member
Donna Frisk	KCIT/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:

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

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

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

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

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Conceptual review	12/31/13	Jon Scherer	New, initial draft	60 min
Conceptual review	12/31/13	Molly Cherkin	Provided feedback on initial draft	30 min
Conceptual review	1/23/14	Molly Cherkin	Review with Margaret Brownell and updates	45 min
Conceptual review	2/7/14	Margaret Brownell	Final edits	30 min
Gate #2	6/30/14	Syd Phillips	Updates	60 min
	9/12/14	Sean Bouffiou	Address KCC staff comments/suggestions	3 hrs
Conceptual review	11/3/14	Sean Bouffiou	Address additional KCC staff comments and suggestions	90 min
Implementation	4-1-16	Sean Bouffiou	Update for current information	90 min
Implementation	6-3-16	Jon Scherer	Update for current informaton	1 Hr

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

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

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

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

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

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

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

The existing software solution (Anthem) has been deployed in the Recorder's Office since 2002 (12 years), though it was effectively an upgrade (not a platform change) from the system implemented in 1999 (ISOL). The existing vendor product was phased out by the vendor over four years ago, with the introduction of their next generation platform. While the Anthem system is still technically supported by the vendor for existing customers, support is limited to maintenance with the exception of changes mandated by state or federal law. With all of the vendor's investment and new development focused on their next generation platform, no new development on the retired platform has occurred in years. The functionality is limited, particularly online access for electronic recording and the processing of Real Estate Excise Tax (REET) affidavits and the associated taxes and fees. Recorded documents processed prior to August 1991 are maintained either in paper, microfilm, or digitally imaged. Digitally imaged documents, including most documents recorded August 1, 1991 or after, are available to the public online via the Recorder's Office web site. Certified copies are not available electronically via an online system, and the index used to search and find relevant documents has historically been weeks or months behind actual recording dates, making searches more difficult and incomplete.
Project Update: (June 6, 2016). This project is on schedule. The project selected Pioneer Software Solutions, Inc., to replace the legacy Anthem software. The contract has been executed with Pioneer, and Pioneer was onsite the week of May 31-June 3 for team introductions and initial project kickoff. The current project anticipated lauching the new system in Q1, 2017.

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

A. Customer will be able to request documents electronically through a Web-based interface
B. Customer will be able to submit documents for recording electronically through a Web-based interface
~~Staff will have access to better tools for indexing and quality control work~~
C. Customer will be able to access multiple functions and services via self-service online
D. Customer will receive faster and more accurate service from the county, given improved indexing and timing.
E. Documents will be immediately searchable for the Public (vs. searchable after they are fully indexed, which takes additional time), and searches will be more accurate and more intuitive.
F. The County will be able to receive Excise Tax payments online

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

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

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

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

~~A. Percentage of document requests received online (v. mail)~~
~~B. Percentage of hard-copy document submissions (v. electronic)~~
~~C. Staff time devoted to quality control measures (Image review/data entry verification)~~

~~D. Number (count) of customer self-service functions available online~~
~~Quantity/percentage of self-service transactions conducted online vs. over the counter.~~
~~E. Backlog in indexing~~
~~F. System in place and operational to process Excise Tax payments online~~

3. What is the current baseline for this measure?

- Current:
  - A. 100% of document requests received via mail (vs. electronic)
  - B. 56% hard-copy document submissions (vs. electronic)
  - ~~15 minutes per day of staff time currently devoted to quality control measures~~
  - C. Only One (1) self-service function available online (records searches)
  - D. Ten (10) days for documents to be fully searchable and available online
  - E. Ten (10) day indexing backlog – No self service transactions available online.
  - F. Zero (0) excise tax payments received electronically

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

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

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

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

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

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

6 to12 months after go live (once staff becomes completely familiar with new systems and processes) and customers are aware of and using online tools.

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

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

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

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

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

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

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

G. Documents will be immediately searchable by staff and this is important to operations because customers can find documents more easily for themselves without needing to visit the office or call and take up valuable staff time.(vs. searchable after they are indexed, which takes additional time),

H. Searches will be more accurate and more intuitive. The current system only allows for minimal search criteria and does not accommodate multiple searches simultaneously or the direct comparison of documents. This makes it difficult for staff and customers to quickly determine which documents are needed. Modern search systems also allow for autofill of commonly searched items.

I. Accountability with change tracking will be higher. Managers and supervisors will have better tools for oversight through more robust internal tracking (changes to indexes, receipts, images/rescans, etc.) system notifications, user privileges, reports, etc.

J. The County will be able to minimize chances of future backlogs which is important because it minimizes overtime and means documents are available sooner for the public.

K. The County will be able to receive Excise Tax payments electronically, allowing conveyance of property transactions to be performed at remote locations and by electronic submission which will speed up delivery and reduce the consumption of paper and postage.

L. Automation will free up staff time to focus on higher value work such as quality control and the prompt delivery of recording services.

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

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

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

G. 1 day for documents to be fully searchable and available online
H. Limited search functions and single searches at a time
I. Limited reports available without KCIT technical assistance
J. No indexing backlog
K. No ability to process REET affidavits online.
L. C~~A baseline will be identified as part of the planning process for this project. An example of a baseline is 15 minutes of staff time (per staffer?)c~~urrently, a total of 15 minutes per day for a single staff member is dedicated to quality control measures focused solely on ensuring that all images are accounted for. With a more efficient system we expect to be able to dedicate 4 hours of staff time per day to quality control including ensuring that all documents are recorded and indexed accurately. ~~currently devoted to quality control measures.~~

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

~~F.~~G. 1 day for documents to be fully searchable and available online
~~G.~~H. Multiple seach field functionality and simultaneous seach capability
~~H.~~I. Standard and ad hoc reporting available to supervisors and managers without technical support.
~~I.~~J. No indexing backlog
~~J.~~K. Ability to process REET affidavits online.
~~K.~~L. Targets will be identified as part of the ~~planning~~implementation process for this project. Currently, the goal would be ~~An example includes,~~ four (4) hours of staff time ~~(~~per day~~?)~~ devoted to quality control measures.~~.~~

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

6 to12 months after go live (once staff becomes completely familiar with new systems and processes)

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

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

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

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

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

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

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

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

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This

category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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

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

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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 Judicial Administration (DJA)
Project Title	System Replacement Project (SRP)
Project Number	[Update 1/27/16] 1123900

Section 2. Business Owner Accountability

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

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

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

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

Name	Title / Agency	Project Role
Teresa Bailey	Deputy Director/DJA	Project Director
~~Katy Shaw~~ Danielle Anderson	CaseFlow and Court Clerk Division/DJA	Manager
Joe McAllister	Finance and Customer Service/DJA	Financial processes oversight
Sarina Aiello	Kent RJC Division Manager/DJA	• 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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Benefits Achievement Plan	August 24, 2015	Teresa Bailey	Request to combine Core ECR Replacement and CMS (SCOMIS Replacement) Projects	2 hours
Annual Update	January 27, 2016	Latasha Battle	Updated project#, name of CaseFlow Manager and the status of ECR stabilization work	.5 hour

Section 6. Description of Project Benefits

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

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

4) Reduced cost to produce services (internal or external)

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

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

Primary project benefit? (Check only one)

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

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

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

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

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

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

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

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

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

Benefit A, BUSINESS CONTINUITY: Although the external benefits listed below are critical and position DJA for multiple service improvements, DJA's System Replacement Project (SRP) is first and foremost a business continuity project made essential by: 1) The outdated Core ECR technology platform; and 2) AOC's planned decommission of the SCOMIS system within the next 3-4 years. In addition to the service enhancements listed below, a moderns CMS solution replaces the functionality provided by SCOMIS. Should DJA lose business continuity in the areas of case, financial or document management operations, the manual work requirements could prevent both the court and the public from processing cases and accessing critical information in a time frame required for reasonable court operations.

Benefit B, EQUITY AND SOCIAL JUSTICE – TIMELY PUBLIC ACCESS TO DATA: A significant service limitation of AOC's SCOMIS system is the 24-hour turn around between defendants/offenders making payments with the Clerk (known as a Legal Financial Obligation or LFO), and that same payment being uploaded to the AOC finance and

accounting module(s) in Olympia. *The data associated with the payment is not available for reporting until upload is complete.* Customers therefore cannot verify receipt or required distribution of LFOs in real time, causing a great deal of frustration and requiring DJA customers to make multiple inquiries to secure verification of funds received, paid or distributed. Although there are many reasons that customers are inconvenienced, two particularly common scenarios include: 1) After paying on an LFO for many years, payers make the final payment and want immediate verification that their obligation is fulfilled; and 2) LFO payers must often provide proof of a fulfilled obligation when purchasing vehicles or real estate. This second example is particularly important because third-party transactions cannot close if the payer does not have the required documentation. A modern Case Management System will upload LFO data in real time, thus allowing DJA staff to access the requested detail and provide financial information timely to customers. Additionally, in many circumstances juvenile offenders are eligible to have their records sealed upon completion of certain criteria by a specific date. When juvenile offenders make their final payment just before the date when the Judge considers sealing their case, not having up to date financial data is problematic.

Assisting the general public and case parties timely is particularly responsive to King County's Equity and Social Justice agenda, since a certain portion of Superior Court clients come from disadvantaged populations that have difficulty physically accessing the Clerk's Office on even a single occasion. When a customer comes in and makes a final payment on their LFO, they expect to leave with an accounting printout showing the balance is paid in full. Due to the delay in posting payments, an accounting history cannot be provided until the following business day. Turning these individuals away and/or asking them to call or return on the following business day for updated information may not be realistic from the point of view of ensuring equal public access to DJA services. Considering that a portion of DJA customers are jail and prison inmates, DJA's inability to provide real time data is particularly disparate. These individuals also call DJA to inquire about LFO payments and distributions, and there can be significant ramifications for their court cases. Nevertheless, DJA still cannot provide accurate data until the following business day; or if an inquiry is made on a Friday, the requestor must wait until the following Monday.

DJA's industry research shows that a COTS solution will deliver real time reporting capability. This translates to questions associated with case status or LFO payments being answered in real time with the most accurate information. (Although a new CMS also brings with it the potential for accessing critical data online, DJA still must answer in-person and telephone questions from case parties timely, since some disadvantaged individuals do not have access to a computer. Any public facing web data access points would also show real time data, however.)

<u>Benefit C, OPPORTUNITY FOR PUBLIC CONVENIENCE</u>: DJA has recently completed industry research and observed analogous case management systems installed in other Superior Court Clerk Offices around the country. It is clear that COTS CMS solutions can facilitate an intuitive public web interface and convenient access to court documents and data for the general public, the judiciary and the legal community. The potential to filter data by various fields such as date, party name or case positions DJA to assist both the public and the legal community in accessing critical case management data timely.

Industry research also shows the potential to expand the way DJA receives payments (i.e. credit cards) and offer multiple options for providing receipts (e.g., printed or emailed).

The legacy SCOMIS system that is owned and operated by the Administrative Office of the Courts (AOC) in Olympia, WA is also built on a decades-old platform. The public interface is counter-intuitive and quite backward against the public's expectation for current technology: For example, users must tab between fields and cannot use a mouse; 2) the entire user interface is code dependent and, without in-depth knowledge of system commands and consistent practice,

public users, as well as the legal community and the judiciary find SCOMIS nearly impossible to navigate. Consequently, SCOMIS remains a highly inefficient tool for case research. With the data owned and managed by the AOC in Olympia, DJA has been unable to affect service levels associated with public access to data. A modern Case Management System designed to accommodate County business needs will position DJA to design public-facing web interfaces and present case information in a straightforward and helpful manner.

Benefit D, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: LFO recipients often receive multiple payments from multiple payers on a given day. However, the current AOC financials associated to SCOMIS only permit a single check for each individual LFO payer, meaning that DJA often issues multiple checks to a single LFO recipient on a given day. For example, the State Department of Social and Health Services (DSHS) can receive anywhere between 100 and 150 checks from DJA on a given day; banks and insurance companies can receive as many as 20 checks on a specific day. A modern finance and accounting module (typically designed into COTS Case Management Systems) will benefit Legal Financial Obligation (LFO) recipients directly by allowing DJA to cut a single check covering payments from multiple LFO payers. This will simplify banking operations for LFO recipients.

BENEFIT E, EFFICIENCY IN GOVERNMENT THROUGH DATA SHARING: As background, DJA is chairing the Criminal Justice IT Efficiencies Work Group, which is comprised of technology leaders from KCIT and King County CJ agencies. This work group is facilitating opportunities for data sharing and efficiency through applied technology. The SRP solution will integrate with a King County Law, Safety & Justice Integration Solution Center (which will function as a central data exchange for the PAO, DAJD, KCSO and DPD.) This will support single instance data entry in all agencies, and allow each agency to access critical data in real time in order to maximize operational effectiveness.

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

Benefit A, BUSINESS CONTINUITY: A successful project results in DJA operations continuing without interruption once SCOMIS is decommissioned. Additional business continuity results include continued access of court documents over the internet and via electronic viewing systems in courtrooms and in DJA customer service centers.

Benefit B, EQUITY AND SOCIAL JUSTICE - TIMELY PUBLIC ACCESS TO DATA: DJA can measure the number of customer requests for financial data that cannot be immediately answered in a given time period. A successful project will result in this number being either zero or a *de minimis* amount. Because our customer base is disproportionate based on who is using the court system, increasing customer service will benefit this population.

Benefit C, OPPORTUNITY FOR PUBLIC CONVENIENCE: The public benefit for DJA's new Case Management System can also be measured through the commentary of the public and the judiciary. A successful project will create a comment record indicating that customers can conduct case and document research through straightforward web-based interfaces. Such commentary can be secured through surveys and focus groups.

Benefit D, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: DJA can monitor the number of checks issued to individual LFO recipients on any given day. A successful project will show a daily average of 1 check per LFO recipient.

BENEFIT E, EFFICIENCY IN GOVERNMENT THROUGH DATA SHARING: Once the KC LSJ central data exchange is established, it will be straightforward to count the number of data elements secured by and transferred from each participating agency. It will also be possible to measure reductions in case processing time for each agency, given their access to real time data.

3. What is the current baseline for this measure?

Benefit A, BUSINESS CONTINUITY: The SCOMIS system is currently 99.95% available and fully utilized by DJA for case processing and financial management.

Benefit B, EQUITY AND SOCIAL JUSTICE - TIMELY PUBLIC ACCESS TO DATA: Currently, customers cannot secure verifying data associated with court-ordered financial payments on the same day that a payment is processed by the Clerk. Once a payment is processed, DJA cannot provide *verification* of payment made and/or distributed until the next business day. This is particularly troubling if the request is made on a Friday.

As with item A above, DJA cannot provide verification of payments made and distributed until the next business day. With respect to Equity and Social Justice, this service deficit forces disadvantaged populations to either access a computer or make a return trip to DJA offices on the following business day, neither of which may be realistic. For incarcerated customers, family members often call or visit DJA offices in order to secure the information once it is subsequently available.

Benefit C, OPPORTUNITY FOR PUBLIC CONVENIENCE: The state SCOMIS system is difficult to use and, from a case research point of view, nearly prohibitive. Considerable time is reportedly wasted by customers trying to navigate the displayed data. Because DJA does not own or manage AOC's case data, the CMS case data that DJA does offer online is fairly limited. It is currently impossible to filter case data online by document type, case type, attorney name or hearing date.

Benefit D, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: As noted above, the State Department of Social and Health Services (DSHS) can receive anywhere between 100 and 150 checks from DJA on a given day. Banks and insurance companies can receive as many as 20 on a specific day.

BENEFIT E, EFFICIENCY IN GOVERNMENT THROUGH DATA SHARING: Currently, there is no method for King County LSJ agencies to share data in real time.

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

Benefit A, BUSINESS CONTINUITY: The target for this measure is no disruption and/or reduction to DJA service levels once SCOMIS is decommissioned.

Benefit B, EQUITY AND SOCIAL JUSTICE - TIMELY PUBLIC ACCESS TO DATA: The target for this measure is zero lag time between data entry and data availability. Any finance questions that cannot be answered in real time will be de minimis and highly specialized circumstances.

Benefit C, OPPORTUNITY FOR PUBLIC CONVENIENCE: The targets for this benefit include: 1) reductions over time in the number of customers who visit DJA offices for services for information that can be secured online; 2) feedback from customer surveys and/or focus groups designed to assess the satisfaction of the public and the judiciary with the new CMS system - the target would be an average rating of either "satisfied" or "very satisfied"; and 3) offering robust online case management research capability serving both the public and the judiciary.

Benefit D, EFFICIENCY FOR LFO RECIPIENTS IN CHECK PROCESSING: The target for this benefit will be an average of one (1) check issued to each LFO recipient on a given day.

BENEFIT E, EFFICIENCY IN GOVERNMENT THROUGH DATA SHARING: The targets for this benefit will vary depending on agency. However, a high level target applying to all participating agencies is establishment of a dependable

data stream allowing each agency to facilitate multiple LEAN process improvements.

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

Upon SRP go-live.

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

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

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

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

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

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

Multiple COTS products exist that offer DJA the opportunity to innovate through efficiency and customer service delivery. For example, many systems on the market allow data included in court minutes created within the system to automatically populate throughout the system. This means that a future court date included in the clerk's minutes can automatically add a calendar entry in the case management system and would include the docket entry for the clerk minutes. Additionally, the SCOMIS system has multiple screens that contain certain data fields and it is necessary to go to various screens to enter data. Data entry should be easier and more intuitive in a modern system. Finally, many case and document solutions facilitate varying degrees of automated data intake from scan stations, which would allow DJA to index court documents to the court file sooner, making those documents available to the court and the public sooner as well.

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

Benefits can be measured by reviewing data elements in the new system and determining whether any require double data entry. That information can be compared to the data entry currently required. Ease of data entry can also be determined by comparing the steps currently necessary to input data to the steps required by a new system. DJA will also be able to measure the average time between document intake and availability for viewing in the court file.

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

DJA currently has performance measures in place to track time required for data entry as well as the average time between document intake and availability for viewing in the court file. Time required for data entry depends on the type of case, type of document, and type of processing required by staff for a particular document. The baseline measure is available for

the various types of documents filed.

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

The target for this measure is data entry that is 2-4% more efficient than the current system supports. In addition to more efficient data entry there should also be increased accuracy and less time spent due to the elimination for the need to duplicate data. Overall, DJA staff should have more time to spend on other value added work, such as enhanced customer service.

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

The quicker data entry and document processing will likely be achieved within 6 months of go-live. Staff are currently very fast and accurate and there will be a learning curve while they all transition to a new system that operates quite differently than the SCOMIS system.

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

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

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

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

SRP Phase I, Case and Financial Management: RCW 2.32.050 designates County Clerks as the official record keeper for the Superior Court's case records. The Department of Judicial Administration (DJA), which is the King County Clerk's Office, requires an electronic system to fulfill this role: specifically, to track and index court records and facilitate public and government access to those records. For more than 30 years, DJA has fulfilled its record-keeping responsibilities with the Superior Court Management Information System (SCOMIS), a statewide mainframe system operated and maintained by the Washington State Administrative Office of the Courts (AOC) in Olympia. SCOMIS serves as a Superior Court case management index for the entire state. It is used by the court, the public, the Bar, and Law, Safety and Justice (LSJ) agencies seeking information pertaining to specific Superior Court cases. DJA staff enter data directly into SCOMIS that is used as the official index and docket, and also for limited case management purposes. As further background, SCOMIS does not maintain actual case documents; those remain stored within individual County Clerk Offices. Rather, SCOMIS stores *critical data associated to each case*.

County Clerks in the state of Washington enter and maintain data in SCOMIS and also in various systems within each Clerk's Office. SCOMIS and multiple DJA systems' data are kept in synch via highly outdated screen scrape methodology. SCOMIS is engineered from extremely old and inflexible mainframe technology, the functional limitations

of which have forced the establishment of multiple IT systems in order facilitate performance of DJA's record-keeping and case management responsibilities (DJA systems for case scheduling and exhibit management are two examples). As the largest Clerk's Office in the state of Washington, DJA has long been limited by the AOC SCOMIS system, which was designed and constructed in the late 1970's.

As further background, AOC is currently managing the State Superior Court Case Management System (SC-CMS) Project, which seeks to replace SCOMIS within the next 3-4 years. King County has recently made the decision to *not* participate in the statewide project due to multiple characteristics of the Project and AOC's chosen solution that are incongruent with mission-critical business practices and/or strategic goals of DJA and Superior Court. DJA places high value on its ability to respond quickly to changing operating requirements typically stemming from local rules, urgent changes to practice, or increasing customer demands. AOC's chosen solution will be designed as a functional common denominator among Clerks Offices in Washington; and to some extent, with functionality that is even less desirable than the legacy SCOMIS solution. DJA has long needed an updated Case Management System (CMS) to: 1) capitalize on modern computing functionality that allows for data exchange and more efficient business practices; 2) improve the customer service delivered to the public and the court; and 3) update and consolidate DJA's technology platform and position the department for service excellence well into the future.

King County's decision to separate from AOC's SC-CMS Project was made extremely carefully and with close coordination with the Executive's Office, Budget Office, Superior Court Administration, Superior Court leadership, and the County Council. Nevertheless, DJA intends to provide data to facilitate a statewide view of official case records.

In addition to constructing its own case management system, DJA must also develop a unique system for data exchange between a County-specific system and the AOC solution in order to feed King County's case data to the statewide repository.

Finally, as part of its project to replace SCOMIS, AOC will also retire financial management systems that are used by all County Clerks in the state. (These financial systems are comprised of the Judicial Receipting System (JRS) and the Judicial Accounting Sub System (JASS).) Accordingly, DJA must replace the functionality provided by JRS and JASS. DJA will require a finance management system that is suitable for a large, high-volume Clerk's Office before SCOMIS and JRS/JASS are decommissioned. Without procurement of a financial module, DJA will be left without the capacity to fulfill its financial obligations to the court and public.

SRP Phase 2, Document Management: 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.

The existing Core ECR system was originally developed in 1999 and is at end-of-life. Although the life expectancy of IT systems can vary depending upon system-specific characteristics, a 10 year production lifespan without major redevelopment/replacement is typically the maximum (1). Core ECR has far exceeded this rule of thumb and now

[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.

poses a significant risk to Clerk and Superior Court operations because its outdated technology platform is extremely difficult to maintain. DJA has nearly completed a maintenance effort to stabilize the main repository. Once this is complete, a significant risk of catastrophic failure will be eliminated. However, the associated workflow layer is still extremely outdated and inefficient.

Update – 1/27/16:

The maintenance effort to stabilize the main ECR repository was completed in September 2015.

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

SRP Phase I, Case and Financial Management: Without a new CMS system and an accompanying Finance and Accounting module to replace the functionality that will be lost when AOC decommissions SCOMIS, it is assured that DJA will be unable to perform the vast majority of its mission critical business processes. Such a scenario has a profoundly negative effect on both DJA and Superior Court operations.

SRP Phase 2, Document Management: Core ECR 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 exactly why DJA is currently working to stabilize Core ECR by replacing the document repository layer. However, the outdated and inefficient workflow layer still highly outdated.

Update – 1/27/16:

The maintenance effort to stabilize Core ECR by replacing the document repository layer was completed in September 2015.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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

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	DNRP, Parks and Recreation Division
Project Title	Parks Facility Scheduling System Replacement
Project Number	1124159

Section 2. Business Owner Accountability

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

Katy Terry, Assistant Director of the Parks and Recreation Division

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

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

Name	Title / Agency	Project Role
Leslie Arai	KCIT	Project Manager
Gary Hocking	IT SD Manager	Project Advisor
Doug Hodson	Finance Manager	Project Advisor
Jennifer Lehman	Business Finance Officer	Project Team Member
Macile Assink	Business Finance Officer	Project Team Member
Helen Wolski	Recreation Coordinator	Project Team Member

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

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

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

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

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

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

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

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

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
2015/2016 Budget Process	11/4/14	Jennifer Lehman	New, initial draft	
2016 Annual Benefits Update	2/23/16	Jennifer Lehman	No changes to anticipated benefits.	

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

☒ **Category #3: Maintaining service levels by replacing or upgrading older technology**

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

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

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

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

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

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

   By creating a web portal for customers to reserve facilities, register for classes, and pay online, the proposed IT system is anticipated to improve customer experience by providing more options for customers to access parks services.

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

   The division will measure the public satisfaction with the web portal by inserting a short survey at the end of the online reservation process about the customer's experience with booking and paying online.

   Furthermore, the division will measure the proportion of bookings and payments via the web portal versus traditional methods (in person and over the phone).

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

   Currently, the only way for customers to book and pay for reservations/registrations are over the phone, in person, and mail. Several customers have requested the ability to book and pay online.

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

   The division strives for a positive reception of the web portal. The target is survey results indicating 75% of users are satisfied with the new system, including easy of navigation and useful information.

   Furthermore, the division anticipates a material amount of bookings and payments will shift towards the web portal. According to an **American Customer Satisfaction Survey** from January 2014, roughly one-third of all users of federal services interface with agencies most frequently via websites.

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

   There is likely to be a transition and education period for Parks' customers to get acquainted with the web portal. The division anticipates to shift the amount of transactions occurring to the web portal six months after implementation, and to yield survey results indicating 75% of users in favor of the new system one year after implementation.

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

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

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

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and*

devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

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

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

   By allowing customers to enter their information directly into the booking and payment system, for example camp sites and picnic shelters, the proposed IT project is expected to free up Parks employees' time for other higher-level duties. In doing so, Parks employees' time can be dedicated to other activities such as timely follow-up to customer questions, coordinating booking of larger events including timely review of required paperwork for the larger events (e.g. insurance documentation), and more frequent bank reconciliation.

   Parks does not anticipate any staff reductions due to this project because some reservations, such as ballfields, weddings, and birthday parties, will continue to be booked via traditional methods.

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

   Parks will roughly measure the resources currently spent on reservations, and describe how that freed-up staff time is used.

   Parks will also measure whether timeliness for other higher-level duties improves. For example:

   (1) improve the frequency of changing lock combinations at camping facilities from monthly to weekly; and
   (2) reduce the median follow-up time to customer questions to within the work day.

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

   Currently, Parks has four FTEs spending a significant amount of time dedicated to reservations and bookings (>75%), and another eight FTEs who spend a portion of their time (<50%) on reservations, particularly during the busy, summer season.

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

   This project is anticipated to shift the number of FTEs currently spending a significant amount of time to reservations and bookings to only a portion of their time (<50%) on reservations.

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

   Within two years of implementation, Parks anticipates the number of staff spending a significant amount of time dedicated to reservations and bookings to shift to spending only a portion of their time (<50%) on reservations. As the business process surrounding online reservations and bookings is developed, a more thorough timeline will be identified.

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

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor*

support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

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

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

Parks and Recreation Division is currently using an information system from CLASS Software Solutions (now called The Active Network) as its registration and scheduling system, as well as tracking accounts receivable on user fees and entrepreneurial efforts. This application is vital to division operations.

King County's 200 parks provide venues to meet the increasing recreation demands of our growing population. King County Parks today operates 82 athletic fields available for a variety of team sports and other activities, 29 play areas, 26 picnic shelters, 2 equestrian arenas, regional and back-country trails, a campground and a world-class aquatic center. King County Parks processes over 26,000 bookings, 3,000 user groups, and manages close to $4 million in revenue annually through its current system, CLASS.

CLASS has been in operation since March 2000. Since that time, the Division underwent a business transition plan, adopted by the King County Council that emphasizes community and corporate partnerships and greatly reduced the division's dependence on King County's general fund. Since 2003, the Division has successfully taken many strategic actions that have generated revenue or created efficiencies, including implementing or increasing user fees and establishing corporate and community partnerships that enhance park amenities and maximize the investment of taxpayers' dollars.

However, The Active Network is phasing out CLASS Software Solutions. The company has announced that it will no longer support the software system beyond 2017. As a result, the Division seeks a replacement solution to reliably support three business offices (Marymoor Park, King County Aquatic Center, and the Regional Scheduling Office) to do their jobs more effectively and help the public continue to have seamless process to book facilities and classes through King County Parks.

The Division is seeking a SaaS solution for this system. This type of solution is continually updated by the system vendor. A very long life cycle is anticipated, but cannot really be quantified at this time due to the relatively short period of time the current SaaS vendor model has been in place.

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

The CLASS software system may fail if a replacement system is not fully implemented before 2017, resulting in permanent data loss and significant, manual- and paper-intensive process workarounds.

Prior to 2017, it is likely the system will experience delays or errors as Active Network begins phasing out support for the system, but still remain functional. To mitigate this risk, the Division is investing in virtual server storage and SQL standard server to ensure CLASS continues to be operational until a replacement is implemented.

After 2017, it is guaranteed the system will fail without regular support from Active Network.

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

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

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

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Example:

Metric Description	Metrics	Baseline	Target	Actual
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IT Project Benefits Achievement Plan (Version 2)

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

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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	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
Robert Waddle	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?

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

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

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

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

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

Revision History Table

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Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Revised per Council Request	10/14/13	Ann Grothe	Revised, changed to new format	2 hours
Revised per Council Request	2/24/16	Ann Grothe	Customer updates	30 minutes

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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

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

Category #1: External service benefits: N/A

Category #2: Internal service benefits: N/A

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

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   This project will completely replace the current West Section control system. The expected life span of a SCADA or DCS (distributed control system) is 10-20 years. The current control system technology, installed in the 90's, is failing. The hardware is no longer manufactured and the software is no longer supported by the manufacturer. As this system is critical to plan operations, timely replacement is necessary to avoid Ecology permit violations.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   Existing hardware and software is already failing. The probability of complete system failure is 100% within a year. The replacement has been phased to prioritize the replacement of critical and failing hardware first.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance – N/A

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

Metric Description	Metrics	Baseline	Target	Actual
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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

IT Project Benefits Achievement Plan (Version 5 - updated 6/21/16)

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

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

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

King County Department/Agency Names	DNRP – WTD, DOT and FBOD (update 6/16/15)
Project Title	IBIS and Business Objects Retirement
EBS Project Number	745408050

Section 2. Business Owner Accountability

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

Business Owner Name and Title: Tim Aratani, Finance Manager, WTD

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

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

Name	Title / Agency	Project Role
Molly Cherkin	Business Analyst, KCIT	Business Analyst
Max Foster	Business Finance Officer, DNRP	WTD SPOC
Margaret Brownell	Service Delivery Manager, KCIT	Project Lead/Director
Lyza Gatmaytan	Web Developer, KCIT	Project Manager

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

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

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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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Budget Process	9/3/13	Molly Cherkin	New, Initial draft	4 hours
Budget Process	9/5/13	Max Foster and team	Research, collaboration for choosing metrics	4 hours
Budget Process	10/16/13	Molly Cherkin	Re-doing BAP in new form	30 minutes
Annual report/project implementation – Phase 3	3/17/15	Lyza Gatmaytan	Review, project status update.	1 hour
Report on Phase 1 and 2 Implementation	6/21/16	Max Foster and team	Prepare statistics and prepare draft summary	6 hours
Annual report – Phase 3	6/16/15	Lyza Gatmaytan	Annual review, incorporating changes requested by Beth Mountsier/KC Council.	1 hour
Annual report – Phase 3	7/8/15	Lyza Gatmaytan	Incorporate Phase 3 description - change requested by Beth Mountsier/KC Council.	30 mins.
Annual Report – Phase 2 has been completed, Phase 3 currently in Contract Negotiation	6/21/16	Max Foster	Updates on benefits realized for Phase 2 and project status for Phase 3 as requested by Jennifer Giambattista/KC	6 hours

				Council.	

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)

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

(Secondary)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.

(Secondary)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).***
   - Reduce cycle times - If this project is approved, WTD staff will be able to more quickly and efficiently access relevant data so they can provide accurate and timely responses to customer inquiries and keep up with ongoing operational duties. Specifically, the following cycle times will be decreased as a result of the solution's implementation:

- Response to escrow request
- Early pay-off (unapplied receipts)
- Early pay-off (escrow request)
- Lien request preparation
- Returned item processing
- Overpayment research

- Reduce deficit - If this project is approved, WTD staff will have more time and resources to focus on decreasing the backlog of work (including decreasing a $1.9 million deficit in "at-risk" delinquent accounts) resulting in part from the current inefficient data retrieval process.
    - *Note: The $1.9 deficit only refers to "at-risk" accounts, accounts on which a lien can be filed and thus WTD staff is more likely to be able to collect payment ("at risk" accounts are those within 30 days of being 3 years delinquent and older that do not have a lien against the property).*

2. ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)***
    - Decreased cycle times
    - Decreased balance of delinquent payments

3. ***What is the current baseline for this measure?***
    - Cycle times
        - Response to escrow request – 2 days
            - Average of 250 escrows received daily. Average response time is 2 days. If no research is needed to complete the request, it takes between 5 - 20 minutes to respond. However in most cases additional research is needed and/or WTD staff must contact local agency for confirmation which may take up to a week to complete the original escrow request. This project's focus is to reduce this research delay.
        - Early pay-off (unapplied receipts) – 1 day
            - On average, this process takes about 1 day. Of the 14,000 invoices that are mailed out each month, WTD gets approximately 7 to 15 pay-offs daily in the unapplied receipts. It takes anywhere from 60 - 90 minutes to process, depending on how fast the invoices are printed. This cycle time is also affected by a glitch in the Oracle Concurrent Manager, which may increase the processing time to overnight. From the pay-off, WTD also has to complete the process by closing future invoices and closed/inactive accounts. If this leads to refunds, which often happens, the process can take 1 hour to days to find the correct data. This project's focus is to reduce the delay's from the system and missing data in the EBS customer records.
        - Early pay-off (escrow request) – 15 minutes
            - For payoffs due to an escrow request, it takes 5 to 15 minutes to process the early payoff.
        - Lien request preparation – 2 hours
            - Preparation for lien requests takes approximately 2 hours.
        - Returned item processing – 1 hour per item
            - There are currently approximately 7,022 items of outstanding returned mail. Cycle time varies depending upon how much research and account maintenance is needed for each piece. Estimated cycle time per piece is 10

minutes to 1 hour.

- Delinquent deficit – $1.9 million as of 8/31/2013
  - WTD pulls this report annually and as of 8/31/2013, the deficit for the "at-risk" accounts was $1.9 million.

4. ***What is the target for this measure? (How much improvement will this project achieve?)***
   - Cycle times
     - Response to escrow request – 5 to 60 minutes depending on the amount of research needed
     - Early pay-off (unapplied receipts) – 15 to 75 minutes
     - Early pay-off (escrow request) - 5 minutes
     - Lien request preparation – 45 to 60 minutes.
       - 15 minutes for drafting Intent to File Lien (then 3 weeks to deliver via post office processing) and 30 to 45 minutes processing time (with up to one day for signature approval) to file lien.
     - Returned item processing– 10 to 30 minutes to process each item (and the elimination of the backlog)
   - Delinquent deficit –
     - The total deficit will be less than one million by 8/31/2014

5. ***When is the benefit likely to be achieved?***
   - Cycle times - likely decrease within 2 months of implementation
   - Delinquent deficit – 1 year
     - The deficit would reduce over 5-10 years as each property with a lien changes hands. The amount at risk would become $0 within 12 to 24 months. Any amounts delinquent over 3 years will have lien filed so the actual amount will not have an "at risk" status.

NOTE: The Capacity Charge Section will undertake a Lean Business Process Improvement Project starting with a Lean Event in October 2013.

Category #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.***
   - HP ends all support for the HP-UX operating system used by IBIS and Business Objects on December 31, 2015.
   - BRC does not have the resources or knowledge to provide support moving forward.
   - IBIS and Business Objects software programs are very old and have not been upgraded. It is very fragile.
   - Program software incompatibility. KC employee/standard workstations can no longer access IBIS and Business Objects. Extra "IBIS only" workstations with very old configurations have been put in place to resolve the issue.

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

Category #4: Reduced cost to produce service (external or internal) or cost avoidance
This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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

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

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

1. ***Describe why you expect the proposed IT investment to reduce costs?***
   A market research was conducted Q4 2014 to identify possible solutions to replace IBIS and Business Objects. One of the proposed solutions is a Cloud-based ITL with BI. Cost is projected at $20,000 for Data Migration and Implementation, and $45,000 for Annual Subscription.

2. ***How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)***
   Implementation success measures incorporated into the project – UAT acceptance, implementation for 3-6 months with no problems/errors, cost reduction.

3. ***What is the current baseline?***
   Yearly cost for maintaining IBIS and Business Objects in 2014 is $141,289.92.

4. ***What is the target for this measure? (How much savings will this project achieve)***
   Approximately an annual savings of $90,000.

5. ***When is the cost reduction likely to be achieved?***
   Q1 2016 (updated 6/16/2015)

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.*

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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*	• *10 days processing time* • *10% of purchases are receiving discount* • *$100,000 savings*	• *1 day processing time* • *30% of purchases are receiving prompt payment discounts* • *$400,000 savings*	• *2 day processing time* • *20% of purchases are receiving prompt payment discounts* • *$200,000 savings*

Phase 2: CCP Data Migration from IBIS to EBS (updated 6/16/15)

- CCP data migration from IBIS to EBS eliminated accessing two AR systems as part of the daily workflow
- Migrating the IBIS data to EBS was a precursor to a LEAN process improvement process for CCP
- The IBIS data migration project was conducted as a model for future EBS system improvement projects by the BRC Review Board and management.

Project update 6/21/16:

- Project was implemented in Dec-2014 with IBIS access removed CCP users in early 2015.
- All IBIS data that was needed to perform transactions in EBS was successfully migrated from IBIS to EBS eliminating the need to look at two systems to perform routine business activities.
- The cycle times for transactions totally within Oracle EBS AR have dropped because of the elimination of the need to consult two systems.
- Escrow requests however have not reduced in cycle times due to the need to review assessor data and other public records. The cycle time would have been significantly higher if IBIS 2 data wasn't implemented.
- Volumes have increased for escrow requests and change of ownerships due to continued increases in new construction and mortgage refinances. CCP is able to accommodate the increased workload due to the ease in accessing data on one system.
- Additional staff resources and the ease in accessing data in one system have helped to eliminate backlogs in returned mail, change of ownership and intents to lien.
- Moving IBIS data into EBS has enabled the Phase 3 project to move forward.

Phase 3: IBIS and Business Objects Retirement Project (updated 6/21/16)

- The IBIS data will be migrated to a stable inexpensive environment to support demand for continued use of data. Data will be migrated in a format that can be queried to produce business critical reports.
- The IBIS Financial and Business Objects Reporting systems are outdated and unstable, program software incompatibility problems have prevented users from accessing needed data. Special workstations with very old configurations have been put in place to resolve the issue.

Project update 6/21/16:

- Phase 3 has processed through vendor selection and contract development and can proceed once the final contract details have been finalized. KCIT has conducted an OPS ART analysis and has approved the project after obtaining security architectural improvement commandments from the vendor. DOT/Transit, DNRP/Wastewater and FBOD/FMS have reviewed the project and a project financing plan has been developed.

Measure	**Baseline**	**Target**	**Results** (updated 6/21/2016)
Decreased cycle times	2 days	5 to 60 minutes	3 days (heavier volume, limited staff)
Decreased balance of delinquent payments	$1.9 million (as of 8/31/2013)	<$1 million by 8/31/2014	<$3.6 million
Early pay-off (unapplied receipts)	1 day	15 to 75 minutes	No change due to scanner issue.
Early pay-off (escrow request)	15 minutes	5 minutes	1 minute 17 seconds
Lien request preparation	2 hours	45 to 60 minutes	30-45 minutes
Returned item processing	1 hour/item	10-30 minutes/item	10-20 minutes/item

IT Project Benefits Achievement Plan (Version 2)

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

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 BAP?

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Name	Title / Agency	Project Role
Richard Watson	Administrative Services Division Director	Budget and Project Oversight/Coordination
Al Dams	Chief Deputy Assessor	Business Owner
Brendan Camarda	Budget & Procurement Coordinator	Budget Coordinator
Don Saxby	IT Project Manager I	Project Manager

Section 4. When should the BAP be started, updated and completed?

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

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

Section 5. How long will it take to complete the BAP?

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

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Annual Report	2/11/14	Rich Watson. Al Dams, Brendan Camarda	New, initial draft	3 hrs.
Annual Report	3/19/14	Rich Watson. Al Dams, Brendan Camarda	Revision. Updated based upon Council and PSB comments.	30 min.
Annual Report	2/19/15	Rich Watson, Al Dams, Brendan Camarda	Annual Update	1.0 hr.
Annual Report	2/23/15	Rich Watson, Al Dams, Brendan Camarda, Hoang Nguyen, Don Saxby	Annual Update	1.0 hr.
Annual Report	3/19/15	Rich Watson, Al Dams, Brendan Camarda	Annual Update	1.0 hr.
Close out report	2/17/16	Rich Watson, Al Dams, Brendan Camarda, Don Saxby	Close out report	1.0
Close out report	3/4/16	Rich Watson, Al Dams, Brendan Camarda, Debra Prins	Close out report	1.0
Close out report	3/9/16	Rich Watson, Al Dams, Brendan Camarda, Jonathan Larson	Close out report	1.0
Close out report	6/13/16	Rich Watson, Brendan Camarda, Debra Prins, Al Dams, Jonathan Larson	Close out report – revision	1.5

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

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.

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

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

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

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

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

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

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

   The 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.
     - The Filed application includes an integrated GIS map which displays current GPS location and location of assigned parcels. This facilitates efficient, direct travel from parcel-to-parcel, thereby saving time and fuel consumption

   - Allow DOA to document increasing new construction activity (post-recession) with increased field data collection – Added benefit 2/19/15

2. ***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

3. ***What is the current baseline for this measure?***
   - 3.74 per hour – physical inspections in residential division
   - 147,000 appraisal hours

4. ***What is the target for this measure? (How much improvement will this project achieve?)***
   - 3.96 per hour – physical inspections in residential division
   - Appraisal hours remain constant despite increase in parcel count
   - OEFA estimate/projections for new construction

5. ***When is the benefit likely to be achieved?***
   - Phase 1 in 2014,
   - Phase 2 in 2015
   - Phase 3 in 2016

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

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

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: *<u>Reduced cost to produce service</u>. 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: *<u>Cost Avoidance.</u> 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

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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
Time saved	• *Average parcel inspection count per appraiser per day*	• *3.74 per hour* • *147,000 hours*	• *3.96 per hour*	• *4.68 per hour*

	• *No new field hours added through 2017* • *OEFA estimate/projections for new construction*	• $2.48B	• *No new field hours* • $2.48B	• *No new field hours* • $3.03B

The Department of Assessments successfully created and implemented a native application for the iPad, iRealProperty, on time and under budget.

The DOA has absorbed approximately 20,000 new residential parcels in to the valuation process during the last six year cycle without having to add any new FTE. Nor are any new FTE requests planned for the 2017 – 2018 biennium. The significance of absorbing this large number of parcels is heightened by the fact that new parcels require a far greater amount of appraisal time than existing parcels.

This efficiency was generated by the following improvements:

- iRealProperty GIS/mapping components which allow for faster parcel reference. With iPad map, the Appraiser has continual locational awareness and an instant snapshot of parcel characteristics, spatial reference and geostatistical layers. Geostatistical layers, such as topography contour lines, building footprints, critical area delineation, remove the need to hand copy from one paper map to another, saving approximately 2,625 staff hours (75 staff * 35 hours). This allows appraisers to spend more time in the field appraising and collecting new construction.

- Parcel characteristic renderers (maps) can be displayed to allow for quick field reference. In prior years appraisers had to carry paper maps or had limited mapping to refer to on tablets. This required extra map prep time and less accurate information. The ability to input data directly to the iPad with immediate update to the DOA database thereby alleviating capture on paper and the additional lag time required for office data input.

- The iRealProperty integrated photo capture improved efficiency by allowing for capture and immediate sync with parcel in the field versus digital cameras, tracking of pictures and input in office saving approximately 3,975 hours (75 staff * 53 hours). Ease of use encourages taking more photos, benefiting data quality and appraisal accuracy.

- iRealProperty allows for greater characteristic/data capture in field - This results in more field time and less appraiser time traveling to/from the office. Our LEAN event along with our iRealProperty program resulted in a new business model of up to a total of 6 hours field time including travel. In addition, we realized reduced appraiser preparation time needed since the data is loaded onto the iPad – benefitting hybrid telecommuting. Telecommuting and alternative work schedules have resulted in new business processes increasing our agency's field efficiency.

- With our previous technology area information was loaded but static. This required appraisers to constantly stop in office to update or do work with outdated information and have to correct in office when new information discovered. Many appraisers would take 1-2 hours to prepare

maps, spreadsheets, and load areas in office before traveling to field. With ease of area download and field data update this time has now been reduced to an estimated ½ hour or less.

- iPad mobile capability provides new access to online informational sources in the field, which previous technology did not. Specifically:
    - Pictometry, real estate websites, google maps, jurisdictional sites
        - This results in increased knowledge of the area information. It also increases Appraiser time in the field by eliminating need for additional office visits. As characteristic information was static when using the previous technology, the online information allows for more accurate information and better awareness by appraisers when in the field inspecting and better information sharing with taxpayers.

Many of the benefits documented above resulted in appraisers being available to collect additional new construction. The OEFA total new construction forecast was $4,994,659,235 for 2015, of which $2,480,647,069 (The Department of Assessments' estimate) would be the Residential portion of new construction.

The actual new construction collected for 2015 is $6,111,997,054, of which $3,035,583,984 was Residential new construction. Our actual was approximately 22.4% increase over forecasted.

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	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	Administrative Services Division Director	Project Manager
Al Dams	Chief Deputy Assessor	Business Owner

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

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

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

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

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

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

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

Revision History Table

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Conceptual review	10/21/13	Rich Watson. Al Dams, Brendan Camarda	New, initial draft	30 min.
Annual Report – Update	3/19/14	Rich Watson. Al Dams, Brendan Camarda	Provided updates based upon PSB comments	15 min
Annual Report – Update	2/17/16	Rich Watson. Al Dams, Brendan Camarda	Annual update	45 min

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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

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

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

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

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

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

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   Because taxpayers will have the option of choosing between regular and electronically mailed valuation notices. Some taxpayers would prefer to have their valuation notice in electronic format instead of the current paper format. We have received suggestions from taxpayers to move to electronic notices and this will satisfy those requests. These requests for electronic notices were based on several factors, including convenience for the taxpayers, cost savings for taxpayers, and environmental considerations (reduced use of paper and reduced transportation for mail delivery). Taxpayers that wish to continue to receive paper notices can do so. This investment will increase taxpayer options.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   Number of taxpayers who opt in for the electronic notice program, and the percentage increase in taxpayers who opt-in year-over-year.

3. *What is the current baseline for this measure?*
   Zero for residential valuation notices. (Pilot program in place for small number of commercial taxpayers and government agencies)

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   10% in first full year of implementation.

5. *When is the benefit likely to be achieved?*
   Upon implementation. Delayed until March 2016 by technical issues arising from the Mainframe re-host project.

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

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

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

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

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

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.*

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

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

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

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

provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
   Over time, there will be a reduction in printing and mailing costs as taxpayers opt into the electronic valuation notice program, and we print and mail fewer paper valuation notice post cards. Our projection is for 10 percent of taxpayers to opt into the electronic notices in year one – this would save about $22,500 in postage and paper/printing costs (we currently spend $225,000 annually on postage and paper stock). We project to increase that to 20 percent in year two for a savings of $46,200 in postage and paper/printing costs that year. There will also be a small reduction in the staff time needed to print and handle the paper postcards.

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
   The number of taxpayers that opt into the electronic notice program. Track postage and printing costs for revaluation notices and compare to baseline.

3. *What is the current baseline?*
   Number of post cards printed and mailed annually. Total postage and printing costs for revaluation notices ($225,000 in 2013).
   The Department of Assessments is required to send property valuation notices to every property owner in King County annually – totaling nearly 740,000 notices sent by regular mail every year, incurring a large annual printing, postage and paper supply expense. The state legislature has authorized electronic notification of property valuation notices, with King County as a lead lobbyer, effective in Fall 2013.

4. *What is the target for this measure? (How much savings will this project achieve)*
   10 percent of taxpayers opt into the program (of 740,000 total) for a commensurate 10 percent cost savings ($22,500) in first full year of implementation. We believe this target is reasonable based on experiences of a local vendor that provides electronic valuation notice services to Assessors, and the reception our eAppeals program has received (30 percent of appeals being filed electronically as of this submission). Over the longer-term (four to five years), our target for taxpayers in the electronic valuation notice program would be in the 40 percent range, for a savings of about $90,000 per year (in 2013 dollars). This estimate is based upon a review of vendor discussions concerning Yakima and other counties and their projection of similar type counties with King County type demographics.

5. *When is the cost reduction likely to be achieved?*
   Upon implementation. Delayed until March 2016 by technical issues arising from the Mainframe re-host 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.

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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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	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~~ Randall D. Berg, Airport 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
Michael Colmant	Deputy Director	~~Project Manager~~ Project Sponsor
Joel Abanes	Info Systems Specialist	Provide technical assistance on Maximo
~~Kent Sherburne~~ Vacant	Fin & Admin Svcs Mgr	Provide assistance to Project Manager
Cheryl Boudreau	KCIT Project Manager	Assist KCIA with project management activities

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Budget Process	2013	Gary Tripp	Added the additional budget of $278,640 received in the 2013-14 budget ordinance.	2 hours
Update (2/6/15): Conceptual Review	Feb, 2015	~~Kent Sherburne~~ Retired Recruitment in process	KCIT assisted KCIA in conducting a solutions analysis of existing KC asset management systems. Spent $58,000 on this stage that went from April 2014 to Jan 2015. Since no system has yet to be chosen or implemented it will be another 1-2 years before benefits will start to be achieved.	1 hour
Update: Annual Report	Feb 12, 2016	Cheryl Boudreau	Azteca was recently chosen as vendor to implement City/Works as asset	.5 hour

				management solution.	

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The investment will improve internal processing and reporting, functionality, and the accuracy of the data. The current system's reporting capability has declined. For example, the cost roll-up feature does not work anymore so supervisors have to try to piece together different data on an excel spreadsheet; the inventory report does not pick up all of the data you need extracted so you have to manually intervene to piece together the right data. There are database capacity limitations on the system that is slowing the response time down significantly so supervisors and those inputting data are spending more time with the system.

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

The benefits will be achieved if the system saves labor in producing reports, enhances data accuracy since errors are more likely when piecing together reports from different fields and files, and reduces the labor time in inputting and extracting data.

3. *What is the current baseline for this measure*? (1) Time spent in extracting data and producing a report from current level to a new system. Producing a report can take several hours instead of minutes. (2) Improve data accuracy by comparing report results of the old method and the new

system's standard reports. (3) Improve the amount and variety of custom data that can be extracted and integrated into a single report.

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

Spend 50% less time inputting data into the system and extracting reports.

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

Within 3 months after installation and training in the new system**.**

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

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

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

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

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

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

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

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

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

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project 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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of*	• *1 day processing time* • *30 percent of purchases are receiving prompt payment discounts* • *$400,000*	*2 day processing time* *20 percent of purchases are receiving prompt payment*

discounts.	*discounts*	*$100,000*	*savings*	*discounts $200,000 savings*

Benefits have not been achieved because the project has not started.

Update (2/6/15): Benefits have not been achieved because project is at the stage of evaluating three replacement systems (EAM, M5, and City/Works) to meet KCIA's functional requirements.

Update (2/12/2016): Benefits have not been achieved because the project just recently chose replacement system City/Works. Contract negotiations in process.

IT Project Benefits Achievement Plan (Version 3)

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

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

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

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~~ Ruth Harvey	~~SBOS Manager/Roads~~ Strategic Business Operations Section Manager/Roads	Project Vision and Oversight
~~Harry Clark~~	~~IT Supervisor/Roads~~	~~Business and Technical Oversight~~
Stephanie MacLachlan	Asset Management and Technical Services Program Manager/Roads	RCAMM Project Manager
Mike Crippen	Senior Business Analyst/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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
Post-Implementation Benefit Update	2/11/16	S. MacLachlan	One-Year Post-Implementation Benefit Update	3 hours

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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.

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).*

   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

Implementation will replace paper records with spatially referenced electronic work flows and records that are accessible to all legitimate users immediately. This is particularly important given that the RSD's pit sites are located throughout unincorporated King County, and previously, paper service requests and other documents had to be hand carried, resulting in time lags and the risk of losing or misplacing documents.

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.

2. *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 research related to FOIA and claims, for example.

3. *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.

4. *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.

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. (Since revised upward)

Most of the tangible benefits of RCAMM system implementation fall into the cost avoidance category. These cost avoidance benefits are productivity enhancements resulting from 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.

Benefit Update (February 11, 2016)

Based on current estimates (source RCAMM IT Project Close-Out Report, 7/24/15), we expect the productivity enhancements due to the RCAMM implementation to amount to about $1.2 million per year, as specified later in this document.

In addition, when the QBC was prepared, we did not anticipate the value of reducing time lags in recording and assigning customer service requests to the appropriate maintenance division. Prior to implementation, the average lag for logging routine (non-emergency) customer queries was 3.5 days. Since implementation, the average lag has been reduced to minutes by virtue of recording and mapping service requests electronically. Given that the RSD logged over 6,000 service requests in 2015, this amounts to a reduction of over 20,000 lag days.

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: *<u>Reduced cost to produce service</u>. 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	*Processing Time annual savings, and percentage of purchases receiving prompt*	• *10 days processing time* • *10 percent of purchases are receiving*	• *1 day processing time* • *30 percent of purchases are receiving prompt payment*	*2 day processing time* *20 percent of purchases are receiving prompt*

of prompt payment discounts.	*payment discounts*	*discount* • *Savings of $100,000*	*discounts* • *$400,000 savings*	*payment discounts $200,000 savings*

Benefit Update (February 11, 2016)

We prepared a summary of benefits as part of our project closeout report in July 2015. Since that time, the nature of the benefits has not changed; they are still in the area of cost avoidance, reduced lag time for customer response, and better work history and asset data, on which the RSD is increasingly basing its operating and capital investment decisions.

We continue to see benefits, and to update their quantitative value, we have applied the increase in the CPI (about 1%) to our original estimates, as specified below. We also recalculated reduced lag days for customer service response based on a whole year's service requests. When we submitted the Project Close-Out report, in July 2015, we only had six months of 2015 data. This update references the full year of 2015 data.

Type	Description	Basis	Benefit Year 1 (from Project Close-Out Report)	Benefit Update (2/11/16)
Benefit Summary	Summation of cost avoidance and lag day items listed below	Units and quantities specified below	$1,160,000/yr ~~5,000 lag days~~	Same yearly benefit as estimated in Project Close-Out Report Lag days per year (22,239 for 2015) re-estimated based on full year of data
Cost avoidance *Service Requests*	Because Roadworks replaces paper records with a searchable relational database, there is significantly less time spent filing, tracking and recalling paper records	1 FTE saved	Estimated cost avoidance: $70K/yr	Same as estimated in Project Close-Out Report
Cost Avoidance Crew Chiefs Extraneous Travel	Prior to Roadworks, Division Maintenance crew chiefs often had to drive from a field investigation to shops, or downtown to get information necessary to determine best action (e.g., whether asset is in service area, asset work history, whether upcoming planned work will address issue). Much of that information is now available in the field eliminating non-value	Labor and vehicle mileage-hours saved Assume 5 hours per week per crew chief saved at $50/hr labor + $22/hr mileage = $72/hr[1] $72 per hour x 5 hours x (10 crew chiefs + 6 supervisors)x 52 weeks = $300K/yr	Estimated cost avoidance: $300K/yr	Same as estimated in Project Close-Out Report

[1] (40 mi x $0.55) = $22/hour

	added travel			
Cost Avoidance Research Related to FOIA	Average 20 FOIAs/yr Prior to Roadworks, it took an average of 40 hours to research paper records related to FOIA; with Roadworks it takes an average of 12 hours per FOIA	40 hours x 20 @ $50/hr =$40K 12 hours x 20 @ $50/hr =$12K	Estimated cost avoidance:$28K/yr	Same as estimated in Project Close-Out Report
Cost Avoidance Research Related to Claims	Number of claims (2014) 59 Prior to Roadworks, it took an average of 3 hours to research paper records per claim; with Roadworks it takes an average of 1.5 hours per claim. Lag time waiting for delivery of paperwork prior to Roadworks: 1 day; with Roadworks: 2 minutes to generate paperwork	3 hours x 59 @$50/hr= $8,850 1.5 hours x 59 @$50/hr = $4,425	Estimated cost avoidance: $4K/yr 59 days lag time saved/yr	Same as estimated in Project Close-Out Report
Cost Avoidance Research Related to Lawsuits	Number of lawsuits per year: 3 (estimate) Prior to Roadworks it took an average of 3 days to research paper records per lawsuit; with Roadworks it is estimated to be an average of 1.5 days per lawsuit	Pre- Roadworks cost =$50 x 24 x 3= $3,600 Post Roadworks cost =$50 x 12 x 3= $1,800	Estimated cost avoidance: $2K/yr	Same as estimated in Project Close-Out Report
Cost Avoidance Related to Repeat Investigative Work	In the past there was no way to physically locate areas of complaint. Now that all are geographically referenced, a history of complaint by area can be mapped, and records (including prior complaints) can be pulled in minutes, which eliminate the need for repeat field investigations. Also, multiple complaints on a single problem are mapped, eliminating the need to individually investigate each complaint (1 field investigation to cover multiple complaints at same location).	Estimated elimination due to repeat investigations: 4 per week per Division at 1.5 hours labor each ($75—assumes investigation by single crew chief or supervisor) and 1.5 hrs mileage ($33) 4 (@ 1.5 hrs/ea) avoided investigations x 52 weeks x ($75 + $33) x 6 divisions = $202,176	Estimated cost avoidance: $202K/yr	Same as estimated in Project Close-Out Report
Cost avoidance Related to more efficient driving	In terms of work planning, users can better plan their driving routes based on	Assume 5 hours per week saved per(3-person average) crew[1] at	Estimated cost avoidance: $554K/yr	Same as estimated in Project Close-Out

[1] Crews are typically either 2-person or 5-person in Division Maintenance. Across all division there are 15 crews, so a 3-person average is adequate for estimating benefits (Tony Ledbetter via Brandy Rettig, 6/26/15)

	routes	mapped location of complaints and work needed. This saves a lot of time (estimate 1 hour per day on the low end)	$40/member/hour + $22/hour mileage (40 mi x $0.55) x 15 crews x 52 weeks a year = $554K/yr		Report
	Reduced lag time customer service	Reduces lag time in apprising Division staff of customer service requests due to need under old system for supervisors to drive from pit sites to pick up paper CARS in Renton (average lag 3.5 days ea)	Minutes of lag between customer calling in service request (SR) and the SR being communicated to Division staff	*Lag time per service request reduced from 3.5 days to 2 minutes* ~~*1,397 service requests x average lag of 3.5 days = 4,889* days/yr~~ ~~*4,889* lag days saved/yr~~	*Lag time per service request reduced from 3.5 days to 2 minutes* 22,239 days/yr[2]
	Improved Reporting and Analysis	Prior to Roadworks, RSD could not easily map or quantify accomplishment; now work completed can be reported and mapped using Roadworks in conjunction with GIS	Easily quantifiable, data-driven accomplishment reporting by asset and location	Richer, asset- and location-specific reporting of RSD accomplishment. Even with only 6 months of data, tactical and strategic decisions are becoming more data-driven and less anecdotal	As a case in point, RSD is using cost and accomplishment data from this IT project in its 2017-2018 Line of Business budgeting work

[2] ~~1,397 service requests logged in Roadworks between January 1, 2015 and June 24, 2015~~. Update 2/11/16. 6,354 service requests logged in Roadworks between January 1, 2015 through December 31, 2015.

IT Project Benefits Achievement Plan (Version 2)

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

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
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 Transportation/Transit
Project Title	ADA Broker Equipment
EBS Project Number	1111983

Section 2. Business Owner Accountability

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

Business Owner Name and Title: Kevin Desmond, Transit General Manager

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

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

Name	Title / Agency	Project Role
Bob Sahm	Supervisor/Transit	Supervisor of project managers
Janey Elliott	Transportation Planner III	Original Project Manager
Michael Glauner	Transportation Planner IV	Ending Project Manager
Matthew Weidner	Transportation Planner III	Technical IT Planner

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

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

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

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

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

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

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

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Benefit Achievement Plan	11/24/14	Michael Glauner	Updated	2 hours
Annual Update	3/3/15	Kathleen McMurray		
Annual Update	2/9/16	Kathleen McMurray	Final report	1.5 hours

Section 6. Description of Project Benefits

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

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, 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)

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

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

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

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

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

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

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

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

The Broker Equipment Project funded a variety of technology systems for the Access Transportation Program, the final phase being the IVR replacement. Because the majority of expenses occurred between 1993 and 2005, this benefit achievement plan focuses on the IVR upgrade. The upgrade and new install were completed in 2012 and included both hardware and software used by the telephone system and added additional features including SMS/text messaging and Spanish language line.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   The final phase of this project involved upgrading the ACCESS Transportation Control Center (ACC) Interactive Voice Response (IVR) system. This is the menu driven phone system used by riders in the program. Additional elements of the new system include automated booking, text messaging capabilities and Spanish language line.
   a. **Call Distribution.** Call distribution statistics were expected to improve greatly with the new ACC IVR system.
   b. **Automated Booking.** The goal of this element is to allow riders to make transportation requests, confirm requests and cancel requests. This can all be done using the new touch tone automated system.
   c. **SMS/MMS Text Messaging.** The goal of this element is to offer an additional method of notification for riders that carry newer mobile data technology. In addition to the current automated dial-out functions of the system, riders can now request notifications by text messaging or use their device to initiate a request for trip information that is then texted back.
   d. **Spanish Language Line.** The goal of this element is to offer additional language support for Spanish to the IVR. Riders can choose to navigate the entire system in Spanish and be routed to a Spanish speaking call taker.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   The new system should maintain or improve existing ACC call handling functions and statistics. In addition, new features will be brought online and implemented and measured.
   a. **Call Distribution.** Improvements to call distribution were measured by looking at average hold times and calls answered within 3 minutes.
   b. **Automated Booking.** This element did not exist prior to implementation. Success will be measured by the number of successful logins, successful bookings and successful cancellations.
   c. **SMS/MMS Text Messaging.** This element did not exist prior to implementation. Success will be measured by the number completed outgoing messages.
   d. **Spanish Language Line.** This element did not exist prior to implementation. Success will be measured by the number of users that are able to navigate the new menu system.

3. *What is the current baseline for this measure?*
   The existing phone system tracks multiple call statistics including avg. hold times and % calls answered within threshold. New feature tracking measures will include:
   a. **Call Distribution.** The baseline for average hold times was 3:57 minutes and the baseline for calls answered within 3 minutes was 90%.
   b. **Automated Booking.** Success will be measured by the number of successful logins, successful booking and successful cancellations. Current baseline is 0%
   c. **SMS/MMS Text Messaging.** Success will be measured by the number of completed outgoing messages. Current baseline is 0%
   d. **Spanish Language Line.** Success will be measured by the number of users that are able to navigate the new menu system. Current baseline is 0%

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   As part replacement and part new implementation, call statistics should remain the same or improve.

New features will be tracked using new metrics as described below.

a. **Call Distribution.** The target measure for average hold times was 3:30 minutes and the baseline for calls answered within 3 minutes remained 90%.
b. **Automated Booking.** The goal of this element is to allow riders to make transportation requests, confirm requests and cancel requests. Target for this element is a cumulative 100 users per day.
c. **SMS/MMS Text Messaging.** The goal of this element is to offer an additional method of notification for riders that carry new mobile data technology. Target for this element is 100 SMS/MMS outgoing per day.
d. **Spanish Language Line.** The goal of this element is to offer additional language support for Spanish to the IVR. Target for this element is 25 language line users per day.

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

The majority of benefits of the replacement were achieved by the close of the project including the menu driven phone system, text messaging and Spanish language line.

a. **Call Distribution.** This benefit has been achieved. Average hold times is now 00:48 minutes and calls answered within 3 minutes are 94.39%.
b. **Automated Booking.** [New 1/22/16: This benefit was not achieved.] The IVR features of automated booking are currently working, but are waiting on an upgrade to the scheduling software from another vendor 1st quarter 2015 to fully implement. This was caused by a change in the scope of work for the scheduling software as outside partners were brought into the system. Additional customizations need to be completed on this outside software in order for it to distinguish between non-Access Transportation providers and funding sources.
c. **SMS/MMS Text Messaging.** This function is currently in use, but has not reached goal due to a lack of knowledge of its availability on the part of riders. Additional outreach efforts will be made in 1st quarter 2015 to educated riders on the availability and benefit of this function.
d. **Spanish Language Line.** This function is currently in use and has been incorporated into Access Transportation Ride Line. Mainstream usage has been slow due to the ready availability of bilingual call takers available in the call center as well as the use of the 3rd party language line.

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

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

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

annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

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

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

The ADA Broker Equipment project closed in 2012. This is an annual update to the Benefits Achievement Plan.

The ADA Broker Equipment Project funded a variety of technology systems for the Access

Transportation Program, the final phase being the IVR replacement. Because the majority of expenses occurred between 1993 and 2005, this Benefit Achievement Plan focuses on the IVR upgrade. The upgrade and new install were completed in 2012 and included both hardware and software used by the telephone system and added additional features including SMS/text messaging and Spanish language line. Although target goals have not been fully met, the final three functions and metrics did not exist before the upgrade and are fully functional. Usage has been limited by a lack of general knowledge on the part of riders that these features are available to them. ~~Further growth in use of these functions requires further outreach and education of riders to better notify them of the availability of these new features.~~

Metric Description	Metrics	Baseline	Target	Actual
Call Handling ***(Benefits achieved)***	• Avg. hold time • % calls answered under 3 minutes	• 3:57 minutes • 90%	• 3:30 minutes • 90%	• :48 minutes • 94.39%
SMS Text Messaging	# successful outgoing	• N/A	• 100 per day	3 per day
Spanish Language Line	# using language option	• N/A	• 25 per day	4 per day
Automated Booking	# successfully booked	• N/A	• 100 per day	~~TBD*~~ Not fully realized

~~*For full functionality, this will require an upgrade to another vendor's scheduling software before full deployment, scheduled 1st quarter of 2015.~~

[New 1/22/16: <u>No further benefits will be achieved with this project.</u> In August 2015, Metro moved its Access Control Center to a new location in the International District. As part of the relocation, Metro implemented a new phone system that was incompatible with the hardware-specific IVR system. Metro has since migrated to a service-based cloud solution that has all of the features of the previous IVR system, minus automated booking. This is the final report for the ADA Broker Equipment project.]

IT Project Benefits Achievement Plan (Version 2)

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1. 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	DOT/Transit
Project Title	Capital Management and Reporting System
EBS Project Number	1028812 , Appropriation A00580

Section 2. Business Owner Accountability

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

Business Owner Name and Title: ~~Kevin Desmond, Transit General Manager~~ Rob Gannon, Acting Transit General Manager

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

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

Name	Title / Agency	Project Role
Liviu Prisecaru	IT Project Manager II, DOT Transit Division	Project Manager
Jill Krecklow	Finance Manager, DOT Transit Division	Stakeholder
~~Randy Witt~~	~~Design & Construction Manager DOT Transit Division~~	~~Stakeholder~~

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

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

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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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Conceptual Review	06/20/14	Liviu Prisecaru	New, initial draft	1 hour
Conceptual Review	08/14/14	Kathleen McMurray	Revision	3 hours
Annual Report	02/19/15	Liviu Prisecaru	Review only	.25 hours
Annual Report	02/06/16	Liviu Prisecaru	Review only	.25 hours
Annual Report	04/01/16	Kathleen McMurray	1. Updated Business Owner 2. Updated Section 3 to only include current staff 2. Updated Section 6, Cat 2	1 hour

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Metro Transit Division manages a 6 year Capital Improvement Program (CIP) worth over $1.4 billion. The program encompasses facility, IT and bus procurement project activities that are performed by several different Transit sections using their own systems, processes and methods. Project data in Transit is maintained in dispersed and non-integrated, mostly manual systems. Creating consolidated Transit CIP reporting from the existing data is problematic, lacks timeliness and is limited to what is available for manual compilation. Compiling the data is very time consuming and by the time the final reports are created, some of the data may be already outdated, making it impossible to use for the identification of problems or issues with a project. Further, the need for improved CIP reporting and revised practices has been part of several audit recommendations. Transit's response to these audit recommendations identified a management and reporting system as a necessary item to fully implement improvements. Audits have included:

- **1999:** Transit Management Audit of the King County Department of Transportation (performed by Doolittle

and Company) several recommendations regarding capital program management and reporting

- **2005:** Performance Audit of Transit Capital Planning and Management – Executive response to the audit identifies the need for a capital management and reporting system with the goal at that time of evaluating Oracle Projects as part of the ABT process.
- **2009:** Performance Audit of Transit – recommendations for the capital program reporting and the overall recommendation of making more data driven decisions require us to be able to gather and report information on the capital program in a consistent manner.
- The Washington State Auditor, also completed an audit of King County's capital programs which has resulted in the development of several standards and reporting requirements which currently are difficult to implement without a system.

If this project is approved, the new Capital Management and Reporting System (CMRS) would support improvements in the CIP that include project management standardization, process efficiencies, increased reporting accuracy and improved capital project delivery rates:

1. Project management standards. All capital projects in Transit will be managed within the CMRS utilizing standards established during the course of this project. These standards will be scalable to project size and complexity and are expected to result in improved visibility to project delivery performance throughout the organization.

2. Process efficiencies. The project is expected to result in efficiencies due to the elimination of the need to extract and consolidate data from dissimilar sources. Transit and King County project reporting and budget processes are expected to be streamlined as a result of using a single data source.

3. Accurate and timely reporting. The project is expected to result in more accurate reporting because the data and processes used to create the data will have less variability across the organization. Consolidated CIP reporting will not require the manual manipulation to form the information into a single data structure – thus saving time and reducing the likelihood of errors.

4. Capital projectperformance. Better project planning and the ability to identify issues early through timely reporting is intended to improveproject performance, including capital project delivery rates. For example, the new system will have historical information, including project schedules, that can be used help identify trends and improve overall project management.

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

1. Project management standards. This benefit will be measured by using the number and percentage of Transit capital projects that are maintaining all data required by the Capital Management and Reporting System (CMRS). Data requirements will include information to support reporting as well as standard project management practices.

2. Process efficiencies. This benefit will be achieved when the need to extract and consolidate capital project data from dissimilar or manual systems is eliminated.

3. Accurate and timely reporting. This benefit will be measured by the speed with which consolidated CIP reports are prepared (less 'stale' data) and CIP report recipients' satisfaction with output.

4. Capital projectperformance. As part of this project, Transit will identify performance metrics to demonstrate performance in meeting major milestones, and budget metrics. Examples could include:

- Percent of projects setting a baseline as compared to planned**.**

- Roll up portfolio wide- construction/implementation contract dollars awarded year to date compared to plan
- Final project results – scope, schedule and budget compared to baseline
- Roll up portfolio of final project results - % delivered scope on time and on budget

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

1. Project management standards. Currently, Transit capital projects are not managed within a central system. Therefore, the baseline for this measure is zero. The percent of projects following standard practices is not known.

2. Process efficiencies. Currently, Transit staff must extract and consolidate project data from dissimilar systems. As an example, Transit capital program data must be manually entered into the King County budget system.

3. Accurate and timely reporting. Currently, it takes Transit staff hours to prepare limited consolidated CIP reports and this allows for very limited analysis of the information. CIP report recipients' will be surveyed to determine their current satisfaction level with the accuracy of reports.

4. Capital projectperformance. As part of this project, Transit will identify specific performance and budget metrics. If no baseline data exist, then the first year of data can be used as a baseline. ~~Transit's overall annual program "accomplishment rate" is currently 90%.~~ Transit's overall capital program annual accomplishment rate, as measured by expense, has been ranging between 60% and 90% in the recent years.

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

1. Project management standards. The target is to have 100% of Transit capital projects managed within the central system and to have 100 percent of capital projects entering all required data.

2. Process efficiencies. The target is to eliminate the need for Transit staff to extract and consolidate project data from dissimilar and manual systems.

3. Accurate and timely, reporting. Project status updated are performed within 5 days of month closing. Reports on financial elements of project performance are available within 5 days of EBS closing. Targets for other reporting measures will be developed as the project progresses. The target is for Transit staff to spend more time analyzing and interpreting capital program data than developing it. CIP report recipients' will be surveyed to determine their satisfaction level with the accuracy and timeliness of reports using the new Capital Management and Reporting System. It is expected that the target level of satisfaction will be 80% or more as stakeholders become familiar with the sytem and reports.

4. Capital project performance. Transit will identify specific performance and budget metrics and identify targets as part of this project. ~~The target for Capital Project Delivery information to be readily available and program under expenditure to be reduced to 5%. The target accomplishment rate would therefore be 95%.~~ The target for Capital Project Delivery information to be readily available and program under expenditure will be reduced, improving overall accomplishment rate and helping achieve a goal of 90%.

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

1. Project management standards. The benefit will happen in phases with the first phase

establishing a threshold level of required data for all capital projects. The level of data will likely be expanded in subsequent phases of the project. Likely to have 100 percent of projects entering all required data at each phase. .

2. Process efficiencies. The benefit will likely be achieved within 1 year following implementation.

3. Accurate and timely reporting. The benefit will likely be achieved within 2 years following implementation.

4. Capital project delivery rates. The benefit will likely be achieved within 3 years following implementation.

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

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

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

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

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

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

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

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

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

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

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*	• *10 days processing time* • *10 percent of*	• *1 day processing time* • *30 percent of purchases are*	*2 day processing time* *20 percent of*

average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*purchases receiving prompt payment discounts*	*purchases are receiving discount* • *Savings of $100,000*	*receiving prompt payment discounts* • *$400,000 savings*	*purchases are receiving prompt payment discounts $200,000 savings*

IT Project Benefits Achievement Plan

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

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

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

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)
Matt Hansen	Customer Communications & Services Manager	Project Sponsor (official replacement for retired Section Manager)

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

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

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

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

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

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

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

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
Annual Report	03/13/15	Damon Berbert	Review only; updated Project Sponsor	.25 hours
Annual Report	02/11/16	Damon Berbert	Updated Category 3	1 hour

Annual Report – update	06/15/16	Damon Berbert	Added Category 1; Updated Category 3	3 hours

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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.

New 6/16/16: Entire Category 1 discussion new with this BAP update. Prior version of the BAP focused solely on the Category 3, the primary project benefit. This update describes Category 1 measures for customer information tool updates going forward.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   The purpose of the Transit Customer Information Systems Refresh program is to replace outdated customer information systems that are at/near/or past effective use. By implementing or improving a new customer facing tool, it is expected that there will be an additional benefit of increased customer satisfaction related to the use of the tool.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   Success will be measured using customer surveys. Customer satisfaction is expected to be measured in terms of convenience, usability, and repeat use. Customers of each customer facing tool will be surveyed to determine their current level of satisfaction with the tool. This will create a baseline measurement. Following each system refresh, we will survey customers to determine their satisfaction with the system.

3. *What is the current baseline for this measure?*
   There is no current baseline for this measure. The baseline measure for each of the customer facing tools will be established prior to the next refresh for that tool.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   We would expect to see at least a 10% increase in customer satisfaction with the tool following each refresh.

5. *When is the benefit likely to be achieved?*
   This benefit will be realized after the next set of refresh implementations is completed. This is currently scheduled for 2019.

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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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.*

New 2/11/16: Updated with the 1st submission of the 2016 Annual Report.
New 6/16/16: Updated with the 2nd submission of the 2016 Annual Report.

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

   Outdated technology platforms limit the ability of Transit to effectively deliver customer service information to the public. Information accessed by customers can be inaccurate, incomplete, delayed or difficult to obtain. Technology and procedural issues prevent effective data sharing between customer information systems resulting in inconsistent outputs.

   This project will implement software products that will include improved data sharing and integration between systems. To insure these new software products continue to be relevant, this program has includes a 3 year refresh of each new product. In other words, after each system is initially replaced or upgraded, it will then be reevaluated after 3 years. This evaluation will include a review of the method of data sharing and current technologies. It will inform the final refresh plan for each system or tool.

   The following status shows the customer information systems that require replacing or upgrading in order to improve the sharing of data and message content:

INITIAL REPLACEMENT / IMPLEMENTATIONS

1. Online Trip Planner – originally implemented in 2001
   Replaced desktop Online Trip Planner in 2013
   Added mobile web Online Trip Planner in 2014
   Added iOS/Android Online Trip Planner apps in 2015
2. Tracker – originally implemented in 2005
   Replaced Tracker in 2013
3. Customer Relations Management system (including Lost and Found) called MCS – originally implemented in 2005
   Replacement expected to be completed in 2016
4. IVR (BusTime) – originally implemented in 1991
   Replaced IVR in 2014
5. SMS Departure Information (text messaging)
   New tool targeted for 2016
6. Downtown Seattle Transit Tunnel Wifi Access Points
   Added in 2016

NEXT REFRESH OF IMPLEMENTED SYSTEMS

7. Online Trip Planner
   Refresh planned 2017-2018
8. Tracker
   Refresh planned 2017-2018
9. Customer Relations Management system (including Lost and Found)
   Refresh planned 2018-2019
10. SMS Departure Information
    Refresh planned 2018-2019

Updating these systems is also expected to provide increased customer satisfaction as users will be able to take advantage of improved user interfaces, various modes of accessing transit information (for example, mobile phones), and reduced Call Center traffic.

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

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

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

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

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

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

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

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.	*Time annual savings, and percentage of purchases receiving prompt payment discounts*	*processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	*processing time* • *30 percent of purchases are receiving prompt payment discounts* • *$400,000 savings*	*processing time* *20 percent of purchases are receiving prompt payment discounts* *$200,000 savings*

IT Project Benefits Achievement Plan (Version 3)

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

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

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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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
Annual Report	3/6/2015	Amy Spangler	Review Only	1 hour
Annual Report	2/5/2016	Amy Spangler	Review Only	.25 hour

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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.

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

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

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

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

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

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

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

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

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

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

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

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

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

   King County Transit has a set of databases that store critical fixed route bus service, schedule and geographic data needed by many transit vendor applications including ORCA, On-board Systems/ Control Center Systems (OBS/CCS) and various customer information systems. The transit "data infrastructure" consists of

   - this set of databases
   - programs that populate the data into the databases from transit source applications
   - programs that translate the data into different forms as necessary for use
   - programs that retrieve data from the databases and send it to transit applications that rely on the data

   The current data infrastructure was developed over 30 years ago. The data stored in the databases is of a different format than newer transit vendor applications require. As a result, adding new transit vendor applications has placed an ever-increasing strain on this method of supplying data. There are more and more data translations that need to occur, leading to delays in delivering the data. In addition, errors are introduced when extensive processing is required to create and translate this data.

   The errors and delays in processing data have impacted both fare collection and bus operations – including radio operations. Customer related information systems such as bus stop signage and trip planning require extensive data manipulation to work properly. Though there are no industry standards on average life cycle replacement timeframe, the current transit infrastructure is not sustainable. Transit needs a new foundation of data and data delivery methods upon which to operate current and future technology.

   The Data Infrastructure Replacement Project is expected to enable transit staff to

   - deliver data to operations system such as On-Board Systems, so that buses are consistently provided with current schedule data in time to operate on that schedule
   - combine the creation of transit schedules with bus stop information, reducing the inconsistencies in the schedule information that customers see.
   - reduce the amount of programs required to translate the data into different forms in the data infrastructure.

   As part of this project, Transit is developing an "enterprise architecture model", a set of information that captures the business processes, data, applications, and hardware currently in place to support transit. This will help the project understand the pieces of the current data infrastructure and all of the transit systems to which it is connected. This model will help project planning and analysis for the data infrastructure replacement, and help transit and IT maintain transit systems and prioritize future transit projects. The project is employing a federally-funded "standard" Enterprise Architecture model, called Transit Enterprise Architecture and Planning framework (TEAP), from which to

customize a model for King County Transit.

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

   The impacts to fare collection, operations, and customer information from the outdated data infrastructure already occur today. For example, after the completed transition to the new On-Board Systems in 2012, there were repeated occurrences during bi-weekly schedule adjustments of buses not being provided with the current schedule data in time to operate on that schedule. This led to problems such as some customer information being inaccurate, or bus operators needing assistance in system sign-on processes. This and other impacts to transit systems have been handled through extra efforts on the part of transit and IT staff to mitigate the impacts and fix the problems. These efforts take staff away from their regular responsibilities. The intention with a new data infrastructure is to alleviate these impacts that occur today, and allow transit and IT to focus their efforts back on their primary responsibilities.

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

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

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

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

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

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

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

3. *What is the current baseline?*

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

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

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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

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

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

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

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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 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~~ Rob Gannon, Acting 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
Ted Harris ~~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:

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

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

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

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

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

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Annual Report	01/21/14	Ray Burgess	Converted plan from Benefit Realization Plan into Benefit Achievement Plan format	4 hours
Annual Update	2/11/15	Kathleen McMurray	Review only	.25 hours
Annual Update	1/22/16	Kathleen McMurray	Review only	.25 hours
Annual Update	4/4/16	Kathleen McMurray	Added clarifying language	.25 hours

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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~~ consolidating personnel records from multiple sources for each operator.
c. Improved accuracy of employment actions (disciplinary, etc). Current practice is prone to errors due to incomplete or inaccurate information.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   a. **Reduces the entry by base administrative staff from paper operator records into Laserfiche** – Success will be measured by a reduction number of paper records to be entered into Laserfiche by the base administrative staff.

   b. Reduces time spent by Transit Operations chiefs and supervisors gathering and ~~analyzing~~ consolidating paper personnel records from multiple sources for each operator – Success will be seen in chiefs and supervisors spending less time gathering and analyzing personnel records as the information would available via EPM.

   c. Improved accuracy of employment actions (disciplinary, etc.). Current practice is prone to errors due to incomplete or inaccurate information – Success will be the elimination of any error in employment actions for operators.

3. *What is the current baseline for this measure?*
   a. **Reduces the entry by base administrative staff from paper operator records into Laserfiche** – Baseline for this measure is an estimate of 500 hours per month for each base from a survey done by Base Operations.

   b. **Reduces time spent by Transit Operations chiefs and supervisors gathering and ~~analyzing~~ consolidating paper personnel records from multiple sources for each operator** – Baseline for this measure is not recorded as it involves a desk audit and the cost of doing a desk audit is not justified by the estimated time savings.

   c. **Improved accuracy of employment actions (disciplinary, etc.). Current practice is prone to errors due to incomplete or inaccurate information** – Baseline for this measure is not producible as Base Operations does not keep statistics on inaccurate employment actions as they are corrected as soon as discovered. Any error records are buried within the thousands of quality employment actions done annually by Base Operations.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   a. **Reduces the entry by base administrative staff from paper operator records into Laserfiche** – Should see at least a reduction of 1 hour per day per base the time spent by base administrative staff doing entry from paper operator records into Laserfiche. This equates to a total of approximately 140 hours per month for all seven bus bases.

   b. **Reduces time spent by Transit Operations chiefs and supervisors gathering and ~~analyzing~~ consolidating paper personnel records from multiple sources for each operator** – the EPM module will be used 100% for employment actions with no reliance upon personnel files.

   c. **Improved accuracy of employment actions (disciplinary, etc.). Current practice is prone to errors due to incomplete or inaccurate information** – No errors in employment actions.

5. *When is the benefit likely to be achieved?*
   The benefits of the EPM module will [New 1/22/16: begin to]be seen immediately upon implementation but will not be fully realized for at least 6 months. This slow realization of benefits will be due to the changing of procedures and behaviors by the affected base personnel.

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

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

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IT Project Benefits Achievement Plan (Version 2)

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King County Department/Agency Name	Department of Transportation, Transit
Project Title	HASTUS Planning Module
Project Number	

Section 2. Business Owner Accountability

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Kevin Desmond, General Manager

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Name	Title / Agency	Project Role
Marty Minkoff	Supervisor, Service Planning	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Stakeholder

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

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Revision History Table

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Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	6/5/2014	Yan Zhang	New, initial draft	.5 hours
Budget process	10/2/14	Kathleen McMurray	Updates based upon Council staff feedback.	3 hours
Annual Update	2/11/15	Kathleen McMurray	Review only	.25 hours
Annual Update	1/22/16	Kathleen McMurray	Review only	.25 hours

Section 6. Description of Project Benefits

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

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

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

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

Primary project benefit? (Check only one)

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

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

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. ***Describe why you expect the proposed IT investment to produce the benefit(s).***
    a. ***Streamlined processes.*** *The Transit Service Planning workgroup currently uses a labor-intensive, Excel-based process to produce draft timetables, which are used to estimate costs and otherwise evaluate transit service design concepts. Service Planning also uses a variety of GIS-based tools to generate spatial views of network design concepts and produce street-by-street instructions for publication in paper-based service change packages. If this project to implement the HASTUS Planning Module is approved, Metro would acquire a new module for HASTUS, the software suite currently used by the Scheduling group to produce vehicle and operator/crew schedules. The new module would be used primarily by the Service Planning group to develop and evaluate route and transit network concepts, including the associated costs.*

    The HASTUS Planning Module is integrated with other HASTUS modules currently used by Transit for Scheduling and Operations. Incorporating this module would enable planners to easily access current ridership, run-time and trip arrival/departure data and

more efficiently incorporate these data in the development of route and network design concepts. This would streamline the service planning task of developing service alternatives and identifying more realistic/accurate cost estimates. It would also reduce steps (and effort) in the handoff of planner guidance to schedulers who could then take that imported planner estimate and develop full vehicle and crew schedules from the same data source inside the same software/platform. This effort may also streamline/simplify the process of creating maps that could then be used for public presentation, both in the planning process or later on for public consumption of live or future transit information.

b. ***Elimination of duplicate data entry.*** *Service Planning uses different tools than other workgroups involved in the production of service change data. As a result, Service Planning's Excel-based timetables and paper-based maps and routing instructions must be manually re-created in HASTUS by other workgroups in Transit. If this project to implement the HASTUS Planning Module is approved, the need for other Transit workgroups to re-create this information in order to proceed with the production of transit service change data can be eliminated.*

When combined, both a and b are expected to result in savings in labor hours that will be reinvested in higher value activities. The project will determine the exact nature of these savings as well as any new costs associated with this module as part of the business process review.

c. ***Improved service efficiencies.*** *If this project to implement the HASTUS Planning Module is approved, process improvements that will be enabled by the addition of the module to Transit's HASTUS application are expected to result in more efficient service. This will increase the amount of service hours available for serving our customers, which will in turn impact ridership, productivity and the overall value Metro provides to King County.*

2. ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)***

a. ***Streamlined processes.*** *We will know that this benefit has been achieved when we realize the aforementioned process efficiencies in developing and evaluating route and transit network concepts, including the associated costs.*

b. ***Elimination of duplicate data entry.*** *We will know that this benefit has been achieved when Service Planning's Excel-based timetables and paper-based maps and routing instructions do not need to be manually re-created in HASTUS.*

For both a and b, Transit will identify the specific bodies of work to be done by freed up hours from these efficiencies .

c. ***Improved service efficiencies.*** *We will know that this benefit has been achieved with increases in service trips (Service Trip per Plat/Vehicle Hour) and/or productivity (Riders per Plat/Vehicle Hour).*

3. *What is the current baseline for this measure?*

a. ***Streamlined processes.*** *The baseline for this measure will be determined at the early stages of the project when all of the steps that can be eliminated have been identified.*

b. ***Elimination of duplicate data entry.*** *The baseline for this measure is that it takes hundreds of labor hours each service change to re-create Service Planning's Excel-based timetables and paper-based maps and routing instructions in HASTUS.*

For both a and b Transit will identify the work to be done by freed up hours and note the current level of that work.

c. ***Improved service efficiencies.*** *The baseline for Service Trip per Plat/Vehicle Hour and/or Riders per Plat/Vehicle Hour is currently zero as we are not able to easily calculate these measures of service efficiency. (Note that these measures are different than the overall system efficiency measures as they enable a comparison of productivity between individual service hours (e.g. how much of a route is in revenue service versus deadhead or layover.) The baseline will be determined during the first year of operation.*

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   a. ***Streamlined processes.*** *The target for this measure is elimination of unnecessary steps from the process to produce draft timetables, which are used to estimate costs and otherwise evaluate transit service design concepts.*

   b. ***Elimination of duplicate data entry.*** *The target for this measure is the elimination of the need to re-create Service Planning's Excel-based timetables and paper-based maps and routing instructions in HASTUS.*

   For both a and b Transit will identify the work to be done by freed up hours and note the target level of that work.

   c. ***Improved service efficiencies.*** *The target is a 2% improvement in these measures.*

5. *When is the benefit likely to be achieved?*
   a. ***Streamlined processes.*** *This benefit is likely to be achieved within a year of implementation.*

   b. ***Elimination of duplicate data entry.*** *This benefit is likely to be achieved within a year of implementation.*

   For both a and b, staff should have freed up staff time available for higher value work within one year of implementation.

   c. ***Improved service efficiencies.*** *As this benefit can only be measured at a service change event and Transit is moving to two service changes a year by the time this project is implemented, we would anticipate achieving this benefit in 3 years (or 4 service changes after the baseline data is developed).*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor*

support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

3. *What is the current baseline?*

4. *What is the target for this measure? (How much savings will this project achieve)*

5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

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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:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Funding Release	11/08/2013	Ray Burgess	New, initial draft	8 hours
Annual Report	1/31/2014	Kathleen McMurray	Review only	.25 hours
Annual Report	2/14/2014	Jill Krecklow	Modified benefits discussion	.75 hours
Annual Report	2/12/2015	Cathy Snow	Review only	.25 hours
Annual Report	1/29/2016	Diane Sutherland	Review only	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

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☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

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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.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   The HASTUS application system is crucial to the scheduling of transit routes and the management of bus and train operators on a daily basis. This system must be available to the multiple customers within Transit for them to perform their jobs.

   The current HASTUS software is version 2006 and has only 2 more years of guaranteed maintenance. The version of Crystal Reports that comes with HASTUS 2006 is currently unsupported. The new software, HASTUS 2014, will provide 10 years of guaranteed maintenance. In addition it comes with a fully supported version of Crystal Reports.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   The HASTUS system is an essential component of day to day Transit operations. This project addresses the fact that the risk of system failure would increase if Transit were to operate on a version that was no longer supported by the vendor. The reporting component of the system is already not supported. Changes such as upgrading operating systems and servers by King County increase the risk that older, unsupported software will experience a failure.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

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King County Department/Agency Name	Department of Transportation, Transit
Project Title	M5 Yard Manager – Dispatch Replacement
Project Number	

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Name	Title / Agency	Project Role
Randy Winders	Vehicle Maintenance Manager, Transit Vehicle Maintenance	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Finance Manager

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   ~~The potential for automated yard mapping of coaches would produce operational benefits as coach location would be known without any need for manual tracking. Currently vehicle location is identified and entered into a dispatch system that provides location information to Operators looking to leave the base in their assigned coach and vehicle maintenance staff bringing coaches in for scheduled maintenance. The benefit would be time savings likely in the form of reduced overtime.~~

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   ~~Many factors influence overtime paid to Transit Operators and VM staff. Quick location of vehicles eliminates the need to source parking lanes for the right bus and lane position. Capturing savings from operators would be difficult to achieve. Within VM before and after time studies could be done to identify the amount of time savings from the use of automated vehicle location.~~

3. *What is the current baseline for this measure?*

~~The current baseline has not yet been established but will be captured as part of the project planning. Cost benefit of the time savings against future operating costs of the identified system will be evaluated~~.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   ~~A cost benefit analysis will be conducted with the preferred solution prior to completing a contract. A positive NPV will be required demonstrating that the benefits exceed the costs.~~

5. *When is the benefit likely to be achieved?*
~~When the complete project is implemented.~~

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   Vehicle dispatch software is used by Transit Vehicle Maintenance to locate coaches for pull-out, maintenance, fueling and servicing. The dispatch software currently in use is over 18 years old, outdated and no longer supported by the vendor. The current dispatch software, built on Power-Builder, is at the end of its life cycle. Power-Builder was discontinued in 2011 and support ended in 2012. Therefore, no software updates are available and the application is not able to operate with newer operating systems such as Windows 7 requiring workarounds.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   The risk is currently occurring. While KCIT has been able to keep the system operating on current operating environments, there is risk that this may not be possible with future operating systems. If the system fails, we would be required to revert to manual yard mapping requiring staff that would continually identify coach location and provide information to Operations so that operators can be informed of location of their assigned coach. Failure to adequately identify locations, can result in buses being blocked in lanes and unable to leave the base at the intended time resulting in late trips.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay,

has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in*

less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	DOT/Transit
Project Title	Mobile Ticketing Pilot Project
EBS Project Number	#1116944 , A00650

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Kevin Desmond, Transit General Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Liviu Prisecaru	IT Project Manager II, DOT Transit Division	Project Manager
Dan Overgaard	Supervisor, DOT Transit Division	Stakeholder
Kathleen McMurray	Supervisor, DOT Transit Division	Stakeholder
Jill Krecklow	Finance Manager, DOT Transit Division	Finance Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	06/20/14	Liviu Prisecaru	New, initial draft	2 hours
Conceptual review	7/8/2014	Kathleen McMurray	Updated for Conceptual Review	5 hours
Annual Report	2/19/15	Liviu Prisecaru	Review only	.25 hours
Annual Report	2/06/16	Liviu Prisecaru	Review only	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐Category #1: External service benefits: Improving the quality or quantity of services provided to the public

XCategory #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

   If this project to perform an evaluation of mobile ticketing fare payment technologies is approved, customers will have the opportunity to test a new method for paying their transit fare. Currently, customers can pay for their bus fare using either an ORCA card or cash. This project will evaluate the feasibility of adding mobile ticketing to the list of fare payment methods.

   The 2012 Metro Rider Non-rider Survey found that sixty percent of respondents used a smartphone. Of those smartphone users, twenty-three percent paid their bus fare with cash. This represents fourteen percent of all riders. It is expected that this group of riders will experience the greatest benefit from mobile ticketing. These benefits include:

   a. **Convenience.** By paying their transit fare from their smartphone, customers can avoid "fishing" around for cash and worrying about having exact change.
   b. **Faster boarding.** Riders who pay with a mobile ticket instead of cash will not need to wait in line as their change is accepted and processed by the farebox.

   Other transit agencies who have implemented mobile ticketing have experienced significant user acceptance of the technology. According to an April 11, 2014 **article** in Mass Transit, over 80,000 TriMet (Portland, OR) riders downloaded their mobile ticketing application, and purchased over 1 million tickets in the first seven months of operation. MBTA (Boston, MA) reported that in the first 9 months after implementing their mobile ticketing system, over 1 million tickets were purchased (representing $10 million in sales). Metro customers are expected to similarly find mobile ticketing to be a convenient way to pay their bus fare.

   Reduced dwell times due to increased use of non-cash forms of payment will benefit riders during peak boarding times on trips through downtown Seattle. This is consistent with one of the lessons learned in the Data and Lessons Learned from Elimination of the Ride Free Area and Start-up of RapidRide C and D Lines Report: *Continue to pursue strategies to speed boarding in downtown Seattle through off-board fare payment.*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

   The Mobile Ticketing Pilot Project will assess adoption patterns, complexity of the technology and its acceptance by the test participants. All test participants will be surveyed to obtain reactions to various aspects of the test, such as specific fare products, boarding times, the ease of using the particular application and the convenience of mobile ticketing in general. Survey findings will be included in the Mobile Ticketing Pilot Assessment Report. This report will address both the internal and external benefits of this project.

3. *What is the current baseline for this measure?*
   No assessment exists of customer acceptance of mobile ticketing for King County Metro.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

   It is expected that at least 75% of the test participants will find mobile ticketing to be a convenient way to pay their bus fare. It is expected that at least 75% of the test participants will find boarding faster with mobile ticketing, as compared to cash.

5. *When is the benefit likely to be achieved?*
   Two months following the completion of the pilot test, the Mobile Ticketing Pilot Assessment Report will be delivered. This report will contain the test participants' survey results.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff..*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   If this project to perform an evaluation of mobile ticketing fare payment technologies is approved, Metro will have the opportunity to assess whether or not it makes sense for the County to implement mobile ticketing. The pilot program model allows for proof of concept and study of consumer response, technology effectiveness, and other operational considerations prior to a full-scale investment.

   <u>Background</u>
   King County Metro currently collects cash fare payment on the bus. This process requires a farebox into which customers insert their fare. Maintaining the farebox system and cash handling costs the agency more than $5 million a year. In addition, cash collection on the bus has been shown to increase the amount of time that a bus sits in a zone boarding passengers. Less cash collected on the bus would both reduce the costs of cash handling and reduce dwell times. As a result, King County Metro is looking at the possibility of migrating the transit system to cashless on-board payment at a point in the future. In order to reach a cashless on-board environment a number of functional and policy changes will need to be implemented. This Mobile Ticketing Pilot is one step towards removing cash collection, but it is not the only change that would be required, nor is it the sole reason for piloting new ways for customers to purchase fare media.

   Taking cash collection off the bus would not mean that customer cannot use cash to purchase fare media, just that it would need to happen off the bus. Cash would still be collected off-board through ticket vending machines (TVMs), Metro customer service offices, or third party retail outlets. The goal would be to maximize electronic fare payment methods, including the existing ORCA card and emerging new technologies. By applying various strategies intended to move the penetration of electronic media close to 100%, Metro would then be in a place to consider eliminating the onboard cash fareboxes and avoid the cost to replace the equipment. The cost to replace this equipment is estimated at over $20 million (not including the on-going operations and maintenance costs for this equipment). Currently fareboxes are the leading source of trouble-calls requiring staff to make repairs while a bus is in service. The cost savings from eliminating cash collection on the bus cannot be fully realized until all cash is removed from the bus.

Whether or not cash is no longer collected on the bus, increasing the use of electronic fare payment media is expected to benefit transit travel times through downtown Seattle. Although the exact date has not been determined, the implementation of North Link will eventually require Metro to bring its bus routes out of the downtown Seattle transit tunnel. The added volumes through downtown Seattle surface streets will benefit from faster boarding (see the Data and Lessons Learned from Elimination of the Ride Free Area and Start-up of RapidRide C and D Lines Report).

One of the emerging electronic fare payment technologies is mobile ticketing, which provides customers the ability to pay their transit fares using their smartphones. This technology is currently implemented in numerous transit systems worldwide. Example agencies and vendors provided below:

Transit System	**Vendor**
Capital Metro (Austin, TX)	Bytemark (NYC)
Dallas Area Rapid Transit (DART) Fort Worth Transportation Authority Denton County Transportation Authority	Unwire (Denmark)
Massachusetts Bay Transportation Authority (MTBA)	Masabi (UK)
NJ Transit	Masabi (UK)
NY Waterway	Bytemark (NYC)
San Diego Metropolitan Transit System (MTS)	Masabi (UK)
South Shore Line, Northern Indiana and Chicago	Bytemark (NYC)
Telefonica O2 (Europe)	Masabi (UK)
TriMet (Portland, OR)	GlobeSherpa (Portland)
Virgin Trains (UK)	Masabi (UK)

Mobile Ticketing Pilot Program

This pilot project will procure a system for test purposes and solicit test participants from the public to evaluate the value of mobile ticketing for King County Metro and its customers. Customer adoption patterns will be assessed to determine if current cash paying customers are likely to embrace this new technology and thereby increase the use of electronic fare payment media.

In talking with consultants and other agencies, Transit has learned that the cost for mobile ticketing systems range from 8% to 12% of the fare transaction (in other words, up to 12 cents per dollar collected). Since mobile ticketing systems are generally hosted services, these costs include management of the back-end system, revenue processing and management of the application. The pilot project will analyze the cost to operate, maintain and upgrade a mobile ticketing system to help determine if mobile ticketing is a cost effective fare payment option for the County.

If proven beneficial, a project to fully implement mobile ticketing technology for Metro could follow.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The Mobile Ticketing Pilot Project will provide the opportunity to measure potential benefits of implementing mobile ticketing technology. Test participants will be surveyed to assess the likelihood of current transit customers switching from cash to mobile ticketing for fare payment. Additionally, the cost to operate, maintain and upgrade a mobile ticketing system will be gathered from vendor data. These findings will be included in the Mobile Ticketing Pilot Assessment Report.

3. *What is the current baseline for this measure?*

a. Customers switching from cash. No assessment exists of customers' likelihood of switching from cash to mobile ticketing at Metro.

b. Cost to maintain system. Metro will use cash collection costs as the baseline for this measure:

Collection cost per cash boarding (approximate): $0.14

Collection cost as a % of cash collections (2013 estimate): 15%

(Note: these are not measures that are routinely reported and the information provided here are estimates and do not include the longer term decision about replacing fareboxes.)

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   a. Customers switching from cash. Test participants who currently pay with cash report they would switch to mobile ticketing: 25%

   b. Cost to maintain system. For the pilot, we will be evaluating the collection cost per transaction and evaluating if it is less than our current cost for cash collections. This analysis may be skewed based on the pricing that is proposed for the pilot; however moving forward the procurement process will help to ensure that transaction costs are as low as possible. It is also unlikely that the pilot will have a significant impact on overall system costs, however transaction level costs can be evaluated. Full recognition of savings won't be possible until and unless all cash collection costs are eliminated. The pilot will provide data upon which a goal can be developed and considered as part of the decision making to move forward with a full roll-out of mobile ticketing.

5. *When is the benefit likely to be achieved?*
   Two months following the completion of the pilot test, the Mobile Ticketing Pilot Assessment Report will be delivered. This report will contain the cost analysis and the results of the tester survey responses.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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Benefit Achievement Summary

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IT Project Benefits Achievement Plan (Version ~~3~~4)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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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 Transportation, Transit
Project Title	Next Generation Wireless (NGW) (Replacement of 4.9 Network and Mobile Access Routers)
Project Number	1124429

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

~~Kevin Desmond, General Manager~~
Rob Gannon, Acting General Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

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Name	Title / Agency	Project Role
Dan Overgaard	Supervisor, Transit Systems Development and Operations	~~Project Sponsor~~ Steering Committee Member
Jill Krecklow	Finance Manager, Transit	Finance Manager
Pamela Wrenn	Project Manager II, Transit Systems Development and Operations	Project Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Conceptual review	6/4/2014	Yan Zhang	New, initial draft	.5 hours
Conceptual review	7/1/2014	Kathleen McMurray	Update	.5 hours
Conceptual review	10/02/2014	Dan Overgaard	Updated in response to questions	2 hours
Annual Report	2/11/2015	Dan Overgaard	Minor update in Section 6	.25 hours
Funding Release	6/22/2015	Pamela Wrenn	Updated per planning phase. Added Project Manager. Changed from Categories 1 & 3 to Category 3 only.	.5 hours
Annual Report	2/9/2016	Pamela Wrenn	Updated project title and added project number.	.25 hours
Annual Report	4/1/2016	Kathleen	Updated Business Owner	.25 hours

		McMurray	and Primary Project Benefit	
2017-2018 Budget	5/20/2016	Pamela Wrenn	Review only	.25 hours
2017-2018 Budget	6/13/2016	Kathleen McMurray	Updated in response to questions	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

Updated June 2015 – Portions of text related to Cisco product end-of-life were deleted in June 2015 because Transit and KCIT reached agreement with Cisco that the product would continue to be supported indefinitely, prompting removing schedule constraints and network security risks from the BAP. The existing 4.9 GHz technology and equipment as a whole remains end-of-life and needs to be replaced so the overall project justification has not changed.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The existing 4.9 GHz network provides data communications to support ORCA, On-Board Systems, Transit Signal Priority (TSP) and Real-Time Information Signs (RTIS). At a minimum, the replacement project must support the operation of those systems in their current state. In that sense, this project falls under Category 3, since it is **replacing or upgrading older technology, reducing the risk of system failures.**

Since this project will be a major investment in network technology, it should be expected to support the requirements of the next generation of systems that are planned to deploy during its useful life. (Since the replacement technology has not been selected, we not know for sure what useful life to expect, but the project team will be seeking a continued support period of seven or more years.) Chief among these new systems are the ORCA replacement, planned for implementation around 2020, and TSP replacement, planned for implementation around 2018.

This data communications network is an enabling technology. As such, customers are not aware they are using it, but they benefit from the operational functions that it supports, through the data communications it provides. In that sense, the project will provide direct improvements to the public if the replacement technology enables the next generation of those projects, which will provide "**improved quality of service, such as faster response times and better access to services**." These potential external customer benefits can be summarized s follows:

- **Improved fare payment.** The ORCA strategic planning process has identified potential enhancements for the next generation, such as the use of open payments (e.g., account-based payments using various credit- and debit-card technologies). If implemented, these would directly benefit customers by providing more options for fare payment. In addition, credit- and debit-based technologies would not require customers to wait for 24 to 48 hours of processing to have the value loaded on their cards, as they must do with ORCA. This step could be eliminated. In order to implement an open payment system, the ORCA partners would need to implement a secure, always on connection to every bus, such as a cellular 4G/LTE connection. This is a candidate technology for the 4.9 replacement network, so if it is selected, it would enable the ORCA replacement project to deploy those new features and benefit customers by improving fare payment options, speed and access.

- **Expansion of TSP and RTIS.** The current 4.9 GHz wireless network is constrained from expansion due to scheduled approaching system obsolescence. ~~and the fact that the vendor has withdrawn the product from the market.~~ KCIT and Transit have limited spares which must be saved to maintain existing services. No more ~~wireless access points and~~ mobile access routers are available for purchase, which limits Metro's ability to deploy TSP on additional corridors. Although several jurisdictions are interested in deploying more TSP (Seattle, Bellevue, Redmond and others), those plans are on hold pending Metro's deployment of a

replacement network that can support TSP. Assuming unlimited access to new equipment, the new network will allow continued expansion of TSP and RTIS on new corridors, which will directly benefit the public through improved speed and reliability, and greater access to bus arrival information along those corridors.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

   The benefits identified above will be measured when the replacement network is deployed, and the next generation systems that use the new network are deployed as well. In other words, the stated benefits should not be expected when the replacement network is merely supporting existing systems and their existing levels of functionality.

3. *What is the current baseline for this measure?*

   Current baseline for this measure is the existing ORCA system and its features (a card-based, closed loop system, with 24-48 hours of waiting time to load card revalues); and the existing corridors with TSP and RTIS deployed (RapidRide Lines A-F, plus Routes 44, currently being tested, and Route 120).

4. *What is the target for this measure? (How much improvement will this project achieve?)*

   The target for this measure will depend on the scoping, design and funding for the deployment of those replacement projects – ORCA and TSP – and any decisions to fund additional installations of Real Time Information Signs.

5. *When is the benefit likely to be achieved?*

   As noted above, the benefit will be achieved when the future replacement systems are deployed. The timing for these deployments is subject to future project scoping and dependent on funding for implementation.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and*

devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

Updated June 2015 – Similar to the note in Category 1, portions of text related to Cisco product end-of-life were deleted in June 2015 because Transit and KCIT reached agreement with Cisco that the product would continue to be supported indefinitely, prompting removing schedule constraints and network security risks from the BAP. The existing 4.9 GHz technology and equipment as a whole remains end-of-life and needs to be replaced so the overall project justification has not changed.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   Transit's 4.9 GHz wireless network was installed starting in 2009, as part of the installation of the On-Board System/Communication Center System (OBS/CCS). There is no industry standard life

cycle for this type of equipment, but it generally falls in the IT commodity category, which generally means an expected life of five to seven years. However, equipment obsolescence can be affected by multiple factors, such as lack of market availability of processing chips and other hardware components; updates to operating system software or other software that runs on the hardware, making it obsolete; and other strategic business decisions. In this case~~, due to a slower than expected market up-take of the 4.9 product line, Cisco scheduled the end of support~~ there are increasing failures of equipment for the 4.9 GHz wireless network equipment that Transit uses to upload and download data from the bus fleet at the bases and on RapidRide lines. This network also provides network connectivity for ORCA readers and Real-Time Information Signs (RTIS) on the RapidRide corridors, and enables Transit Signal Priority communications on RapidRide and other routes.

Not doing this project will increase the risk of service interruptions and the eventual failure of data communications for the systems that use the 4.9 network. Such failures will impair Metro's fare collection, operations management, service analysis, transit signal priority and customer information services.

Transit and KCIT need to deploy a replacement system before the ~~vendor's support ends in mid-2017~~existing system is no longer working. ~~This end of support affects both hardware and software. Cisco has already stopped manufacturing this line of equipment, and in 2017 will stop their software support. King County has asked about extending the support for this product, but Cisco has declined to offer this service. There is no alternate third party source for hardware parts since these are proprietary Cisco products. It is not possible for KCIT to assume the responsibility for software support since that would require access to Cisco's proprietary source code, as well as significant expertise in developing security patches for specialized network and communications software.~~

Update – 3/18/2015: Options that will be considered during alternatives analysis include new products that Cisco and other manufacturers are developing for the USDOT's "**Connected Vehicle**" initiative, which is expected to use wireless communications in the 5.9 GHz band, sometimes referred to as Dedicated Short Range Communications, or DSRC.

The system has already passed the "last buy" milestone for some types of spare parts. This project is a necessary life cycle replacement to maintain a state of good repair, and ensure business continuity. ~~The lack of security patches for potential operating system vulnerabilities will create a security risk for the King County network, and KCIT will require these devices to be disconnected~~. The lack of spare parts and the loss of software support means that it is not cost-effective to try to isolate this specialized network with additional firewalls or other network modifications. There is no other option to keep these services running, than to replace this obsolete equipment. This project needs to replace the following devices, and ensure integration and provide continuous operation for the systems connected them:

- 1,450 mobile routers installed on the transit fleet, and 140 on RapidRide corridors;
- 44 access points installed at transit bases; and
- 241 access points and along RapidRide and other Intelligent Transportation System corridors.

To maintain business continuity during the transition, Transit and KCIT will need to build and

implement the new system as a parallel network at the bases and along the corridors, and then migrate the fleet by installing or modifying mobile routers in a coordinated, phased process.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

If this wireless network is not replaced, the probability of incremental network failure, and increasing business impacts, is not just high but certain. There will be partial communication gaps failures when individual hardware units fail and no replacement parts are available. ~~There will be an increasing risk of systemic failures and network vulnerability after software support ends in 2017.~~

At the seven operating bases, this network provides wireless communications to connect the revenue fleet with back office systems to upload and download daily on-time performance data, passenger counts, fare transactions, ORCA card reloads, fare tables, daily on-board bus schedules, stop announcements and other on-board configuration data. It is critical to Transit operations that these data transmissions continue to occur in a timely manner. Over 60% of Transit's fare revenue is processed over this wireless network.

- The ORCA readers are updated daily with customer card reloads and card hotlists. ORCA transactions are offloaded at every pull-in. ORCA transaction data expires if it is not downloaded from the vehicle after seven days. Intermittent communication failures in the network may result in fares being lost due to expired data.
- On-board systems are generally loaded with about 30 days of operational data. If this data is not updated before expiration, on-board data will expire and present operational issues, such as limiting the operators' ability to use the radio system (a critical life/safety requirement) and collect correct passenger fares (a critical financial requirement).
- The network provides connectivity to collect fares from ORCA readers at major stations, display bus arrivals on real-time information signs, and enables transit signal priority operation along the corridor, for improved speed and reliability.

King County is already experiencing maintenance and operations issues, due to the lack of spare parts. ~~and Cisco's delayed turnaround on warranty repairs. Some access points have failed due to unexpected loss of transmit power. Others fail to come back up when rebooted.~~ It is expected that these kinds of issues will increase as the system ages, and this will put transit operations at a significant risk of more frequent and longer lasting outages. Incremental failures may require prioritization of certain functions, and moving limited spares around the system to fill in gaps. Some less critical functions such as Real-Time Information Signs and off-board ORCA readers could be temporarily decommissioned in order to keep the core ORCA system functional.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central*

purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that*

qualified for prompt payment than originally estimated.

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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 Transportation (DOT)/Transit Division
Project Title	On-Board Systems/Communication Center System (OBS/CCS)
EBS Project Number	1027519 and 1028626

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~~ Rob Gannon, Acting Transit General Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Randy Boshart	IT Project Manager II, DOT Transit Division	Project Manager
Dan Overgaard	Systems Development and Operations Supervisor, DOT Transit Division	Steering Committee Member

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
Annual Report	3/13/15	Randy Boshart	Review Only	.25 hours
Annual Report	1/31/16	Randy Boshart	Review Only – no changes	.5 hours
Annual Report	6/13/16	Randy Boshart	Revised per council staff feedback	.5 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

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.*

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1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those

benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The On-Board Systems/Communication Center System (OBS/CCS) Project combines upgrades to two separate, interrelated systems into one project. The OBS/CCS Project provides the user interfaces and controls required to implement the new Transit Radio System (TRS) on Transit's fixed route fleet, at the transit bases and in the Communication Center. Without OBS/CCS, the new radio system could not have been fully utilized as the legacy systems were incompatible with the TRS. The On-Board Systems portion of the project also replaces an obsolete vehicle tracking system with a modern GPS based system. The Communications Center System Project updates the Computer Aided Dispatch/Automatic Vehicle Location (CAD/AVL) system to one that provides more efficient call processing to an essential life-safety system.

Interface to Transit Radio System (TRS)

The TRS Project (a separate project from OBS/CCS) replaced Metro's obsolete 450MHz land mobile radio system with a 700MHz radio system mandated by the FCC. The existing radio spectrum was no longer available for use by King County at the end of 2013. This new radio system required the upgrade of both on-board equipment and at the Communication Center. Existing systems were not compatible with the new radio system.

On-Board Systems (OBS) Project

The On-Board Systems portion of the OBS/CCS project integrated with the new TRS to handle call processing between the vehicle and the Communications Center. The OBS Project also replaced the existing signpost based vehicle location system with a new GPS vehicle location system which provides more accurate and timely vehicle location updates thereby enhancing public and driver safety. Additional capabilities now available include: integrated automated passenger counting, automated stop announcements, automated destination sign changes, schedule adherence monitoring for Transit Signal Priority, and a new level of collected performance data not possible with the legacy signpost based system. Vehicle installations concluded in December of 2012. ~~Tasks remaining include the resolution of significant functionality, documentation and training issues.~~

Update June 2016: The Project is currently in the final stages of negotiations to issue Full System Acceptance to the vendor. Any remaining functionality issues will be handled during system operations. All training has been completed. There are some documents that are in the final stages of review and acceptance, and are expected to be finalized in 3rd quarter 2016. Upon acceptance and delivery of documentation the project will enter the close-out phase with completion expected in 4th quarter 2016.

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.~~

Update June 2016: The Project is currently in the final stages of negotiations to issue Full System Acceptance to the vendor. Any remaining functionality issues will be handled during system operations. All training has been completed. There are some documents that are in the final stages of review and acceptance, and are expected to be finalized in 3rd quarter 2016. Upon acceptance and delivery of documentation the project will enter the close-out phase with completion expected in 4th quarter 2016.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The probability of recurrence for the risk that initiated this project is most likely in the medium to high range. The FCC regulatory change that mandated a phase-out of wide-band UHF licensing, and mandated a forced obsolescence of the hardware for wide-band operation, was driven by increased demand for more efficient use of radio spectrum, and the development of new technology that could provide more efficient operation. These two trends are likely to continue.

It is difficult to predict when these continuing trends will affect the new 700 MHz spectrum that is being used by the new Transit Radio System. The new system is already compliant with a similar spectrum efficiency regulation for 700 MHz, which will take effect in 2017. The level of spectrum efficiency in the new system is four times more efficient than that provided by the wide-band operation of the legacy radio system. The technology developments required to reach a higher level of spectrum efficiency will most likely require at least a decade of industry research, testing and regulatory development, before a new regulatory target is issued. Issuance of a new regulatory target is then followed by vendor product development, before agencies such as King County can issue specifications and proceed with the procurement and deployment of a replacement system.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the

neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	DOT/Transit
Project Title	ORCA Replacement Planning
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
Dan Overgaard	Supervisor, DOT Transit Division	Stakeholder
Kathleen McMurray	Supervisor, DOT Transit Division	Stakeholder
Jill Krecklow	Finance Manager, DOT Transit Division	Finance Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	9/4/2014	Kathleen McMurray	New, initial draft	6 hours
Annual Report	2/18/2015	Catherine Boon	Review only	.25 hours
Annual Report	1/22/2016	Kathleen McMurray	Corrected the end of the current vendor operating contract from 2020 to 2021	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

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.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   This project is to fund King County's participation in the detailed planning and scoping to replace the existing regional ORCA smart card fare collection system. The ORCA agencies have agreed to a number of strategic objectives for the ORCA replacement project of which the following are designed to improve the quality of services provided to the public.

   - *Improve customer experience*
     - *Programs for unbanked/underbanked--create programs that make it easier for customers without banking relationships to use ORCA to purchase tickets, take advantage of ride discounts and participate fully in any services ORCA may offer.*
     - *Business and institutional programs--continue to provide programs that cater to the needs of local businesses and leverage the scale that their constituents provide*
     - *Instantaneous availability of loaded value--increase customer satisfaction by eliminating the waiting period for value added to the ORCA cards*
   - *Increase ORCA usage*
     - *All modes--make ORCA easily usable on all modes of transport*
     - *Market penetration--make ORCA available through as many venues as possible in addition to the current retail network and ticket machines*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

   This is a planning project, therefore the benefits to the public will not be fully realized at its completion. However, the scope of this project includes development of detailed requirements for the the new system. The benefits of this planning project will be measured by the inclusion of the following requirements in the planning project deliverables:
   1. The system must address the needs of the customers with limited or no access to bank accounts.
   2. The system must provide programs that support Metro's institutional customers (such as schools and local businesses).
   3. The system must provide instanteous availability of loaded value. Note: Currently, due to limitations in the technology, a customer must wait up to 48 hours for fare value purchased via the ORCA website to be available on their ORCA card.
   4. ORCA must be easily available for use on all modes of transportation.
   5. ORCA availability must be expanded beyond the current retail network and ticket vending machines.

3. *What is the current baseline for this measure?*
   The current baseline for this measure is that there are no detailed requirements for a next generation ORCA system.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

   This is a planning project, therefore the benefits to the public will not be fully realized at its completion. Therefore, the target baseline for this measure is a set of detailed requirements for a next generation ORCA system that include the strategies identified to improve the customer experience and to increase ORCA usage.

5. *When is the benefit likely to be achieved?*

   These detailed requirements are likely to be finalized by the end of 2016.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff..*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   This project is to fund King County's participation in the detailed planning and scoping to replace the existing regional ORCA smart card fare collection system. The ORCA agencies have agreed to a number of strategic objectives for the ORCA replacement project of which the following are designed to improve internal operations.

   - *Fiscal responsibility*
     - *Lower Total Cost of Ownership (TCO)--ensure that the new system is cost-effective to implement and efficient to operate.*
     - *Lower upgrade and improvement costs—increase the use of state-of-the-art technology to create efficiencies, and design a system that is modular enough to be easily upgraded as technology changes*
   - *Operational efficiency*
     - *Roll out new functionality and upgrades faster--use technology and governance to enable the region to quickly assess and pilot new technology features and implement them efficiently.*
     - *Make data easier to access for agencies and public--allow agencies to find, analyze and report information easily.*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

   This is a planning project, therefore the benefits to King County will not be fully realized at its completion. However, the scope of this project includes development of detailed requirements for the the new system. The benefits of this planning project will be measured by the inclusion of the following requirements in the planning project deliverables:
   1. The system must be cost effective to implement and efficient to operate.
   2. The system must use state-of-the-art technology and be easily upgraded as technology changes.
   3. The system must provide the ability to quickly and efficiently roll out new functionality and upgrades.
   4. The system must provide easy access to data by allowing agencies to find, analyze and report information easily.

3. *What is the current baseline for this measure?*

   The current baseline for this measure is that there are no detailed requirements for a next generation ORCA system.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

   This is a planning project, therefore the benefits to the agency will not be fully realized at its completion. Therefore, the target baseline for this measure is a set of detailed requirements for a next generation ORCA system that include strategies that are fiscally responsible and improve operational efficiency

5. *When is the benefit likely to be achieved?*
   These detailed requirements are likely to be finalized by the end of 2016.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   This project is to fund King County's participation in the detailed planning and scoping to replace the existing regional ORCA smart card fare collection system. The ORCA system was deployed in 2009 and is now used for nearly 65% of all fares collected on King County Metro service. The system includes field devices (ORCA readers and other devices) that are operated by the 7 participating ORCA agencies (Community Transit, Everett Transit, Kitsap Transit, Pierce Transit, Sound Transit, Washington State Ferries and King County Metro). In addition, there is a central clearinghouse that stores ORCA data and distributes fare revenue based upon a complex set of business rules established by the ORCA agencies. This clearinghouse is hosted and operated by the ORCA contractor under an operating and maintenance agreement. This agreement ends in ~~2020~~ 2021.

   King County and its partner agencies are starting to plan for the next generation of fare collection in the Puget Sound region. Since King County is the largest transit operator in the region and has significant interest in influencing the design and strategic direction for the new system, its participation in the planning and procurement for the new system is critical.

   If this project to fund King County's participation in the detailed planning and scoping to replace the

existing ORCA smart card fare collection system is approved, King County will be able to properly participate in the regional planning effort. The scope of this effort will be participation in the regional planning process, the development of detailed requirements, and the possible start of a procurement process for the replacement system.

Transit expects to submit a follow-on request with system procurement and implementation costs in the 2017/2018 budget cycle.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The ORCA clearinghouse collects, reconciles and apportions fare revenue between King County and the other six participating ORCA agencies. The ORCA vendor maintains and operates the ORCA clearinghouse under an operating agreement that expires in ~~2020~~ 2021. An extension of this agreement is extremely unlikely. Should the agreement end and the clearinghouse cease to operate without a replacement system in place, King County will be without its primary fare collection system. This is a significant risk to business continuity.

In addition, the ORCA equipment and clearinghouse systems are approaching end of life, from a technology perspective, and by ~~2020~~ 2021 will be obsolete.

For these reasons, the ORCA Joint Board (General Managers and CEOs of the participating agencies) has initiated a planning project to define a next generation ORCA system that will build on the success of the current system while also improving the experience for both the agencies and customers. If Metro is not able to fully participate in the planning and requirements definition phase of this effort, the risk is high that Metro will not be in a position to influence the strategic direction and that its needs will not be adequately met by the new system.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

3. *What is the current baseline?*

4. *What is the target for this measure? (How much savings will this project achieve)*

5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

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Metric Description	Metrics	Baseline	Target	Actual
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IT Project Benefits Achievement Plan (Version 2)

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King County Department/Agency Name	Department of Transportation, Transit
Project Title	P&F Timekeeping via EAM
Project Number	TBD

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Kevin Desmond, General Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jerry Rutledge	Manager, Transit Power & Facilities	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Stakeholder

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
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Conceptual review	6/5/2014	Yan Zhang	New, initial draft	.5 hours
Conceptual review	9/25/201 4	J. Krecklow	re Revised to address questions	1 hour
Annual Report	2/11/15	Kathleen McMurray	Review only	.25 hours
Annual Report	2/9/16	Kathleen McMurray	Added missing text in Category 3.	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   This project

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

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5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   Transit's Power & Facilities section (280 employees) currently uses a timekeeping system called ETTS which is an independent system that interfaces with our Asset Management system (EAM) and with PeopleSoft to provide time entry for payroll and reporting purposes. ETTS has been in use since 2001, was developed using Delphi, runs on the 32 bit platform, is no longer supported by the vendor, and is running with outdated operating systems.

   Improvements to the existing ETTS system are not viewed to be cost effective given the current status of the system. Preliminary estimates are that it would also cost more to upgrade the ETTS system than it does to implement time & labor reporting in EAM ($250k versus $217k) The EAM system is a current generation system that provides work order functionality as well as the ability to collect and pass time records to Peoplesoft as EAM has the capability to capture employee time accurately with in the EAM system itself. Using EAM and its work order data to generate time and labor entries would eliminate the need for the ETTS system, allowing it to be retired. This would result in one less system

to maintain and would provide for increased return on the investment paid in the EAM system.

Generating time and labor entries directly from EAM would still require an interface to Peoplesoft. Such an interface would be similar to the one currently in place with ETTS or that used by the Vehicle Maintenance group which captures time and labor information in a vehicle work order system (M5) which interfaces directly to Peoplesoft.

Directly capturing time from the work order system eliminated redundant data entry and reduces the possibility for error. Employees will enter time once into EAM and the time and labor records for Peoplesoft will be generated by the system. Management and administrative time is currently spent reviewing the ETTS data (as well as the work order data in EAM) and resolving errors/issues. Having the time collected in one system would allow manager to approve the work order data once.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   We will track the number of time and labor corrections required as the data is approved in Peoplesoft.

3. *What is the current baseline for this measure?*
   We currently have not quantified the amount of time associated with redundant time entry and error correction. If each employee spends 30 minutes a week doing redundant data entry there would be about 6,500 hours spent on this activity each year. ((250 hourly employees X 30 mins X 52 weeks)/60 = 6,500 hours). Employees work 24/7 shifts. This is roughly equivalent to 3-4 FTEs worth of time each year. In addition management will no longer be required to review for and reconcile errors.

4. *What is the target for this measure? (How much improvement will this project achieve?*
   The target for this measure will be zero redundant data entry as well as zero time spent by management reconciling errors as there will be reconciliation required.

5. *When is the benefit likely to be achieved?*
   This benefit should be achieved as soon as the system goes live.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   P&F currently uses a timekeeping system called ETTS which is an independent system that interfaces with our Asset Management system EAM and with PeopleSoft. ETTS has been in use since 2001, was

[New 2/9/2016: developed using Delphi, runs on the 32 bit platform, is no longer supported, and is outdated. It is not in P&F's best interest to add or improve system features and upgrading at some point in the near future is not feasible.]

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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 Transportation, Transit
Project Title	Real-Time Improvements 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.

Kevin Desmond, General Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Dan Overgaard	Supervisor, Transit Systems Development	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Stakeholder

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	6/5/2014	Yan Zhang	New, initial draft	0.5 hours
Conceptual review	9/26/2014	Dan Overgaard	Address questions; clarify project scope and benefits	3 hours
Conceptual review	10/15/2014	Dan Overgaard	Address embedded comments	2 hours
Conceptual review	11/5/2014	Jill Krecklow	Finalize BAP for budget	30 minutes
Annual Report	2/11/2015	Kathleen McMurray	Review only	.25 hours
Annual Report	2/9/2016	Kathleen McMurray	Provided clarifying updates	.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:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☒ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

Metro customers use a variety of information systems to check bus schedule and status information, including schedule pages in Metro Online, the Automated Trip Planner, Tracker, the Interactive Voice Response system, Real Time Information Signs, and third party applications such as OneBusAway. Many customers also receive automated Transit Alerts via email subscription, or follow Metro on Twitter and Facebook.

[New 2/9/16: As customers use and rely on electronic information in many other areas of their lives, they increasingly expect transit to provide a similar level of customized service and immediate responsiveness. Today, these] systems do not provide consistent information about significant temporary changes that may affect the customers' trips, such as reroutes, stop closures and service cancellations. In these situations customers have to do additional work to research what is happening, and even then may not find the information they need in time to adjust their trip plans. For many events, Metro is simply not able to produce [New 2/9/16: consistent electronic updates, across all of its customer information outlets] ~~electronic updates~~, because the information has to be entered manually into each system, and resources are not available to keep up with the pace of the event, [New 2/9/16: customize the output appropriately for each system, or ensure consistency on all the changes that potentially] ~~or the volume of changes that~~ should be announced. Some systems such as OneBusAway and Tracker cannot be updated manually, and Metro does not have the capability to distribute these updates electronically. So customers are often not provided with accurate or timely information about changes affecting their service.

~~Customer reliance on all electronic forms of information is expected to continue to increase, and we believe that this increased dependency will bring greater visibility to those products, as well as any gaps or inaccuracies in them.~~

~~The proposed IT investment will implement a new system and modified business processes to create, manage and distribute data about these changes. Customer-facing systems will be modified to receive and display this new information.~~ ~~**As a result, the primary external benefit is that customers will receive more timely and more accurate information about reroutes, stop closures and, to the extent possible, service cancellations.**~~

[New 2/9/16: The proposed IT investment will implement a new centralized system and modified business processes to create, manage and automatically distribute updates about reroutes, stop closures and service cancellations. Customer-facing systems will be modified to receive and display this new information. **As a result, the primary external benefit is that customers will receive more timely, consistent and accurate information about reroutes, stop closures and, to the extent possible, service cancellations.**]

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

At present, the Automated Trip Planner, Tracker and OneBusAway do not display any information at all about reroutes, stop closures and service cancellations. They simply refer customers to the "Alerts and Updates" page in Metro Online, which is very cumbersome to use. After the project is implemented, these systems will be able to receive the updates and display them automatically. The number of reroutes, stop closures, and service cancellations where automated information is available to customers will provide a measure of intended project benefits. Post implementation Transit will measure the percentage of all reroutes, service cancellations and stop closures that are provided in an automated manner OneBusAway, the Automated Trip Planner and Tracker.

Additionally, the project will use customer research such as a focus group, in order to measure customers' satisfaction with the newly added information to ensure it is displayed in a way that it is easy for customers to understand. Customer research may also come from the work of partners agencies such as Sound Transit.

3. *What is the current baseline for this measure?*

The baseline measure is that none of these updates (zero) are provided to OneBusAway or to Metro's Automated Trip Planner and Tracker in an automated manner. [New 2/9/16: Although Transit Customer Communications and Services has begun to announce trip cancellations in the Next Departures section of Metro Online's Trip Planner, this is a manual effort that only provides updates in one location and not consistently across all real time systems. The Real Time Improvements project will address this with a more comprehensive solution.]

4. *What is the target for this measure? (How much improvement will this project achieve?)*

The target for this measure is to provide 80% of all reroutes and stop closures to OneBusAway, the Automated Trip Planner and Tracker, in an automated manner, up from the current level of 0% provided. The percentage of service cancellations that is provided will be determined as the project moves forward.

Prior to implementation, as part of our customer outreach and research, we will target a high level of customer satisfaction with information display.

5. *When is the benefit likely to be achieved?*

The benefit of new information for customers will be achieved immediately after the project is completed.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be*

improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

   In the current environment, information about reroutes and stop closures is entered and re-entered into multiple computer systems. Initially, Transit Control Center staff produces and distributes this information via PDF files, and then customer services staff has to load the files to Metro Online, as well as manually re-enter ~~the same~~ an edited version of the information into other systems~~. In the process of doing so, they often have to edit or summarize the information~~, which is very time-consuming. As an example, the detailed street-by-street information in a reroute is generally too long and too detailed for a quick email alert, and will not fit into a tweet. So each of these kinds of updates are customized into new text appropriate for each type of delivery system. There are too many reroutes and stop closures to distribute all of them to all of the customer-facing systems.

   The proposed project will revise these methods so that information can be produced once in a centralized system and then distributed automatically to other receiving systems in a machine-readable format that is appropriate for their consumption. This process will reduce the amount of manual effort required to create and manage this information.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

   As part of the project planning and during implementation, Transit will identify the level of staff resources that have been freed up by this project and how those resources will be redeployed,

3. *What is the current baseline for this measure?*

   Transit will identify the baseline as part of project planning process describing the level of staff effort currently dedicated to activities and how those resources are able to be redeployed to additional activities.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   As part of the planning process, Transit will establish a target or targets associated with reducing the manual effort associated with communicating reroutes and stop closures.

5. *When is the benefit likely to be achieved?*

   As part of the planning process, Transit will estimate when the benefit of redeploying staff to higher value activities will be achieved.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those

benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   This project is being proposed because several of Metro's current customer-facing systems do not provide any information on reroutes, stop closures and service cancellations. Metro does provide some notification of these events via documents that are posted on the "Alerts and Updates" page of Metro Online. In addition, Metro sends out some Transit Alerts to email subscribers, and provides some updates to social media sites for some (but not all) of the Alerts and Updates.

   Information about reroutes and stop closures is communicated internally by posting event-specific documents on internal web pages or SharePoint sites, and distributed externally by posting these same documents on the Alerts and Updates page on Metro Online. In addition some of the information for some of these events is manually re-entered into other systems such as GovDelivery, for distribution to subscribers of Transit Alerts, or sent out as updates to social media sites.

   The overall complexity of the alert notification process and the level of effort required to enter and re-enter these updates into different systems inherently limit the number and type of advisories that can be created. As a result of these constraints, customers never hear about some events; some notifications are more general than they should be.

   This project will implement a new system for managing these updates, and develop the necessary processes and interfaces to display this information in an automated manner. Metro Online's Alerts and Updates page will be modified to make the data more user-friendly, and eliminate the need to open up and read a separate document for each reroute or stop closure. The existing web pages and SharePoint sites will be decommissioned.

   The issues identified above affect some customers daily to some extent; more customers during more significant events, such as bridge or street closures; and virtually all customers during major region-wide events such as Torchlight, adverse weather and so on. The improvements developed by this project are intended to be scalable solutions that reduce overall complexity, so that they provide benefits on a daily basis as well as help the organization communicate and respond more efficiently during major events.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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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Section 7. Benefit Achievement Summary

Benefit Achievement Summary

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Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014.*

The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

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Metric Description	Metrics	Baseline	Target	Actual
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IT Project Benefits Achievement Plan (Version 2)

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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~~ Rob Gannon, Acting Transit General Manager

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Name	Title / Agency	Project Role
~~Tom Friedman~~	~~IT Project Manager II/DOT Transit Division~~	~~Project Manager~~
Phil Branham	Supervisor of Fare Media Sales/DOT Transit Division	Fare Media Sales Information
Chuck Sawyer	Supervisor/DOT Transit Division	Market Research Information
Tom Randall	Chief/DOT Transit Division	Customer Services Information
Dave Dunneback	Planner/DOT Transit Division	King County Employee ORCA Usage
~~Rebecca Switaj~~	~~Project Program Manager/DOT Transit Division~~	~~Budget Analyst~~

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Annual Report	1/6/14	Tom Friedman	Converted plan from Benefit Realization Plan into Benefit Achievement Plan format	3 hours
Annual Report	03/20/14	Kathleen McMurray	Revised per feedback	1 hour
Annual Report	02/06/15	Kathleen McMurray	Review only	.25 hours
Annual Report	2/11/16	Kathleen McMurray	Numerous updates throughout document	2 hours
Annual Report	4/4/16	Kathleen McMurray	1. Updated Business Owner 2. Updated Section 3 to only include current Transit staff 3. Updated # of elements	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

X 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~~ 6 Elements (or sub-projects) within the RFCS Enhancements Project. Four of the ~~seven~~ six elements are in this Benefit Category. The expected benefits for each of these will be described separately.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   a. **Streetcar Element.** The goal of this element is to install ORCA readers on the two streetcar lines: South Lake Union and First Hill. It is an extension of the current regional ORCA system to the streetcar mode. This will allow the public to use ORCA cards for fare payment on streetcars thereby providing better access to services for the public.
   ~~**b. Operations Enhancement Element.** The ORCA system went 'live' on April 20, 2009. This element is intended to address operational issues that have come to light since the implementation of the system. The primary benefits are expected to be customer and employee satisfaction related to the collection of fares on board buses.~~
   c. University of Washington Element. The goal of this element was to convert the U Pass program to ORCA. This allows UW students, staff and faculty to use ORCA cards for fare payment thereby providing better access to services for the public.
   d. Regional Enhancements Element. The specific enhancements included in this element are determined by the ORCA Regional Joint Board (made up of the General Managers of the 7 participating agencies). Overall, the goals are to improve customer satisfaction and increase operational efficiencies.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   a. Streetcar Element. The benefit of this element will be measured by the number of passengers using ORCA for fare payment. The ORCA system automatically keeps track of the number of ORCA "taps" or "boardings". ORCA Boardings reports can be generated easilty for any time period.
   ~~**b. Operations Enhancement Element.** The enhancements planned for this element are relatively small and the impact will be difficult to measure without an expensive survey effort. It is proposed that a surrogate metric is the number of customer complaints recorded by the Metro Comment System (MCS).~~
   c. University of Washington Element. Conversion to ORCA was not expected to change transit use at UW but the number of times the cards are used is an indicator of the usability of the extension of the regional ORCA system.
   d. Regional Enhancements Element. The usage of ORCA since Full System Acceptance is the most relevance metric, specifically regional average weekday ORCA boardings as a percent of total average weekday boards.

3. *What is the current baseline for this measure?*
   a. Streetcar Element. ORCA use on streetcars will be measured by looking at ORCA Boardings on Streetcar service as a percentage of total Streetcar boardings: Baseline is 0%
   ~~**b. Operations Enhancement Element.** Customer satisfaction will be measured by looking at ORCA complaints per calendar quarter as entered in MCS: Baseline is 73 (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)

4. *What is the target for this measure? (How much improvement will this project achieve?)*

a. **Streetcar Element.** ORCA use on streetcars will be measured by looking at ORCA Boardings on Streetcar service as a percentage of total Streetcar boardings: Target is 50%
~~b. **Operations Enhancement Element.** Customer satisfaction will be measured by looking at ORCA complaints per calendar quarter as entered in MCS: Target is decrease by 30%~~
c. **University of Washington Element.** UW ORCA boarding will be measured by looking at Total ORCA Boardings by UW cardholders in October of each year: Target is 1,422,677
d. **Regional Enhancements Element.** ORCA Market Share will be measured by looking at Regional Average Weekday ORCA Boardings/Total Average Weekday Boardings: Target is 65%

5. *When is the benefit likely to be achieved?*
   a. **Streetcar Element.** Two years following implementation of ORCA fare payment on streetcars.
   ~~b. **Operations Enhancement Element.** Two years following implementation of the Operations Enhancement.~~
   c. **University of Washington Element.** Benefit has been achieved. All UW transit trips were converted to ORCA with implementation of the UW Element. Total ORCA Boardings by UW cardholders in October 2012 was 1,422,677.
   d. **Regional Enhancements Element.** Two years following implementation.

[New 1/22/16: Operations Enhancement Element was removed from the scope of the RFC Enhancements project.]

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

Background: There are ~~7~~ 6 Elements (or sub-projects) within the RFCS Enhancements Project. Two of the ~~seven~~ six elements are in this Benefit Category. The expected benefits for each of these will be described separately.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   a. **King County Employee Card Element.** This element implemented ORCA cards for King County employees. The cards provide building access and functionality in addition to ORCA

functionality.

b. **Data Access Element.** The primary benefit of this element is to preserve the detailed ORCA transaction data that is currently stored as csv files on the ORCA Back Office Computer (BOC). This project element will make the transaction data available to a limited number of users but it will position Metro for future use of the data for operational analysis as part of a yet to be determined project. The ORCA vendor will be purging these data soon and it is important that they be saved elsewhere.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   a. **King County Employee Card Element.** The benefit of this element can be measured by monitoring the usage of ORCA boardings generated by King County cards.
   b. **Data Access Element.** Success will be measured by having a repository of detailed ORCA transaction data rather than having the data unavailable for future study.

3. *What is the current baseline for this measure?*
   a. **King County Employee Card Element.** King County employee ORCA usage will be measured by looking at Total ORCA Boardings by King County employees for June to October of each Year: Baseline is 0
   b. **Data Access Element.** Baseline for this element is having no database for BOC transaction data.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   a. **King County Employee Card Element.** King County employee ORCA usage will be measured by looking at Total ORCA Boardings by King County employees for June to October of each Year: Target is 691,673
   b. **Data Access Element.** Target for this element is having a database for BOC transaction data.

5. *When is the benefit likely to be achieved?*
   a. **King County Employee Card Element.** Benefit has been achieved. All King County employee transit trips were converted to ORCA with implementation of the King County Employee Card Element. Total ORCA Boardings by King County employees for June to October 2012 was 691,673.
   b. **Data Access Element.** Benefit has been achieved. Work on this element is complete with the implementation of a repository of detailed ORCA transaction data.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

Background: There are ~~7~~ 6 Elements (or sub-projects) within the RFCS Enhancements Project. One of the ~~seven~~ six elements ~~are~~ is in this Benefit Category. ~~The expected benefits for each of these will be described separately.~~

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   Sales & Customer Services Element. The ORCA system was implemented as a regional system that did not address all of the needs of the individual agencies. This project element's purpose is to extend the ORCA system in several ways with the goal of completing the replacement of Metro's legacy point of sale (POS) system. The legacy POS system is currently only used for a small number of sales transactions at the agency. With the completion of the project element, all sales transactions will be performed using the ORCA system and the legacy POS system will be retired.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   N/A

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

Background: There are ~~7~~ 6 Elements (or sub-projects) within the RFCS Enhancements Project. Three of the ~~seven~~ six elements are in this Benefit Category. The expected benefits for each of these will be described separately.

1. *Describe why you expect the proposed IT investment to reduce costs?*
   a. **University of Washington Element.** Surveys that are currently done every 2 years to determine UW transit usage will no longer be needed.
   b. ~~**Operations Enhancement**~~ **Sales & Customer Services Element.** Legacy POS system will no longer be needed.
   c. **King County Employee Card Element.** Avoids support of multiple building access and ORCA cards for KC employees.

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
   a. **University of Washington Element.** Surveys will no longer be needed. Cost savings.
   b. ~~**Operations Enhancement**~~ **Sales & Customer Services Element.** Legacy POS system will no longer be needed. Cost savings.
   c. **King County Employee Card Element.** Separate building access card will not be needed.

3. *What is the current baseline?*
   a. **University of Washington Element.** $42,000 every 2 years
   b. ~~**Operations Enhancement**~~ **Sales & Customer Services Element.** $18,000 per year
   c. **King County Employee Card Element.** $386,000 over 5 year life cycle.

4. *What is the target for this measure? (How much savings will this project achieve)*
   a. **University of Washington Element.** $42,000 every 2 years
   b. ~~**Operations Enhancement**~~ **Sales & Customer Services Element**.$18,000 per year
   c. **King County Employee Card Element.** $386,000 over 5 year period

5. *When is the cost reduction likely to be achieved?*
   a. **University of Washington Element.** ~~June 2015.~~ [New 1/22/16: Benefit has been achieved. King County no longer pays for or manages a survey to determine UW transit usage.]
   b. ~~**Operations Enhancement**~~ **Sales & Customer Services Element.** Estimated to be June 2016 (two years after implementation).
   c. **King County Employee Card Element.** April 2017.

[New 1/22/16: Corrected the name of the Sales & Customer Services Element (it was misnamed "Operations Enhancement Element").]

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

There are ~~7~~ 6 Elements (or sub-projects) within the RFCS Enhancements Project. Benefits for each of these Elements will be realized at different times. The below list identifies those benefits realized to date. Additional benefits will be added over time.

Metric Description	Metrics	Baseline	Target	Actual
King County (KC) Employee ORCA Use	*Total ORCA Boardings by KC Employees for June to October of each Year.*	*0*	*691,673*	*691,673 (all KC transit trips converted to ORCA with the King County Employee Card Element)*
University of Washington (UW) ORCA Boardings	*Total ORCA Boardings by UW Employees in October of each Year.*	*0*	*1,422,677*	*1,422,677 (all UW transit trips converted to ORCA with the University of Washington Card Element)*
Installation of a repository of detailed ORCA transaction data rather than having the data unavailable for future study.	*Installation of a repository of detailed ORCA transaction data.*	*No data repository exists.*	*Data repository is created and collecting data.*	*Data repository is created and collecting data*
Survey data no longer used to determine UW transit	*Surveys will no longer be*	*$42,000 expended*	*Cost savings of $42,000 every 2*	*Cost savings of $42,000 every 2*

	usage.	*needed.*	*every 2 years*	*years*	*years (King County uses ORCA data to determine UW transit usage and no longer pays for or manages a survey this purpose)*	

[New 1/22/16: Updated Metrics table to include benefit “Survey data no longer used to determine UW transit usage”.]

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 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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Annual Report	2/14/2014	Jill Krecklow	Initial Report	1 hour
Annual Report	03/20/14	Kathleen McMurray	Revised per feedback	1 hour
Annual Report	02/19/15	Liviu Prisecaru	Review only	.25 hours
Annual Report	02/06/16	Liviu Prisecaru	Review only	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

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.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project

will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   The legacy Timetables and Bus Schedule Information System (TABS) was custom designed and implemented in 1992 for the production of paper timetable pamphlets and paper bus stop scheduled that are posted at bus stops. TABS is used to collect and reorganize data for use by PageMaker publishing software and to provide schedule information for use in Metro Online. TABS currently has two components (Automated Time Tables and Bus Stop Information) each of which is facing significant end-of-life issues. While TABS is working today, the continued complexity of data and changing business requirements will continue to require resources to modify and update the highly customized and non-vendor supported system.

   This project will replace both components of TABS (Automated Time Tables and Bus Stop Information) with a modern technological solution that will be maintainable, adaptive and designed to minimize cycle time of production processes.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   The TABS system is highly customized and non-vendor supported. As technology and business requirements change, the risk of being able to produce timetables and bus schedules in a consistent and timely manner will be at risk.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding*

annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver	*Processing*	• *10 days*	• *1 day*	*2 day*

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.	*Time annual savings, and percentage of purchases receiving prompt payment discounts*	*processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	*processing time* • *30 percent of purchases are receiving prompt payment discounts* • *$400,000 savings*	*processing time* *20 percent of purchases are receiving prompt payment discounts* *$200,000 savings*

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Annual Report	1/6/14	Kathleen McMurray	Initial Report	3 hours
Budget Process Update	2/10/14	Kathleen McMurray	Updates per feedback from Council staff	1 hour
Annual Report	2/10/15	Kathleen McMurray	Updates to Sections 6 and 7	2.5 hours
Annual Report	1/22/16	Kathleen McMurray	Updated to indicate this is the final report	.25 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

X 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).*

Under this project Transit is procuring and installing real time customer information signs at select high ridership stops along five RapidRide corridors (A Line through E Line). These signs display the estimated next bus arrival time as well as dynamic messaging to waiting customers.

Information exists about scheduled service in the form of timetables in both digital and paper formats, and posted at existing stops along the corridors. The static paper versions of these schedules by their very nature cannot take into account fluctuations in traffic patterns, inclement weather, minor schedule variations, and other impacts that alter the actual arrival of the bus at the stop.

The addition of real time information signs predicting next bus arrival time at selected Rapid Ride locations provides more accurate and dynamic bus time information, and improves the effectiveness of transportation services. It provides customers with an assurance that the bus is coming and the freedom to make choices on how to make the best use of their wait time for public transportation. The dynamic messaging allows important information, such as adverse weather reroutes, to be provided to riders. In all, these provide an enhanced customer experience that is part of the RapidRide brand.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

1. **Availability of real time information at the designated bus stops** – Success will be measured by having real time bus arrival estimates available at the designated bus stops.

2. **Improved effectiveness of transportation services** – Success will be measured using customer surveys. Customers of each RapidRide line will be asked how satisfied they are with the real time customer information signs.

3. *What is the current baseline for this measure?*

1. **Availability of real time information at the designated bus stops** – Baseline for this measure is having no real time bus arrival estimates available at the designated bus stops.

2. **Improved effectiveness of transportation services** – There is no baseline number for this measure because these are new amenities for our bus stops.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

1. **Availability of real time information at the designated bus stop** – Target for this element is having real time bus arrival estimates available at the designated bus stops.

2. **Improved effectiveness of transportation services** – Target is for the majority (over 50%) of the customers to be satisfied with the real time customer information signs.

5. *When is the benefit likely to be achieved?*

Upon implementation of the signs for each RapidRide line. Lines A – ~~D~~ E are currently complete and the benefits have been achieved. ~~The E Line was completed in February 2014. Customer Surveys that will address customer satisfaction with the E Line signs will be conducted in Summer 2014.~~

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved,*

inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
2. *If the primary reason for the project is risk reduction project, please estimate the probability of the*

risk or describe how likely it is to occur.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014.*

The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

Update – 2/10/15

RapidRide lines A, B, C, ~~and~~ D and E have been implemented and the benefits of the real time customer information signs have been realized. RapidRide line E was implemented in February 2014. Customer surveys for the E Line ~~will be~~ were 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	No baseline number available	Over 50% of customers are satisfied with the signs.	Update – 2/10/15: Summary of customer satisfaction (details below): Line A: 69% satisfied Line B: ~~73%~~ 79% satisfied Line C: ~~70%~~ 82% satisfied

	they are with the signs.			Line D: ~~67%~~ 78% satisfied Line E: ~~TBD~~[1] 81% satisfied

~~Percent satisfied on most recent survey for each line:~~

~~RapidRide Line~~	~~Survey Date~~	~~Period of Operation~~[2]	~~Percent Satisfied~~[3]
~~A Line~~	~~10/2013~~	~~3 years~~	~~69%~~
~~B Line~~	~~12/2011~~	~~1 year~~	~~73%~~
~~C Line~~	~~4-5/2013~~	~~6 months~~	~~70%~~
~~D Line~~	~~4-5/2013~~	~~6 months~~	~~67%~~
~~E Line~~	~~TBD~~	~~TBD~~	~~TBD~~

Update – 2/10/2015:

Percent satisfied with real time signs on most recent survey for each line:

RapidRide Line	Survey Date	Period of Operation[4]	Percent Satisfied[5]
A Line	10/2013	3 years	69% No new survey
B Line	11/2014	3 years	79%
C Line	6/2014	18 months	82%
D Line	6/2014	18 months	78%
E Line (see Note below)	5/2014	2 months	81%

[New 1/22/16: This is the final report for this project. All benefits have been achieved.]

[1] ~~Customer surveys for the E Line will be conducted Summer 2014.~~
[2] ~~Period of Operation is the length of time the line was in operation when the survey took place~~
[3] ~~Percent Satisfied includes those who responded either 'Very Satisfied' or 'Satisfied'~~
[4] Period of Operation is the length of time the line was in operation when the survey took place
[5] Percent Satisfied includes those who responded either 'Very Satisfied' or 'Satisfied'

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

King County Department/Agency Name	Department of Transportation/ Transit Division
Project Title	Vanpool Information System Modernization
EBS Project Number	1123913

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Kevin Desmond, Transit General Manager~~ Rob Gannon, Acting Transit General Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Karen Martin	Transit Rideshare Operations Chief/DOT	Project Business Lead

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Initial PRB Funding Release	5/14/14	Catherine Boon	Draft for review	1 hour
Initial PRB Funding Release	5/21/14	Karen Martin	Review and edits for submittal	1 hour
Initial PRB Funding Release	6/23/14	Catherine Boon	Revisions following review	20 min
Annual Report	2/18/2014	Catherine Boon	Review only	.25 hour
Annual Report	1/31/2016	Randy Boshart	Review only – no changes	.25 hour
Annual Report	4/4/2016	Kathleen McMurray	Updated Business Owner and Category 3 sections.	.25 hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

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.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   Metro Transit's Vanpool Program is the oldest and largest publicly operated program in the United States with nearly 1800 vehicles supporting over 1300 vanpool groups and over 10,000 participants. Staff in Transit's Rideshare Operations group use a suite of information system tools to manage all aspects of the Vanpool Program including setting up and managing vanpool groups, tracking vehicle mileage and scheduling maintenance, and collecting monthly payment from each vanpool group. Based on recent experience, Rideshare Operations projects that the Vanpool Program will grow by 15% by the end of 2016. ~~Pending cuts of regular transit service can be expected to generate even more customer demand for transportation alternatives like vanpools.~~

   This project will move two primary tools used by Rideshare Operations staff from an obsolete client-server architecture to a modern browser-based architecture. The legacy systems are the original Vanpool Information System (VIS), a contractor-developed desktop application custom built for Metro in 1995 using Visual Basic 6 (VB6) and an in-house developed desktop application known as Vanshare, implemented in 2004 using Visual Basic for Applications (VBA). Microsoft stopped supporting VB6 in 2008.

   The VIS application is well past its useful life, risky to modify, difficult to maintain and 3rd party software is no longer supported. The Vanshare application was introduced 10 years ago to augment VIS and work around some of its technical constraints. It is highly integrated with VIS and combining the two will result in reduced duplicate entry of data.

   The project is included in the Transit Information Systems Preservation budget which funds replacements and upgrades of systems that face failure due to their age and changes in business requirements.

   This project is aligned with Goal 6 of King County Metro's Strategic Plan, Financial Stewardship, specifically the strategy to "provide and maintain capital assets to support efficient and effective service delivery." In addition, this project supports King County's Strategic Technology Plan objective of Technology Modernization of Applications to "enable business solutions that are flexible, timely and dependable by pro-actively evolving modern application technologies and processes."

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   The legacy systems have been fairly stable and the risk of them failing is estimated to be between 25 and 40%. If either application fails, it could take weeks to fix the problem during which time there would be a significant customer and financial impact. The real risk is that as time goes on

these applications will not be able to support the business in a practical way. For example, the applications will not be able to be moved into a Windows 8 environment and the SQL Server database will not be able to be kept current because the applications won't support the new version.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

IT Project Benefits Achievement Plan (Version ~~2~~[New 11/4/15]3)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

King County Department/Agency Name	Department of Transportation, Transit
Project Title	Transit Signal Priority ~~Equipment~~ System Replacement Conceptual Design and Specification
Project Number	1124427

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

~~Kevin Desmond, General Manager~~ [New 11/4/15] Victor Obeso, Transit Deputy 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~~ [New 11/4/15] Victor Obeso	~~Supervisor, Transit Systems Development and Operations~~ [New 11/4/15] Transit Deputy General Manager	Project Sponsor
Jill Krecklow	Finance Manager, Transit	Finance Manager
[New 11/4/15] Pamela Wrenn	ITPMII, Transit Systems Development and Operations	Project Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	6/4/2014	Yan Zhang	New, initial draft	.5 hours
Conceptual review	7/2/2014	Kathleen McMurray	Update	.5 hours
Conceptual review	9/28/2014	Dan Overgaard	Update in response to questions	1 hour
Conceptual review	10/5/2014	Jill Krecklow	Final Changes with Budget	15 minutes
Annual Report	2/12/15	Kathleen McMurray	Minor updates	.5 hours
Funding Release	11/4/2015	Pamela Wrenn	Updated to reflect planning and preliminary design phases	1 hour
Annual Report	2/9/2016	Pamela Wrenn	Project Title corrected; project number added	.25 hours
Annual Report	4/4/2016	Kathleen McMurray	Minor update	.10 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

   The scope of ~~the proposed~~ this project is to develop requirements and a design for a replacement Transit Signal Priority (TSP) system. As such, this phase of the project will not deliver the proposed benefits, but rather will provide more information on what benefits can be expected if the replacement system is procured and implemented.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

   The ~~expected~~ benefits to be expected from the replacement system will be identified through a detailed analysis of the functional and technical characteristics of the replacement technology. This analysis phase will assess data management processes, system configuration requirements, maintenance requirements, and other features of the proposed replacement system in order to compare the level of effort required for its future maintenance and ongoing support.

   During the planning stage the project will also identify any potential improvements in bus schedule reliability, on-time performance, and trip time savings from modernizing the Transit Signal Priority system.

3. *What is the current baseline for this measure?*

   The current baseline for this measure is the level of effort required to maintain and support the current TSP system. Using the current TSP technology and supporting processes, each additional corridor equipped for Transit Signal Priority requires, on average, approximately 0.3 FTE Functional Analyst to perform ongoing system monitoring, data analysis, trouble-shooting, data production and coordination.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

   Any new technology will require some level of ongoing support and maintenance. It is not possible to assign a specific target for improvement without knowing more about the replacement technology and how it works – e.g., the overall complexity of the system, the interactions between devices, and the level of data management and analysis that is required to configure the system and keep it running at an optimal level. In developing requirements for the new system, Transit would be seeking to achieve improvements that would support greater productivity, so that more TSP corridors could be deployed without needing to increase support staff at the same rate as the current system.

   During the planning stage, targets will be established for potential improvements in bus schedule reliability, on-time performance, and trip time savings resulting from modernizing the Transit Signal Priority system.

5. *When is the benefit likely to be achieved?*

   The internal service benefits for this project are expected be achieved after a new TSP system is deployed and the existing system has been decommissioned. The currently proposed phase of the project (2015/2016) is intended to produce requirements and a proposed design for a replacement system. As a result the benefits will not be realized in this phase. Assuming a follow-on project is submitted and funded, the operational benefits will be realized after implementation. The schedule for deployment of the replacement system has not been determined.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor*

support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   Transit signal priority (TSP) is one of several branded elements of the King County Rapid Ride program. ~~By~~ At the end of 2014, there ~~will be more than 200~~ were 180 operating transit signal priority installations ~~across all six RapidRide lines, route 120 and several other projects under construction~~ with more than 20 in development. The system is designed to improve transit speed and reliability by requesting special treatment for buses at signal on TSP equipped corridors – either by holding a green light to allow a bus to pass, or by shortening its wait at a red light.

   As discussed in greater length in section 9 of the Conceptual Review document, the TSP system was current technology at the time it was procured in the mid-1990s. Historically, the traffic control industry has tended to keep using its installed technology much longer than other technology-dependent markets, and has been extremely conservative (some might say reluctant) to adopt new technologies as they became available. So although the TSP equipment platform was updated within the past two years, the overall system design is based on 20 year old technologies and practices. The recent updates did not change the overall architecture or functionality within the system. The system has been difficult to deploy and has a history of reliability issues in large part due to the original design. The system has also been difficult to integrate with local traffic controllers because of their varied use of different controllers and traffic management strategies.

   Several factors create the need to pursue a future replacement for the existing TSP system, including:
   - Unavailability of wireless equipment to expand or maintain the current network,
   - Age of the current TSP system platform and architecture,
   - Insufficient~~ly~~ vehicle location accuracy from the on-board systems.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing*

time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
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3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

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Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
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IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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King County Department/Agency Name	Department of Permitting and Environmental Review
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.

Warren Cheney, DPER Chief Financial 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
Warren Cheney	DPER Chief Financial Officer	Oversight

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then **annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected**.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
2014 annual report	2/06/2014	John Backman	New, initial draft	2 hours
2014 annual report	2/10/2014	John Backman	Review and comment by the PI Management Committee	0.5 hour
2014 annual report	2/11/2014	John Backman		3 hours
2014 annual report	3/10/2014	John Backman	Response to comments	1 hour
2014 annual report	3/24/2014	John Backman	Response to comments	1 hour
2015 annual report	3/23/2015	John Backman	Update	2 hour
2015 annual report	6/11/2015	John Backman	Revisions	0.5 hour
2015 annual report	7/06/2015	Warren Cheney	Revisions	2.0 hours
2015 annual report	7/09/2015	Warren Cheney	Revisions	0.5 hour
2015 annual report	7/24/2015	Warren Cheney	Revisions	1.0 hour
2015 annual report	6/20/2016	Warren Cheney	Revisions	0.5 hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☒ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

- ***Describe why you expect the proposed IT investment to produce the benefit(s).***

The Permit Integration (PI) Project involved the replacement of several legacy permitting systems with a vendor-hosted, web-enabled system that has enabled customers to schedule permit inspections on-line and see the results of those inspections on-line on the same day that the inspection occurs. When the Project is completed, customers will also be able to apply and pay for all permits online and submit plans and documents digitally, either via the software vendor's public permitting portal or by joining the regional permitting portal MyBuildingPermit.com, as requested by permitting customers and the Master Builders Association of King and Snohomish Counties.

Thus the benefits are:
1) Ability to apply for permits on-line
2) Ability to pay for all permits on-line
3) Ability to schedule inspections on-line
4) Customer satisfaction with services

The IT Project Review Board has previously approved the PI Project. More detailed description of the Project, its expected benefits, and likely achievement timeframe may be found in the proviso report referenced by Motion 2015-0242.

- ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)***

The usefulness of the on-line service channel to customers will be measured by *customer satisfaction survey* as the services are implemented. Progress to date implementing on-line services will be measured by:
1) the percentage of all applications submitted on-line;
2) the percentage of all permit fee revenue paid on-line; and
3) the percentage of all permit inspections scheduled on-line.

- ***What is the current baseline for this measure?***

As of July 27, 2015, the baseline measures are as follows:
1) Applications submitted on-line = 0%
2) Permit fee revenue paid on-line = 0%
3) Permit inspections scheduled on-line = 32%
4) Customer satisfaction: The most recent customer satisfaction survey conducted by DPER in 2011 revealed that overall customer satisfaction with the quality of services was evenly split: 43% of respondents were satisfied, 43% unsatisfied, and 14% neutral. These detailed survey ratings validated our understanding of the challenges to improve customer service, principally timely permit decisions and responsiveness to customer telephone inquiries.

- ***What is the target for this measure? (How much improvement will this project achieve?)***

Targets are to achieve utilization rates comparable to those obtained by other jurisdictions using MyBuildingPermit.com, which as of 2015-Q1 and aggregated for all jurisdictions using MBP were as follows:
1) Eligible applications: 61% submitted on-line
2) Permit fee revenue: 15% paid on-line
3) Permit inspections: 57% scheduled on-line

4) Customer satisfaction: 60% or more of respondents satisfied with the overall quality of services.

- ***When is the benefit likely to be achieved?***

1) Eligible applications: 61% submitted on-line within one year of implementing MBP
2) Permit fee revenue: 15% paid on-line within one year of implementing MBP
3) Permit inspections: 57% scheduled on-line within one year of implementing MBP
4) Customer satisfaction: 60% or more of respondents satisfied with the overall quality of services, one-year following implementation of MBP, measured by 2019-Q1.

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.*

   A single, vendor cloud solution replaced at least five legacy systems (Permits Plus, PRMS, TRS, Informix-based finance/billing system, and BINS) some of which had reached the end of life, e.g. Permits Plus, which is no longer vendor-supported, and the DDES-built, Informix-based finance/billing system. The life-cycle for the new web-enabled solution is expected to be 2020 or longer.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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

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 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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
Annual update	2/16/16	Brandi DeFazio	Status update	10 minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☑ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   This project 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 be 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.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   This project 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.

1. *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

2. *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

3. *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

4. *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

5. *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. Update 2/16/16: This project has been put on hold pending implementation of the Epic electronic health record, currently scheduled for May of 2016. Implementation planning for Digital X-Ray will begin again as resources become available starting in Q3 of 2016.

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

IT Project Benefits Achievement Plan

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

King County Department/Agency Name	District Court
Project Title	District Court Unified Case Management System
Project Number	1124157

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Othniel Palomino – Chief Administrative Officer, King County District Court (KCDC)

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Othniel Palomino	Chief Administrative Officer – KCDC	Business Owner, Steering Committee Member/Leader
Judge Corinna Harn	Chief Presiding Judge – KCDC	Steering Committee Member, Project Leader
Enrique Kuttemplon	IT Director – KCDC	Steering Committee Member, IT Liaison/Lead
Jill Dorsey	Deputy Chief Administrative Officer – KCDC	Steering Committee Member
Bob Dowd	East Division Director – KCDC	Steering Committee Member
Patti Kohler	South Division Director - KCDC	Steering Committee Member
James Kim	West Division Director - KCDC	Steering Committee Member
Keri She	Business Analyst - KCDC	Responsible for analysis from IT perspective in

		capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment.
Patrick Wells	Training Coordinator - KCDC	Steering Committee Member, Responsible for analysis from operations perspective in capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment, Facilitator for Process Experts and Process Mapping.
Ann Dahlgren	Training Coordinator - KCDC	Steering Committee Member, Responsible for analysis from operations perspective in capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment. Facilitator for Process Experts and Process Mapping.
Dee Hay	Training Coordinator - KCDC	Steering Committee Member, Responsible for analysis from operations perspective in capturing system requirements, coordinating/assisting system design, implementation, testing, and deployment, Facilitator for Process Experts and Process Mapping.
Heather Dean	Budget Director - KCDC	Steering Committee Member, Responsible for Overseeing Financial Requirements and Funding Information
Judge Anne Harper	West Division Presiding Judge – KCDC	Process Experts and Requirement Identifiers
Judge Charles DeLaurenti	South Division Presiding Judge – KCDC	Process Experts and Requirement Identifiers
Judge Peter Nault	East Division Presiding Judge - KCDC	Process Experts and Requirement Identifiers
Judge Johanna Bender	Mental Health Court Judge - KCDC	Process Experts and Requirement Identifiers
Judge Arthur Chapman	West Division Judge – KCDC	Steering Committee Member and Case Cleanup
Judge Mark Eide	South Division Judge – KCDC	Steering Committee Member and Case Cleanup
Judge Donna Tucker	Assistant Chief Presiding Judge – KCDC	Steering Committee Member and Case Cleanup
Nina Davis	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Paul McDavid	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Kenneth Li	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Maggie Bradley	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Lisa Kissler	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Amy Turley	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Elizabeth Alexander	Court Clerk - KCDC	Process Experts and Requirement Identifiers

Sommer Peck	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Lisa Bitz	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Sorin Say	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Betsy Bosch	Regional Mental Health Court Manager - KCDC	Process Experts and Requirement Identifiers
Judy Garcia	Probation Director - KCDC	Process Experts and Requirement Identifiers
Catherine Thompson	Probation Manager - KCDC	Process Experts and Requirement Identifiers
Kathy Orozco	Redmond Court Manager – KCDC	Process Experts and Requirement Identifiers
Josie Jimenez	Bellevue Court Manager – KCDC	Process Experts and Requirement Identifiers
Brandon Billak	MRJC Court Coordinator – KCDC	Process Experts and Requirement Identifiers
Tracey Smith	Auburn Court Manager – KCDC	Process Experts and Requirement Identifiers
Josh Sattler	Seattle Court Manager - KCDC	Process Experts and Requirement Identifiers
Denise Michels	Court Clerk - KCDC	Process Experts and Requirement Identifiers
LeeAnna Young	MRJC Court Manager – KCDC	Process Experts and Requirement Identifiers
Damita Beleford	Burien Court Manager - KCDC	Process Experts and Requirement Identifiers
Lillian Hawkins	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Sadora Anderson	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Kate Olson	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Katy Nelson	Shoreline Court Manager - KCDC	Process Experts and Requirement Identifiers
Rambaldo Cardoza	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Jennifer Miller	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Christina Melby	Bellevue Coordinator – KCDC	Process Experts and Requirement Identifiers
LeeAnn Rissler	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Somphien Manivanh	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Sarah Jaynes	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Theresa Reddekopp	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Elizabeth Biehn	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Nicholas D'Angelo	Probation Officer - KCDC	Process Experts and Requirement Identifiers
David Sterner	Probation Officer - KCDC	Process Experts and Requirement Identifiers
Andrea Shao	Probation Clerk - KCDC	Process Experts and Requirement Identifiers
David Alber	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Christopher Allen	Probation Officer – KCDC	Process Experts and Requirement Identifiers

Nadine Wallace	Probation Officer	Process Experts and Requirement Identifiers
Enid McAdoo	Probation Officer	Process Experts and Requirement Identifiers
Jim Phoenix	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Elizabeth Owens	Probation Officer	Process Experts and Requirement Identifiers
Jerry Pettitz	Probation Officer	Process Experts and Requirement Identifiers
Susan Butler	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Jay Gorham	Probation Officer	Process Experts and Requirement Identifiers
Steven Wede	Mental Health Specialist Probation Officer – KCDC	Process Experts and Requirement Identifiers
Sue Bainton	Probation Clerk – KCDC	Process Experts and Requirement Identifiers
		Process Experts and Requirement Identifiers
Annette Pooley	Probation Officer	Process Experts and Requirement Identifiers
Kari Goode	Probation Officer	Process Experts and Requirement Identifiers
Rachel Brooks-Bailey	Probation Officer	Process Experts and Requirement Identifiers
Annalisa Mai	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Isabelle Isidro	Court Clerk - KCDC	Process Experts and Requirement Identifiers
Regina White	Court Clerk - KCDC	Process Experts and Requirement Identifiers

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Conceptual Review	2/10/14-2/21/14	Steering Committee	New Initial Draft	240 hours
Conceptual Review	2/24/14-3/21/14	Steering Committee	Daily Revisions	360 hours
Benefits Achievement Plan	2/28/14-4/21/14	Steering Committee	New Initial Draft	444 hours
Benefits Achievement Plan	4/22/14-7/3/14	Steering Committee	Daily Revisions	1040 hours
Costs Benefits Analysis Workbook	5/26/14-6/13/14	Heather Dean and Enrique Kuttemplon	Draft and Revisions	78 hours
Process Mapping	2/18/14-4/15/14 (and intermittent days to present)	Subject Matter Experts, Functional Analysts, Business Analysts	Process Mapped all KCDC processes to identify the scope of the requirements and assess the Financial Needs of a new System	1568 hours
BAP Review	3/1/15	Steering Committee	Review Only of BAP for PSB Report Out	2 hours
BAP Review	7/27/15 – 8/12/15	Steering Committee	Review and Revision of BAP and Conceptual Review for PSB Report Out	3 hours
Costs Benefits Analysis Workbook	6/4/15 – 9/2/15	Heather Dean, Patricia Kohler, and Kathy Moon	Draft and Revisions	120 hours
BAP Review	3/1/16	Steering Committee	Review Only of BAP for PSB Report Out	1 hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

****Choosing only one category as the Primary Project Benefit was extremely difficult as all four choices are primary benefits of this project and limiting it to one benefit grossly underestimates the full benefits that will be realized from a new case management system.****

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

External Service Benefits Executive Summary:

King County District Court (KCDC) is using the outdated statewide JIS system with limited integration to internal standalone court systems and virtually no integration with systems of other law and justice agencies statewide (including our partner contract cities). While not selected as the primary benefit of a new case management system for the purpose of this proposal, the implementation of a new case management system will vastly improve both the quality and the quantity of services that King County District Court is able to offer the public and our criminal justice partners. Through new enhanced electronic access to court records, the court will be able to offer the following new or expanded benefits to the public:

A. With the implementation of the new case management system, people will be able to file their court documents any day, any time and from anywhere.
B. Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.
C. Fewer people will be sent to collections.
D. Information from Courtroom will be accessible to the public same day.

1) *Describe why you expect the proposed IT investment to produce the benefit(s).*

A. With the implementation of the new case management system, people will be able to file their court documents any day, any time and from anywhere.

eFiling will be a central requirement for a new Case Management System. eFiling will allow for access to District Court outside of regular business hours. With the implementation of eFiling, documents can be filed twenty-four hours a day, seven days a week from any computer with internet access. This transforms the current filing system from limiting the public and our criminal justice partners to eight filing locations, to a system where essentially any computer terminal becomes a portal to King County District Court.

B. Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.

A new case management system will not only allow parties to access services electronically from anywhere but it will also allow the court to reach defendants through modern means. Currently, notices for upcoming court hearings are delivered standard postal mail. While this meets the legal requirements it is an inadequate means of notification in the current technological environment. Given an atmosphere of frequently outdated addresses, defendants with unstable housing situations, and a culture highly reliant on smartphone technology, mailing paper notices is not dependable and often ineffective. The new case management system will have the technology for hearing notices to be delivered via text and/or email for those who opt-in. Individuals will get notices of future court hearings immediately, and the system can be programmed to send out multiple reminders to keep defendants up to date on the status of their hearing. While text and email will not replace standard mail as a means for notification at this time, they will help the Court reach individuals for whom postal mail was previously an unreliable noticing method thereby providing a supplemental service to the public.

C. **Fewer people will be sent to collections.**

Currently King County District Court contracts with NCO Financial in order to collect on unpaid court fines and traffic infractions. The new case management system would allow King County District Court

to take over the payment plan portion of the NCO contract, maintaining their services only for collections. With King County District Court in control of payment plans, the court could allow for time payments or different pay dates tailored to the defendant's economic situation; smaller monthly payments in response to the defendant's financial standing; or hold the debt if special circumstances arise if the defendant misses a payment. Reminder notifications can be generated by the system with minimal clerical labor to prevent lapses in payment. These notices can be configured to go out by mail and/or as text/email alerts if the defendant desires. If a debt obligation goes unpaid for a certain period of time, the Court may still contract with a third party to handle collection procedures which often require extensive staffing. Having a system in place to foster cooperation with the defendant will enable the court to offer the public payment plan arrangements to match their financial situations.[1]

D. Information from Courtroom will be accessible to the public same day.

Documents created in open court will be created within the system by the judge and clerk, signed by the parties electronically in open court, and uploaded in the system without the need for any clerical re-entry of data. The only paper copies will be those that are printed from the system as reference documents for the defendant. This will be a huge improvement from the current system where all documents are created as paper copies that need to be transcribed into the system and the originals then scanned and indexed, often resulting in a delay of four to five business days or more until the information is viewable in the system by the public will be eliminated. (Please see *King County District Court BAP Supplemental Details* Section VII for more detailed information).

2) *How will you measure the benefit(s)? (How will you know if the benefit has been achieved*?)

A. **With the implementation of the new case management system, people will be able to file their court documents any day, any time and from anywhere**. - We will measure the system's availability for after-hours access by parties remotely (with the exception of planned system downtime for planned maintenance).

B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.** - We will measure the number of texts /email notices sent out and will know the benefit has been achieved through the number of parties opting in to electronic messaging.

C. **Fewer people will be sent to collections.** - To determine if fewer people have been sent to collections we will measure: The number of people being assigned to full collect.

D. **Same Day Access to Court Information** – We will measure the amount of time from court hearing until documents and records are available for public viewing.

3) What is the current baseline for this measure

A. **With the implementation of the new case management system, people will be able to file their court documents any day, anytime, and from anywhere.** - We currently do not have this functionality and thus the baseline is zero.

[1] "Maximizing Recovery Rates in Consumer Debt." Timetric (2012): n. pag. Timetric, Apr. 2012. Web. 23 May 2014.

B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute** - The current baseline for this is zero as we do not have this functionality on our current system.

C. **Fewer people will be sent to collections.** The current baseline for this measure is approximately 166,484, which is the number of cases assigned to collections in 2013.

D. **Same Day Access to Court Information** – The baseline is the current average of 4 to 5 days from hearing in open court to the time when the documents are available for public viewing.

4) *What is the target for this measure? (How much improvement will this project achieve?)*

A. **With the implementation of the new case management system, people will be able to file their court documents any day, any-time, and from anywhere.** - The target is 99% uptime of the system with the exception of planned maintenance.

B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.** – There is no explicit target as we currently do not have this functionality or metrics to measure it. By the end of the first year we will develop a set of metrics and targets for further years to assess the improvement from this functionality.

C. **Fewer people will be sent to collections**. The target for collections is a 15% reduction in cases assigned to collections.

D. **Same Day Access to Court Information** - The target for this measure is that orders, documents, and all case and hearing information would be accessible to the public within 24 hours of a hearing.

5) *When is the benefit likely to be achieved?*

A. **With the implementation of the new case management system, people will be able to file their court documents any day, anytime, and from anywhere.** While the benefit itself will be achieved upon implementation, awareness of the benefit is likely to be achieved over the course of three years after implementation, with expectations of incremental growths beyond.

B. **Parties will be able to opt in to receive text or email based hearing notices in addition to the paper notices required by statute.** - As we currently do not have this functionality or metrics to measure it. By the end of the first year we will develop a set of metrics and targets for further years.

C. **Fewer people will be sent to collections** - We expect the benefit to be achieved by end of the first year in which it is implemented.

D. **Same Day Access to Court Information** - We expect this benefit to be fully realized by the end of the first year in which it is implemented. Much of the information will be available immediately upon implementation but we recognize there may be a delay in full realization due to learning curve of new technology by staff.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

Executive Summary:

As discussed in our previously submitted Conceptual Review, due to our current system's major insufficiencies, King County District Court faces daily challenges operating on multiple stand-alone systems requiring repetitive and duplicate data entry points. The following issues and challenges in King County District Court's current case management system create disjointed and challenging internal operations that require clerks to rework the same tasks. The result is increased errors and processing time which in turn increases the cost of the work and drastically reduces its reliability.

A new case management system will allow us to completely redesign our current work processes that are hampered by the old technology and limited ability to integrate with other County or City criminal justice agencies. We will be able to move to a streamlined and fully integrated workflow process that ensures:

A. Better Utilization of Court Staff
B. Complete Law and Justice Information Immediately Available to Judge and Clerk
C. Accurately Determine Value of Court Programs
D. Maximize System Uptime

Outlined below is an analysis of how a new case management system will address each of these needs:

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

A. Better Utilization of Court Staff – A new case management system will allow King County District Court to better utilize court clerk FTE time in several ways:

- **Reduce Volume of Documents Clerks Manually Scan into System –** As mentioned in category one, eFiling will be a central requirement for a new case management system. Attorneys will be mandated to eFile as they currently are in King County Superior Court. They will submit their documents electronically, eliminating the manual document upload process entirely, leaving the clerk to simply confirm that the attorney's inputs (such as case number and document type) are correct. Though pro se filers and defendants will have the option to file electronically or through traditional paper, the vast majority of the average 3,024,000 pages a year that are scanned into the system will be eliminated and the court's staff will be able to confirm that the documents were filed correctly thereby improving the overall accuracy of the filings. This will allow for both a reduction of some FTE's through

attrition, repurposing of some FTE's for supporting the new system, as well as a reallocation of some resources to increase quality control and customer service that KCDC does not currently have the resources for.

- **Reduction of Court Clerk Training Time –** Movement to a new case management system with only one program to train on and the elimination of hundreds of commands that must be learned to navigate JIS will drastically reduce onboarding time as well as reduce errors that necessitate continuous training of existing staff. This will allow new employees to become productive contributors more quickly, reducing the amount of time a court-location is down any employees. In turn this will allow the Training Coordinators more time to complete other trainings, develop and implement more training materials and continue to document KCDC's procedures as the system and statutes change. Much of in-court clerk training is focused on taking forms and orders generated in the courtroom and entering them into JIS via freehand docketing and command codes. Full integration of forms and orders that populate the data into the system will eliminate all of this training, allowing clerks to be trained on quality control of the data instead.
- **Timely Completion of Work –** Much of the time clerks spend processing case work is due to lack of automation and the redundant data entry in numerous standalone systems. Virtually all relevant case documents must be filed in paper form or converted to paper form and then manually scanned and indexed into District Court's outdated document management system. Due to the lack of an eFiling and case management system, King County District Court has required staff to manually input and manually manage cases. Each stand-alone subsystem exists independently and requires separate clerical data entry. The simple entry of a new case can require a clerk to enter the same data into as many as seven systems. With the implementation of a single integrated case management system with eFiling functionality, the time it takes to process a case will be reduced resulting in case work being completed in a consistently accurate and timely manner. This again, allows for both a reduction of some FTE's through attrition, repurposing of some FTE's for supporting the new system, as well as a reallocation of some resources to increase quality control and customer service that KCDC does not currently have the resources for.
- **Fewer Clerical Errors –** As mentioned above, clerks are required to manually manage cases. Data entry errors are caused by manually entering data (and often re-entering the same data multiple times). There are few safeguards to ensure data is accurate or necessary steps in the management of the case have been completed. Integration of all system components, eliminating redundant data entry requirements, as well as enhanced monitoring capabilities of the new case management system will be instrumental in helping reduce dismissals due to jurisdiction and speedy trial violations. Warning and milestone markers built into the system that are triggered throughout the life of a case are essential for case monitoring and alerting clerks and judges when action is needed.

B. More Complete Law and Justice Information Immediately Available to Judge and Clerk - One of the major limitations within the current system is the lack of integration with the agencies with which District Court shares data, such as the Department of Licensing and King County law enforcement (including the Washington State Patrol, King County Sheriff, Municipal law enforcement and the jails within and outside King County who house defendants with cases in King County District Court). As a central part of this development process, King County District

Court is working with the other criminal justice agencies within King County to create a data sharing model. When the new case management system is implemented, it will conform to a data model that will allow for data transfer between all King County Criminal Justice Agencies such as Superior Court, Department of Public Defense, Sheriff's Office, Prosecutor's Office and DAJD. When a judge or a clerk is in the courtroom, the information from agencies across the county (such as King County Correctional Facility data to include other court holds, prior booking information, Court Information Services Interview data, and Personal Reference Information) will be immediately available through these data interfaces ensuring that the judge can make judicial rulings with a more complete picture of all factors, ensuring fairness and public safety.

UPDATE 8/2015: As part of an agreement between King County District Court and the Administrative Office of the Courts, with support from the King County Council and the Washington State Legislature, the Court is working with AOC as the pilot court for the development and implementation of the Information Network Hub and Electronic Data Repository (INH/EDR) as described in Phase 2 Interfaces in the RFP. The INH/EDR interface allows courts to efficiently and bi-directionally exchange statewide criminal justice data.

C. **Accurately Determine Value of Court Programs -** One of the most valuable additions that the new case management system will bring to King County District Court is much improved metrics and reporting system for data tracking. King County District Court can use the data to make incremental decisions regarding those programs to better serve the public. Currently, JIS is limited in the reports that it can produce due to both the age of the database query system, non-standardized data entry and the fact that it simply was not designed for a court of our magnitude. To compound that fact, the data is queried from fields in JIS that often do not require standard entries. This means that for those reports we are able to run, the data it returns cannot be fully relied upon and thus cannot be used to accurately determine the value of court programs.

D. **Maximize System Uptime –** King County District Court faces intermittent outages of the systems causing interruptions in service and interfering with the Court's ability to carry out daily operations. Notification for system failures is often delayed, especially on systems that are not maintained by District Court such as JIS, and while repairs are being made the judicial process is halted. Additionally, the failings in our current outdated electronic document program often are only detected after the problem has occurred and requires substantial staff time to repair. A new case management system will be maintained in house, with onsite IT staff.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

A. **Better Utilization of Court Staff** – Better utilization of court staff through reduction of clerical time spent scanning documents, reduction of clerical training time, integration that will reduce time spent entering data or scanning in documents as well as increased accuracy and thus reduction of time fixing errors will allow King County District Court to return a total of 16 FTE positions to the County by means of attrition (see this information in Category 4 as well).

B. **More Complete Law and Justice Information Immediately Available to Judge and Clerk –**

This benefit will be achieved upon implementation of a standard data model. Benefit realization will be achieved when judicial officers have access to information from other King County criminal justice agencies.
UPDATE 8/2015 – This benefit will also be achieved upon implementation of the INH/EDR.

C. Accurately Determine Value of Court Programs – This benefit will have been achieved when we have the ability to input data elements, run reports, and gather statistical data about the use and performance of the programs. For example, the ability to query and measure who comes into a program, the time span from entry to completion or recidivism, and the completion rate of participants**.**

***D.* Maximize System Uptime –** Currently we have no mechanism to track system downtime other than anecdotally. With JIS, the state-run court database, we often find out about system errors and interface outages months later. Our new case management system will have system monitoring software that will allow for rapid notification of any error. This will allow us to measure whether our target has been achieved.

3. *What is the current baseline for this measure?*

A. Better Utilization of Court Staff – The current baseline is 162 number of staff.

B. More Complete Law and Justice Information Immediately Available to Judge and Clerk – At this time we have limited to no integration with any of the King County Law and Justice Agencies and while a committee has been formed to develop a data model, at this time there is no shared data model across the agencies. Our current baseline is that the judge has access data and information from JIS only. Any other information has to be manually researched by clerical staff such as through telephone calls, faxes, or access to other agencies systems in an often untimely process.

C. Accurately Determine Value of Court Programs – There is no current baseline for this measure. We lack metrics or reports to measure and evaluate program performance due to current system inflexibly and the limited and unreliable data.

D. Maximize System Uptime – We have no ability to measure a baseline for this measure as we currently cannot measure or monitor this for our systems and often find out about outages months after they have occurred and affected thousands of cases. The ability to monitor for these outages may be the most necessary benefits of a new case management system.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

A. Better Utilization of Court Staff – The target for this measure is a 10% reduction in staffing (a total of 16 positions) through attrition over a three year period of time. (See table below for details).

B. More Complete Law and Justice Information Immediately Available to Judge and Clerk – The target for this measure is development and adherence to a county-wide data model for all King County Law and Justice Agencies and the ability upon implementation of that data model to

interface with those agencies that have that capability at that time. This will provide judicial access to more complete information.

UPDATE 8/2015 – The target also includes the ability to send and receive statewide criminal justice information via the INH/EDR.

C. **Accurately Determine Value of Court Programs –** The target for this measure is implementation of metrics and reports to evaluate the success of various court programs

D. **Maximize System Uptime –** The target for this measure is 99% uptime.

5. *When is the benefit likely to be achieved?*

A. Better Utilization of Court Staff – The breakdown of the timeline of the benefit is detailed in the table below:

	Year 1	Year 2	Year 3	3 Year TOTAL
Total # of FTE's eliminated by attrition through **ALL** efficiencies	8	5	5	18
Total # of FTE's Returned to County through attrition	6	5	5	16
Total Salary and Benefit Savings Returned to the County	$467,184	$856,504	$1,245,824	$ 2,569,512
KCIT workstation savings Returned to the County	$ 9,600	$ 15,600	$ 21,600	$ 46,800
Overhead Savings Returned to the County	$ 3,764	$ 6,899	$ 10,034	$ 20,697
Total Staffing Savings Returned to the County	**$480,548**	**$879,003**	**$1,277,458**	**$ 2,637,009**

*Totals are year on year cumulative

B. **More Complete Law and Justice Information Immediately Available to Judge and Clerk -** Target for this measure is not known at this time as a King County Criminal Justice Committee spanning numerous county criminal justice agencies is currently driving this process. King County District Court is committed to adhering to the timeline developed and decided upon by this committee.

C. **Accurately Determine Value of Court Programs –** Upon implementation of this system we will have the reporting capabilities. As soon as the new system launches, reliable data will start to be collected for measurement. A year after launch of the new case management system, analysis will be done with trusted information accumulated over the previous year. With the data, measurements can be made and goals for subsequent years drafted along with evaluation of success and effectiveness of court programs.

D. **Maximize System Uptime -** This benefit is likely to be achieved within 1 year of implementation as the unstable systems will be replaced in full and new integration with built in validation of data transfers and system monitoring software will be elements of the new system.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older

technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

Please see section XIII (Upgrade of Technology to Maintain and Increase Service to the Public) of King County District Court BAP Supplemental Details for information on this Category

JIS fails to help King County District Court meet the mission of providing a forum that is fair, efficient and accessible. Instead the current case management system produces errors, inefficiencies, and service outages that stalls the judicial process. The new case management system will replace the Court's reliance on JIS and upgrade the secondary programs to be better integrated with the system as a whole and will provide both improved reporting and monitoring capabilities. An improved reporting and data collection system will enable King County District Court to provide quality control and meet its fiduciary responsibility to the public. The new case management system will have the capability to calculate speedy-trial and reconfigure the timeline whenever waivers are filed or warrants are issued. These automated calculations will provide an essential safeguard to ensure a timely resolution of all cases.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

Executive Summary:

District Court expects that eFiling and system-generated forms will reduce paper documents filed to, and produced by, the Court by 35% of the baseline total. From this reduction the Court will realize a savings of 4 FTE positions through attrition. The Court will reassign one staff position into a professional position. The professional position will be used to analyze and maintain data integrity and return 3 of those positions to the county (keeping the salary of and benefits necessary to fund the professional position).

District Court expects that the reduction in paper documents filed to, and produced by, the Court to be 50% from the baseline total, two years after launch. From this reduction, the Court will realize a time savings of an additional 2 FTE positions through attrition.

In the third year after launch, the expectation is that paper documents filed to, and produced by, the Court will be reduced 75% from the baseline total. From this additional reduction, the Court will realize a time savings of 3 more FTE positions through attrition.

The current system also requires a substantial amount of clerical time to be expended towards the manual processing of paper documents filed with the Court. Time must be spent preparing the documents for the scanning program as well as converting the documents into a readable electronic format. The launch of eFiling and system generated forms will vastly reduce clerical time spent uploading documents into the electronic court record.

The lack of integration between the District Court system (JIS) and the probation system (PCMS) has led to a substantial amount of clerical time being spent transferring data between the two systems. The new case management system will have a probation module included which will have full integration with the District Court component. This will greatly reduce the amount of clerical time spent manually entering redundant data. The Court expects that the efficiency savings will allow for the investment of a management position and return to King County 3 FTE positions through attrition. Within the first three years of implementation, King County District Court will return a total of 10% of its FTE clerical positions to the county through attrition. (See table in Question 5 for full breakdown of positions).

It is clear that a new case management system will allow us to completely redesign the way we do business and allow us to significantly reduce costs through a streamlined and fully integrated workflow process that will result in the following:

A. 7.5 Year Payback of Project Costs
B. 10% Efficiency in Staffing through Attrition
C. Savings through Elimination of High Volume Scanners

Describe why you expect the proposed IT investment to reduce costs?

A. **7.5 Year Payback of Project Costs** - The benefits realized after the first seven years of implementation will almost fully recover the project costs. By the end of the eighth year, benefits will have fully recovered the project costs.

B. **10% Efficiency in Staffing through Attrition** - King County District Court estimates that the efficiencies provided by launching a new case management system will allow the Court to return a total of 16 FTE positions to the County by means of attrition. Currently we experience a net attrition rate of approximately 15 FTE's on an annual basis and will return FTEs to the county per the chart below. Furthermore, the Court is committed to investing in one additional professional staff position to meet the complex challenges such as data analysis to ensure quality control and data integrity, and one additional management staff to facilitate the process. The Court will not seek additional funding for these positions, instead funding them through additional clerical savings done through attrition.

C. **Savings through Elimination of High Volume Scanners** - The court will also realize a cost saving transitioning from expensive high volume scanners to smaller desktop models with an expected decrease of $44,000 annually in licensing fees alone. After taking into account maintenance contracts and other costs, the total savings of these high volume scanners will total $110,000 annually.

1. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

A. **7.5 Year Payback of Project Costs –** We will know that this benefit has been achieved through the reduction in payroll through efficiencies, the reduction of certain costs due to the higher productivities of the system, cost avoidance, and realization of new revenue sources. (Please see Cost Benefit Analysis Workbook for detailed figures)

B. **10% of Efficiency through Attrition -** This will be measured through the decreasing staffing number through attrition over time (see question 5, section B for schedule of reduction).

C. **Savings through Elimination of High Volume Scanners –** This benefit will have been achieved when we are able to eliminate the high volume scanners and terminate any associated maintenance contracts resulting in full eradication of costs.

2. *What is the current baseline?*

A. **7.5 Year Payback of Project Costs –** The baseline is repayment of $0 costs. By end of year eight, full repayment of costs will have occurred.

B. **10% of Efficiency through Attrition -** The current baseline is 162 number of staff.

C. **Savings through Elimination of High Volume Scanners –** The current baseline is the approximately $110,000 in annual expenditures on the high volume scanners.

3. *What is the target for this measure? (How much savings will this project achieve)*

A. **7.5 Year Payback of Project Costs –** Target for this measure is full payback of project cost. District Court is expecting to go live with the new Case Management System in 2017. 7.5 years after go live, District Court will have paid back the project cost.

B. 10% of Efficiency through Attrition - The target for this measure is a 10% reduction in staffing (a total of 16 positions) through attrition over a three year period of time. (See table below for details).

C. Savings through Elimination of High Volume Scanners – The target for this measure is elimination of all high volume scanners resulting in a $0 annual expenditure.

4. *When is the cost reduction likely to be achieved?*

A. 7.5 Year Payback of Project Costs – The payback of costs will occur 7.5 years from implementation. Please see the Cost Benefit Analysis for detailed repayment information.

B. **10% of Efficiency through Attrition -** The breakdown of the timeline of the benefit is detailed in the table below:

	Year 1	Year 2	Year 3	3 Year TOTAL
Total # of FTE's eliminated by attrition through **ALL** efficiencies	8	5	5	18
Total # of FTE's Returned to County through attrition	6	5	5	16
Total Salary and Benefit Savings Returned to the County	$467,184	$856,504	$1,245,824	$ 2,569,512
KCIT workstation savings Returned to the County	$ 9,600	$ 15,600	$ 21,600	$ 46,800
Overhead Savings Returned to the County	$ 3,764	$ 6,899	$ 10,034	$ 20,697
Total Staffing Savings Returned to the County	**$480,548**	**$879,003**	**$1,277,458**	**$ 2,637,009**

*Totals are year on year cumulative

C. **Savings through Elimination of High Volume Scanners –** Cost reduction should be achieved by the end of year one. High Volume scanners will be eliminated upon implementation of the new case management system and all associated agreements and costs associated with the existing systems will be terminated.

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	King County Elections
Project Title	Election Management System (EMS) Replacement Project
Project Number	1039315

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.

Julie Wise, Director

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Sonja Rowland	IT PM III	Project Manager
Colleen Kwan	Quality Assurance	Quality Assurance SME
Chris Raver	IT Systems Specialist	IT Systems SME
Jacob Lodge	Voter Services Supervisor	Voter Services SME
Kortney Kinzer	Election Operations Lead	Election Operations SME
Jerelyn Hampton	Ballot Processing Supervisor	Ballot Processing SME
Joe McCleve	Ballot Processing Lead	Ballot Processing SME
Gael Gilchrist	GIS Specialist	GIS SME
Kim Streeter	Voter Services Lead	Voter Services SME

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Business Case Submittal	7/3/2014	Sonja Rowland	New, initial draft	1.5 hours
Revision	10/16/14	Sonja Rowland	Revision	0.75 hour
Revision	2/16/16	Sonja Rowland	Revision	2 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

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).* Documented, streamlined processes that eliminate the need for internal process development and support due to gaps in product.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)* In the elimination of internally built and supported work around applications and queries currently used in day to day operations. These items will be listed in an Excel database and as we are able to sunset them, we will have a good understanding of how many we were able to do away with. This, coupled with staff ability to do other work that has been on the backburner for some time, will be our basis for measuring success.

3. *What is the current baseline for this measure?* There are currently approximately 35 applications that have been built and are supported by KCE Technical Services as a means to fill gaps in the current Election Management System. In addition to these applications, there are over 100 different queries that have been developed by KCE Technical Services that staff use on a regular basis to extract useful

information out of the current system.

4. *What is the target for this measure? (How much improvement will this project achieve?)* 75% of the work around processes that have been developed will be sunset. This will allow KCE IT staff to focus on the many projects and/or initiatives that have either been delayed or are included in the King County Elections Strategic Plan 2014-2018. These include, but are not limited to:
    a. *Development of a Staffing Application for KCE Human Resources*
    b. *Development of a formal intake process for the Alternative Format ballots received from Military and Overseas voters.*
    c. *Development of a process for electronic records retention from our OPEX scanner system to the Electronic Records Management System.*
    d. *Development of 2D barcodes for Challenge Letters*
    e. *Development of a five-year capital improvement plan for technology*
    f. *Increased voter outreach via website improvements/enhancements*
    g. *Research and develop online voting capabilities*
    h. *Broaden access and opportunities to vote for all eligible citizens (ADA outreach and voting opportunities)*
    i. *Implementation of a Customer Relations Management system (CRM) to guide and track voter contacts through a consistent solution/process.*
    j. *Develop a five-year technology plan*
    k. *Implementation of Lync technology for all King County Elections Staff – to include a Call Center application (according to KCIT this will be Zeacom).*
    l. *Evaluation of upgrade of current tabulation system.*

5. *When is the benefit likely to be achieved?* Within the first year following implementation of the new system.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User

agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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
Cost savings. Price for EIMS is $19,506 less the first year and $119,177 over the five year contract period	Contracted price verses quoted DIMS price.	• $224,106 – DIMS Quote 2016 • $230,830 – DIMS Quote 2017 • $237,754 – DIMS Quote 2018 • $244,887 – DIMS Quote 2019	• $204,600 – EIMS Contract Rate – Years 1-5	• $204,600 a $19,506 savings in 2016
Eliminate need for 'home built' applications to fill system gaps.	List of 'home built' applications to support legacy EMS (DIMS) compared to post EIMS deployment.	Home Built applications include: • Candidate Filing • ~~Alternate format ballot processing~~ • ~~mvAttachment~~ • ~~Handsfree~~ • ~~Phone Bank~~ • Phone Bank Reviewer	• KCE would like to keep their 'home' grown candidate filing application. The vendor has agreed and is building an interface between it and their system. • Aside from the	• As of this writing, the vendor has integrated into their system all of the items that have been lined through in the third column. Those currently not lined through are in

		• Challenge Tracker • Provisional Ballot Tracker • PCO Filing • ~~avMultiBatch Upload~~ • ~~avChallengeLetters~~	above, all other functionality is expected to be part of the EIMS and not built by KCE IT staff.	progress.
Eliminate need for internally built queries to fill system gaps.	The legacy system lacked several reports and look up features that resulted in our need to develop approximately 100 queries over the years. We would like to do away with our dependency on those queries.	Approximately 100 queries were used with the legacy system.	Zero queries	We implemented with zero queries. If we cannot find a report or job, we use the help menu or contact the vendor. They either point us to the correct report or job (if it exists) or they build it for us (if it doesn't current exist).

In addition to the above, we have found the Early Voting Module has significantly streamlined the Accessible Voting Unit ballot issuing process. Our staff now only have to find the voter and hit one button as opposed to having to first suspend and then reissue a ballot selecting a number of options.

IT Project Benefits Achievement Plan (Version 2)

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Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

King County Department/ Agency Name	King County Elections
Project Title	Overseas & Service Voter Ballot Delivery System Enhancement
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: Dale Hartman, KCE IT Service Delivery Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
William Adams	KCE Finance Manager	Grant Administration Oversight
Travis Elsom	KCE Technical Services Lead	Project Manager
Dale Hartman	KCE IT Service Delivery Manager	Steering Committee
Janice Case	KCE Election Operations Supervisor	Steering Committee
Rene LeBeau	KCE Ballot Processing Manager	Steering Committee
Francis DelDuca	KCE Financial Analyst	Grant Administration
Anthony Harris	KCE Quality Improvement Manager	Quality Assurance

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
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4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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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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Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Funding Release	11/21/13	Sonja Rowland	New, initial draft	2 hours
Project Completion	2/28/16	Sonja Rowland	Updated measures and benefits and close out	.5 hours
Revision – Project Completion	6/3/2017	Kendall Hodson	Updated to better reflect nature of the project	.5 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ **Category #1**: External service benefits: Improving the quality or quantity of services provided to the public

☐ **Category #2**: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

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.

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.*

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3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   In 2011, King County led a coalition of Washington counties, including Pierce, Franklin, Clark and Yakima, to apply for an EASE Grant to better serve oversees and military (UOCAVA) voters. A solution was procured from the vendor Everyone Counts for a complete online ballot delivery and marking system. As a result, UOCAVA voters in the participating counties, which make up approximately 46% of UOCAVA voters across the state, were able to access and mark-up their ballot online, which is significantly more convenient and efficient.

   This project is a continuation of that work and is funded by an EASE 2 federal grant. The number of counties participating has expanded and there will be some system enhancements and modifications with Everyone Counts. With these new counties joining, 60% of UOCAVA in the state of Washington will be served by this system.

   Because the system is predominantly software, an average life cycle is difficult to determine. Pursuant to the King County Elections 5-Year Technology Plan, when the grant runs out in 2018 the department, in collaboration with KCIT and Council, will need to determine if this system is the best option going forward and, if so, how to fund it.

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

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 10 days to <1 day allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10% of purchases are receiving discount* • *Savings of $100,000*	• *1 day processing time* • *30% of purchases are receiving prompt payment discounts* • *$400,000 savings*	*2 day processing time* *20% of purchases are receiving prompt payment discounts* *$200,000 savings*

As a result of the implementation of this project, 60% of eligible UOCAVA voters (16,000 individuals) in the state of Washington - and 100% of UOCAVA voters in participating counties - receive their ballot via this newly enhanced system each election and will continue to do so. In King County alone 6,000 UOCAVA voters currently utilize this new system, as well as many non-UOCAVA voters who are able to use the system for ballot replacement. We expect this number to grow to as many as 50,000 for this year's Presidential Election.

In terms of security benefits, this system provides accurate tracking and accountability of the issuance of ballots to the citizens of King County and integrates well with our other election systems to ensure they receive and return the ballot they should receive based on their voter registration information.

This is the final update for this BAP.

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	Office of Performance, Strategy and Budget
Project Title	Budget System Project Information Center 2014 Modifications
EBS Project Number	1121753

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Jonathan Swift, Deputy Director, Office of Performance, Strategy and Budget

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
~~Mike Morrison~~ Sid Bender	Capital Manager ~~Program Administrator~~/PSB	Coordinator
~~Sid Bender~~ Mike Morrison	Capital Program Administrator ~~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~~ Jim Walsh	Technology Group Manager/PSB~~Project~~	PIC Administrator~~Roads Services Data Integration Coordinator – Budgeting and~~

	~~Manager/Roads Services~~	~~Quarterly Reporting~~ PSB Technology System Coordination
~~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~~ Leslie Arai; Tracie Jacinto	~~Developer, KCIT~~ Project Manager KCIT; Business Analyst KCIT	~~Advisory – SQL Programming Development~~ Oversee project planning and completion

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Please use conceptual review, budget process, funding release, annual report, project implementation, or	*Date this docume nt was*	*Who did the document updates?*	*A brief summary of what changed in the document. If this is an initial draft, please indicate new. If nothing has*	*How long did it take to complete or revise the*

	project completion.	*updated*		*changed, indicate "review only".*	*form at this stage?*
	Budget Process	10/25/13	See Section 3	Revision required for new BAP format	4 hours draft/16 hours including participant review
	Project Implementation	3/20/15	Sid Bender	In addition to increased training for CIP agency staff, this version of the BAP expands the training beneficiaries to include PSB analysts. Updated the list of operations and management staff involved in work described in this benefit achievement plan update.	2 hours
	Project Implementation	2/22/16	James Walsh	Changed project role of James Walsh to PIC Administrator. Added notation that additional staff will save time because of system improvements.	

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

✓ Category #2: Internal service benefits: Improving internal operations, including the quality or

quantity of internal services

Secondary: Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The investment in system architecture will improve the overall quality of oversight by PSB.
PSB has limited resources available to devote to capital project oversight, while it is responsible for proposing and monitoring about 500 projects worth $200 to $300 million per year.
The investment in the architecture of the Project Information Center (PIC) will free up approximately 25% of an FTE at PSB, that can be utilized to do capital project oversight and training for agencies and PSB analysts.

Who will be able to reinvest their time? Primarily, the PSB capital program administrator, who has over 25 years of experience managing and administering capital projects and systems, will be able to make a significant shift in the use of time~~.~~ In addition, all PSB staff that oversee capital funds, as well as staff countywide who use the system, will save ~~a significant amount of~~ time because information will be easier to access, and the PIC system will be more comprehensive: It will include all capital budget requests, spending from EBS for those projects, and performance monitoring information for projects as required by code.

What will they be able to reinvest their time in?

- Provide 4 training sessions per year. The training will instruct agency finance representatives on how to create capital appropriation proposals using the PIC system, and how to create quarterly reports for baselined projects or for Mandatory Phased Appropriation Projects.

- Provide more oversight~~-~~ and optimizing reporting processes: This time will be spent reviewing information on existing projects being reported, projects being proposed, following up on project issues or inconsistencies, working with the county auditor to address problems, assisting agencies with requests for help with problems, and training other PSB staff to do these same activities.

- This project will also improve~~d~~ user satisfaction because more user friendly interface, better permissions, and a better interface with EBS data.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

Once the architecture changes have been completed, two measures will be utilized:

- Number of training sessions completed per year
- To measure user satisfaction and time saved with the new system, we will sample users using the zzgroup e-mail list. In addition, we will survey Council and Auditor staff using the system. (Time saved can be reported as activities/work completed that would not have otherwise been completed.)

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 and are able to redirect time to other high value capital oversight activities. One year after project completion, our target will be 90 percent of users satisfied and able to redirect time to other capital oversight activities.

5. *When is the benefit likely to be achieved?*

- When project is completed, starting in 2016.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The Project Information Center (PIC) is a SQL server based application providing the county's primary oversight tool for collecting and storing capital project data. PIC is coupled with SQL Reporting Services (SRS) for report distribution.. PIC is utilized by all nine county agencies that implement capital projects.
Implementation of this project will significantly improve the county's ability to maintain high quality project oversight by maintaining data in a stable, secure and supported software environment.

Currently, these essential functions are managed in the PIC system and SQL Reporting Services:

1. Create and maintain for future viewing and analysis 500 Capital Appropriation Proposals (CAPs) per biennial budget cycle
2. Omnibus submissions
2. Supply data to GIS based public website located at kingcounty.gov/cip for projects >$1M.
3. Supply data to quarterly council report for projects over $1M and Mandatory Phased Appropriation (MPA) reports.

Project 1121286, currently in progress, includes development of reports in the SRS environment:

1. Migrate the Mandatory Phased Appropriation Report (MPA) quarterly status report from Access to SRS (for all designated MPA projects in the implementation phase)
2. Migrate the CAP report from Excel to SRS (for all budget requests – provided to council for capital project budget requests)
3. Migrate the Category 1 status report (for all baselined projects over $1M) from Excel to SRS
4. Migrate the Budget status report (Level 1 and Level 3) from Access to SRS

This new request will add these functions to the PIC system:

1. Automate actual cost and budget data transfer from the EBS financial system to the PIC database for CAP reports and quarterly reports.
2. Provide a methodology for efficient data transfer from Agency project management databases, where they exist.

Additionally, implementation of this project will move all of the components included in the system to a platform that the county can continue to support. In addition, it will improve data reliability, user experience, and ability of the county to share and administer project permissions to all county stakeholders without compromising data security. The current architecture of the SQL programming is not compatible with county architecture or security standards and cannot be improved or modified in any significant way without a KCIT-led re-architecture. The initial PIC database was developed in 2009.

The average life cycle for SQL databases is dependent on the ability to keep pace with developments in SQL programming database products provided by Microsoft. Provided that the database is supported by KCIT and updated to current versions of SQL, which is part of the annual

maintenance done by KCIT, the life cycle of the replacement database is not impacted by the programming platform.

In addition, a number of existing tools that are required for capital budgeting, reporting and data management are not supported by the county in a way that is acceptable in the long term. This problem is primarily related to the tool's use of Access databases in combination with Excel reports. Neither PSB nor KCIT have resources dedicated to this type of data management or reporting methodology. Therefore, this project pursues the elimination of all such tools and moves them to the KCIT supported SQL database and SQL Reporting Services model.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The likelihood of risk to the data lies with poor quality data entry from the poor user interface that currently exists. The current application is not user-friendly and lacks basic features that will improve data quality and reliability.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

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Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

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3. *What is the current baseline?*

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5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

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IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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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~~
Aaron Barak, Director of IT Operations

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jayne Pendergast	DCIO, KCIT	Sponsor
Lori Dickneite	Network Manager, KCIT	Steering Committee
Scott Peterson	Project Manager, KCIT	Project Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Conceptual review	9/9/2013	Scott Peterson	New, initial draft	2 hours
Review and Update	9/12/2013	Lori Dickneite	Updated Category 2 and 3 answers	1 hour
New BAP Form	10/14/2013	Scott Peterson	Revised answers	1 hour
BAP Review	2/12/2015	Scott Peterson	No changes	30 min
Council comments addressed	3/18/2015	Scott Peterson/Lori Dickneite	See changes on pages 4 and 6	1 hour
Close Out	3/1/2016	Scott Peterson/Lori Dickneite	Closed BAP	30 min

Section 6. Description of Project Benefits

Identify the category (ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
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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

X Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

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5. *When is the benefit likely to be achieved?*

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Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   The project will replace aging wiring that limits bandwidth and application performance to 10Mb today with 100Mb/1Gb capacity. ~~In doing so, business efficiencies will be increased as more applications can be run through their local area network, current systems will run faster, and services will be enhanced. With poor network connectivity, there is an impact to customers who are unable to receive services they depend on from the county.~~
   Updated 3/20/2015
   This is especially crucial in supporting the business needs of the County. For example, the Prosecutors Attorney's Office utilizes the cloud and other hosted services that require a higher bandwidth to conduct daily business. The Licensing Office handles hundreds of thousands of transactions daily that require uninterrupted network service that demand a higher capacity. Lync required installation of the new cable before they could deploy to the Administration Building.
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   Documented completion of the installation of new wiring and appropriate vendor acceptance testing of that wiring, and capacity increase.

Updated 3/20/2015
The benefit will be achieved when Lync is deployed successfully in the Administration Building and when the business can deliver their services without network services interruptions

3. *What is the current baseline for this measure?*
   The current cat3 wiring is documented at 10Mb maximum throughput
   It will take about 10 minutes to download a 1 Gb video
4. *What is the target for this measure? (How much improvement will this project achieve?)*
   The target is 90% increase in network capacity.
   Updated 03/20/2015
   Currently the connection speed is 10Mb which would take a 1Gb video around 10 minutes to download. After the project is complete, the standard connection speed will be 100Mb, improving the download speed of a 1 Gb video to approximately 1 minute
5. *When is the benefit likely to be achieved?*
   Immediately after the project has completed.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   This project brings the IT Network Infrastructure up to KCIT and industry standards. (KCIT cable standards are cat 5e. Currently the Admin Bldg. has cat 3 and cat4) The cables in some areas are 10 – 15 years old.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding*

annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
   ~~The cost to run new data cables will drop significantly because the cables will have new cable pathways installed in cable trays along the wall rather than within the wall. This will allow the cable installers to run new cables a lot faster bringing the cost down by 20-30%. (current cost is $300, the estimated cost is $150) The before cost per cable installed is $300. The estimated cost because of the new cable tray design is $150 per cable. In the Administration Building, departments constantly move from floor to floor requiring new cables in new locations costing an estimated $18,000 annually. This cost will drop to an estimated $9,000.~~
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
   ~~The number of requests for additional jacks and/or repairs will decrease after the re-cable project. Once LYNC is deployed, there will an additional free cable per location.~~
3. *What is the current baseline?*
   ~~The current cost is $300 to install a new cable vs. the cost after project completion is estimated at $150.~~
4. *What is the target for this measure? (How much savings will this project achieve)*
   ~~30-50% off the cost to run new cables.~~
5. *When is the cost reduction likely to be achieved?*
   ~~Immediately after the project completes.~~

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the*

processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*
Increase network connection speed in the Admin building	Network connection speed	• 10Mb – 10 minutes to download 1Gb video	• 100Mb – 1 minute to download 1Gb video	100Mb – 1 minute or less to download 1Gb video

This project, to update the network cabling infrastructure, was successfully completed in April 2015. The anticipated benefit was to provide an internal network infrastructure that would allow connection speeds from 10mb up to a minimum off 100mb. This upgrade provided the faster network connection for all of the King County departments that reside in the Administration Building and we saw a decrease trouble tickets reporting network slowness by 60% (average reports pre-upgrade was 5 tickets per month, average post-upgrade is 2 tickets per month) This upgrade also made it possible for the Lync (UC) Project to be successful in deploying a fully functional product that requires 100mb speeds for Lync communications.

This project, to update the network cabling infrastructure in the King County Administration Building, brought the King County Administration Building network infrastructure to KCIT's network infrastructure standards.

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	King County Information Technology Department (KCIT)
Project Title	Westin Network Connection Upgrade
Project Number	1124191

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Jayne Pendergast, Deputy Chief Information Officer~~ Aaron Barack, Director of IT Operations

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Bill Kehoe	Chief Information Officer, KCIT	
~~Jayne Pendergast~~	~~Deputy Chief Information Officer, KCIT~~	No longer with King County
~~John Storch~~	~~Regional Services Manager, KCIT~~	No longer with King County
Lori Dickneite	Network Services Manager, KCIT	
~~Behzad Shirinzadeh~~	~~Network Services Manager, KCIT~~	No longer with King County

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review and Business Case	5/29/2014	John Storch, Lori Dickneite	New, initial draft	1 hour
Conceptual review and Business Case	6/28/2014	Lori Dickneite	Updated final document	1.5 hours
Annual BAP Reporting	3/20/2015	Lori Dickneite	No Changes	
Annual BAP Reporting	2/2/2016	Scott Peterson	Slight update	

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   This project will allow the County full immediate access to its critical telecommunications hub and have full control to fix and upgrade equipment without having to obtain a third party review and permission. Equipment upgrade must occur more frequently due to the County's expansion in technology (mobility and modernization); thus the County's immediate access to its communication hub and equipment is critical. In addition to space consolidation, this project will also allow equipment upgrade to handle a rapid volume increase in internet routes. This project benefits will prevent long outages due to waiting period for site access and upgraded equipment

   Currently, the County must request and wait for a third party to review and grant access to the site and to obtain approval for any equipment changes; increasing the County's risk of equipment failure. As an example, in October 2012, MCI/Verizon denied schedule work to upgrade power for the County to be able to make necessary design changes, including an Uninterruptable Power Supply (UPS) equipment installation. King County spent several weeks trying to work with MCI/Verizon to get the work approved and they required us to modify/create another contract before they would authorize.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   - Immediate access to the County's communications hub preventing delays in troubleshooting and maintenance of county's equipment; supporting the continuation of 99.99% of network uptime target
   - County will have full control of its communication hub design and equipment upgrade and there will be no waiting period for third party approval; reducing deployment time
   - The project will include equipment upgrade to speed up internet connections which currently experience frequent slowness due increase traffic

3. *What is the current baseline for this measure?*
   - County currently has the secondary priority access; increasing the risk of network outages due to troubleshooting delays. This risk is growing with the expansion of network needs (mobility, cloud, modernization, egovernment, social media). If continues, the 99.9% network uptime may no longer be maintained.
   - County currently must have third party approval for telecommunications hub design and equipment deployment.
   - Users frequently experience slowness in internet traffic. From Jan 2013 to Oct 2014, there were 237 service tickets related to overall network slowness. In 2015, there were 368 tickets. Although, the service tickets did not indicate specific causes of network slowness; the current hub state and arrangement could have be the drivers of some of them.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   - Immediate access to the communication hub and maintain 99.99% network performance
   - Full control of equipment design and deployment
   - Reduce service tickets related to internet slowness by 30%

5. *When is the benefit likely to be achieved?*
   End of project, June, 2016.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   The Westin Building Exchange is the premier telecommunications hub and primary connection point (POP) for telecommunications and specifically high speed Internet for the Pacific Northwest. Currently, King County site is co-located with Frontier Communications (commercial

communication company) and has critical fiber cable connections to several disparate floors in the Westin facility. King County access, expansion, changes, and outage notification must be authorized by Frontier. This arrangement has been in place for more than 12 years. This project will:

- Consolidate all of our fiber cable termination points (also known as demarcation point - dmark) to a single floor and allow for standardization and expansion. These fiber connections are critical to the County as they provide network connections to multiple Internet peers, such as Software as a Service (SaaS) providers that host applications like those used by the King County Prosecutors Office, King County Council, and Public Health applications. The function of the demarcation points become more and more crucial as technology is advancing to support County's strategy in mobility, modernization, and moving more toward cloud utilization that is depending on the Internet connectivity provided by this facility
- Allow King County to have direct controlled access 24x7, which will ensure we are meeting the new and future requirements for Criminal Justice Information System (CJIS) data requiring a separate area for this connection point.
- Provide direct contact with the building regarding security changes andoutage notifications and eliminate dependency from external organization to ensure King County is aware of planned work, and unplanned incidents in the facility, and have control over decision of type of equipment to reside in the building.
- Upgrade our network equipment to next-generation Internet class equipment that can support the increase in the demand for Intenet access to support SaaS applications and the cloud strategy, which rely heavily on the network equipment and connections to our Internet peers.

Overall, this project gives us the ability to respond to growing rates in internet connections demanded by the needs of future technologies, such as the cloud, mobility, and applicaton modernization which performance are depending on network quality. We have to have ability to grow the network presence and capacity to meet the business needs. The project will reduce the probability of network outages, provide faster response time during outages, and improve connection time; which is crucial with the growing business needs in mobility and cloud utilization.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
King County has not experienced extended downtime to date, however, with the advancement of technology, expansion of mobility, and implementation cloud strategy, the role of this demarkation system become very significant for network performance as the infrastructure of IT. Without the upgrade, quality of IT will eventually deteriorate as cloud services and SaaS applications expand, and access to application will slow down. This project will also avoid an important audit risk by complying with the new and future physical security requirements of Health Insurance Portability and Accountability Act (HIPPA) and Criminal Justice Information System (CJIS) network security that call for a specific King County secured space.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central*

purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	KCIT-IT Operations and Business Solutions
Project Title	IP Fax Service Project
Project Number	1123972

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Aaron Barack, Director of IT Operations

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Molly Cherkin	KCIT	IT Business Analyst
Zita Pryor	KCIT	UC Service Owner

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies

(the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Business Case	5/28/14	Molly Cherkin and Trever Esko	New, initial draft	30 minutes
BAP Annual Report	3/20/15	Zita Pryor	No Changes; project has not started	
BAP Annual Report	2/15/16	Zita Pryor	No Changes; project is ready for deployment in conjunction with the final phase of the UC project	30 minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

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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.*

As a result of many changes to communication technology in King County, residents and the County government now have multiple methods for sharing documents. These changes include:

- E-mail, which was the first system to support sharing of digital documents independent of faxing
- Court eFililng, which requires parties to upload digital documents to the court instead of faxing paper
- Secure FTP, which provides secured infrastructure for uploading and emailing critical documents including medical records
- Integrated Document Exchange (IDX), which enables law enforcement to submit digital criminal case files to the PAO without faxing documents
- Unified Communications initiative, which has replaced the majority of analog communication systems throughout the County

One major component that was not included in the scope of the UC project is fax machine service. Fax machines require that some component of land-line based telephony service remain in every building, on every floor, and often in many locations on a floor throughout the County. Countywide, there will be 1,470 fax lines remaining in the County at the conclusion of the UC project.

Machine-based faxing is an outdated technology originally invented in 1843. Almost all organizations have chosen to replace fax machines over the past 25 years. Modern technology enables online (IP) fax services, which both transmit and receive documents in a digital format. This will reduce the risk of having confidential hard copy documents exposed to unauthorized access. Inbound documents are routed to a recipient's workstation, where they can be saved, archived, and/or printed. Outbound documents can be sent digitally from a workstation, or scanned and sent from a printer/scanner. Adopting such technology would enhance user operations and capabilities, enable a more mobile workforce, reduce environmental impact, and allow the County to reduce the fax telephony infrastructure, hardware and associated maintenance costs. The average life -cycle replacement for fax machines is 5-7 years.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   NA

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	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
Zita Pryor	KCIT	Service Owner

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Project Implementation	3/4/2014	Christine Chou	New, initial draft	2 hours
Annual BAP Reporting	3/20/2015	Zita Pryor	No Changes, benefits still on target	
Annual BAP Reporting	1/29/2016	Zita Pryor	Benefits Changes	

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   This project is to replace the functionality of the existing County voice PBX technology that is 20 years old. Average life cycle of this type of technology should be 5 years.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   The current PBX system is out of vendor support/maintenance. Countywide voice outage will significantly interrupt County business operations; which is likely to occur due to lack of maintenance.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
   The Unified Communication (UC) project is expected to not only replace the older technology to a newer more robust technology, but also provide more functionality at much less cost. The savings from this newer technology will enable the County to payback the investment. The standard video conferencing solution that is a key component of Unified Communications / Lync is a technology that did not exist in the County before 2011 when Lync was rolled out to county employees. To purchase and implement and maintain a standalone video conferencing solution for the County would cost the County millions in project and on-going maintenance cost that is included in the cost of Lync licenses under the Microsoft Enterprise Agreement. In addition the on-going efficiency savings to staff are realized every time a video meeting occurs and staff do not have to travel to an external location to attend a meeting. Savings are also realized with Instant Messaging and Presence and the integration of voice mail to email that provide an overall more efficient integrated communication experience for county employees and external customers that will utilize Lync to engage with county services such as video hearings and customer service inquiries. This purchase cost avoidance and the value of the efficient integrated communication were not included in the updated CBA. The cost avoidance was removed from the original CBA.

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
   The 2015/2016 rates will reflect savings from current status quo voice charges that will be used to repay the bond that is due annually until 2019. Starting in 2020, agencies will see a significant drop in their rates.

3. *What is the current baseline?*
   Current baseline is the 2015 PSQ Countywide voice charges: $6,680,037 (excluding agency specific needs)

4. *What is the target for this measure? (How much savings will this project achieve)*
   Tangible benefits (excluding cost avoidance):
   This project will produce ~~$3M~~ $2.5M annual savings that will be used for bond repayment until 2019

5. *When is the cost reduction likely to be achieved?*
   Tangible savings of ~~$3M~~ $2.5M will start in ~~2016~~ 2017 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.

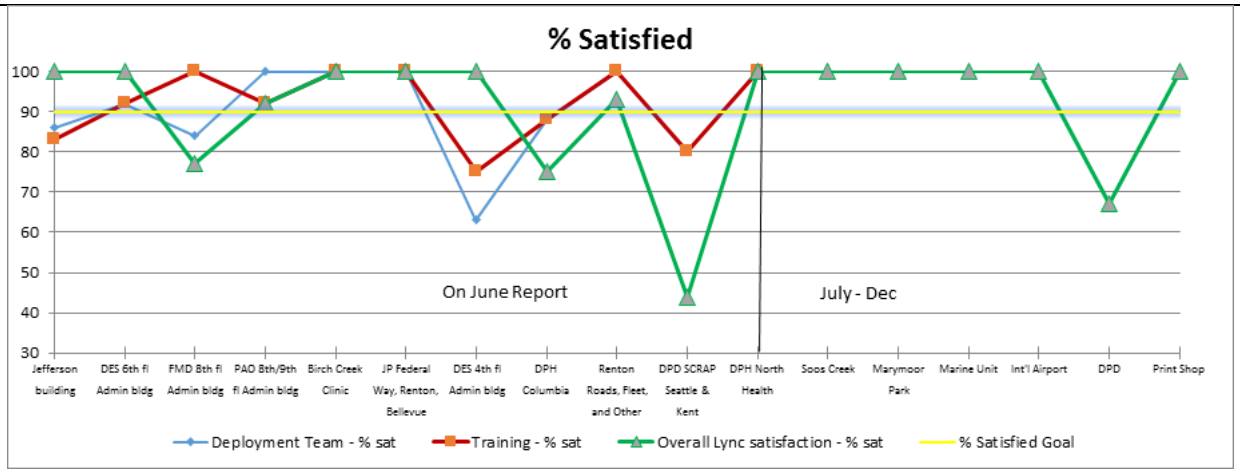
Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in 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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

2015 Survey Results

Below are the survey results for the Unified Communications/Lync service rollout in 2015. The line in the chart is to distinguish between the results reported in June 2015 and the results for the remainder of the year. The ongoing survey demonstrates that customer satisfaction for the Unified Communications/Lync service has continued to grow as the service and deployment process matured with 100% satisfaction for all of departments except for DPD. The DPD deployment had a special requirement for call screening that required implementing a third party solution adding complexity to their deployment and the service. We have met with the customer to document the issues and created a remediation plan. The customer is very happy with the process and steps to resolve the issues.


% Satisfied
100
90
80
70
60
50
40
30
On June Report
July - Dec
Jefferson building
DES 6th fl Admin bldg
FMD 8th fl Admin bldg
PAO 8th/9th fl Admin bldg
Birch Creek Clinic
JP Federal Way, Renton, Bellevue
DES 4th fl Admin bldg
DPH Columbia
Renton Roads, Fleet, and Other
DPD SCRAP Seattle & Kent
DPH North Health
Soos Creek
Marymoor Park
Marine Unit
Int'l Airport
DPD
Print Shop
Deployment Team - % sat
Training - % sat
Overall Lync satisfaction - % sat
% Satisfied Goal

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
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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	800 MHz Trunked Radio System Sprint/Nextel Rebanding
Project Number	347302

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Bill Kehoe, CIO

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Tony Minor	Manager/KCIT	Technical O&M

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
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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)

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Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Annual Report	3/4/2014	Hai Phung	New, Initial	1 hour
Annual Report	3/12/2015	Hai Phung	No Changes Required	N/A
Annual Report	2/23/2016	Hai Phung	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:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

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1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project

will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   This project is to comply with Federal Communications Commission's mandate in reconfiguring the 800 MHz band that being used by King County Police, Fire and Public Works agencies. It involves replacing radio units that cannot be complied with the mandate, reprogramming all radios and the infrastructure equipment. The risk is if the work is not done, King County will be out of compliance of FCC regulations and lose the licenses to use the800 MHz radio frequencies.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   This project is to mitigate the risk of losing the FCC 800 MHz licenses by completing the user radios replacement and reprogramming and infrastructure equipment reprogramming.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

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3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing	*Processing Time annual savings, and percentage of purchases receiving*	• *10 days processing time* • *10 percent of purchases are*	• *1 day processing time* • *30 percent of purchases are receiving*	*2 day processing time* *20 percent of purchases are receiving*

us to take advantage of prompt payment discounts.	*prompt payment discounts*	*receiving discount* • *Savings of $100,000*	*prompt payment discounts* • *$400,000 savings*	*prompt payment discounts $200,000 savings*

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

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 Manager/KCIT	Operating Budget Manager
Fred Grannan	KC Communications Manager/KCIT	Network Manager
Bob Neddo	Enterprise Services Manager/KCIT	Active Directory & Exchange Manager
Diana Chism	Technical Services Manager/KCIT	Backup Solution
Cheryl Ann Gunderson	Enterprise Business Continuity Program Manager	
Gary Hocking	ITSDM/DNRP	Systems & Applications for DNRP
Diep Nguyen	ITSDM/DCHS	Systems & Applications for DCHS
Katie Moriarty	ITSDM/DES	Systems & Applications for DES

Lisa Hillman	ITSDM/DPH	Systems & Applications for DPH
Mike Holland	ITSDM/DAJD	Systems & Applications for DAJD
Lea Ennis	IT Director/SC	Systems & Applications for Superior Courts
Carol Bertapelle	IT Manager/DJA	Systems & Applications for Judicial Admin
Cathy Grindle	Director, Court Technology/DC	Systems & Applications for District Courts
Hoang Nguyen	IT Director	Systems & Applications for Assessments

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Annual Report	3/4/2014	Cheryl Ann Gunderson		
Annual Report	3/13/2015	Cheryl Boudreau	Project continues to be On Hold. It was placed on hold in August 2012 No updates were made to this document.	10 minutes

	Annual Report	3/30/2015	Cheryl Ann Gunderson	Project continues to be on hold. Updates made to Category #2, item #4.	10 minutes
	Annual Report – Final BAP	2/10/2016	Cheryl Ann Gunderson	Project was closed on 12/31/2015	10 Minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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?*

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Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. ***Describe why you expect the proposed IT investment to produce the benefit(s).***
   The purpose of this project is to establish a countywide information technology (IT) Business Continuity plan for county government, identify the technology requirements for this plan, and implement IT solutions to support the King County Emergency Management Plan and county essential business services. King County government is faced with significant exposure if a major disaster or other catastrophe affected the county's computing and communications infrastructure. This project will create a plan and solutions to mitigate the risk associated with the county's computing and communications infrastructure.

2. ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)***

- The following products have been implemented:

- Alternate Data Center (ADC)
    - The Alternate Data Center is in place solely for business continuity and/or disaster recovery. It is not to be used as a development site nor is it used for daily operations outside of those necessary to ensure business continuity and/or disaster recovery.
        - **Business continuity** is the activity performed by an organization to ensure that **critical business functions** will be available to customers, suppliers, regulators, and other entities that must have access to those functions.
        - **Disaster recovery** is the process, policies and procedures related to preparing for recovery or continuation of **technology infrastructure critical to an organization** after a **natural** or **human-induced disaster**.
    - This facility will be used to run critical applications when the King County main data center has a failure during a disaster and the King County Emergency Management Plan is activated.
    - The ADC will provide vertical rack space that will house pre-configured Intel and Unix-based servers ready for immediate use and accommodate additional Quick-ship servers that will arrive within 24 hours of a disruptive event.
- Network Connectivity for the Alternate Data Center
    - Connectivity to the King County WAN and to the Mainframe hot site is provided via VPN utilizing backup Internet connectivity delivered via a path outside of downtown Seattle.
- Mainframe recovery services via SunGard
    - A fully equipped, operationally ready data center offering IBM enterprise level mainframe hardware that is already in place and ready for immediate use by King County when the recovery facility service provider is notified of a disaster. The recovery facility is equipped with redundant power, hardware, network infrastructure, and is staffed 24/7 by expert support staff.
- Quick-ship equipment via Agility
    - Delivery of a pre-determined list of equipment and configurations to the ADC within 24 hours of notification of disaster.
- Emergency Notification System (ENS)
    - A system that rapidly contacts individuals to provide them information and/or instructions via text or voice communications.
- Government Emergency Telecommunications Service (GETS)
    - Priority access to the public switched telephone network to assist in completing emergency calls.
- Wireless Priority Services (WPS)
    - Cellular complement to GETS. Provides priority access to the cellular networks.
- Information Technology Emergency Management Response Plan (EMRP)
    - A guideline for the management of the immediate actions and operations required to respond to an emergency or disaster.
- Networker Back Up and Recovery Services
    - Used to recover application data for ITS Legato client applications at the ADC and will also serve to provide ongoing backups after the applications have been recovered at the ADC.
- Active Directory and Exchange
    - Separate instances of Active Directory running in the production environment yet housed at the ADC.
    - Warm email site – no blackberry services; no historical data. Available via OWA and KCWAN, if available.
- Disaster Recovery Exercises
    - Annual exercises designed to test and refine the disaster recovery plans. This aides in determining and closing gaps as well as keeping documents and processes current on paper and in the minds of those responsible for various tasks in the event of a disaster.
- Individual Disaster Recovery Plans
    - Each of the business critical applications has a disaster recovery plan which outlines the steps to take before, during and after a disaster. These plans are created and maintained by the application owner and are included in the annual disaster recovery exercises.
- Operating Budget
    - The annual budget for the ongoing support, care and feeding of business continuity and disaster recovery in our organization.
- Countywide IT Business Continuity Policy and Guidelines
    - The purpose of the King County Information Technology Business Continuity Policy is to ensure effective service to the public of essential County business services that rely on the continuation of critical business functions and systems and the infrastructure that sustains those systems, that begins a long term and ongoing process implemented at various stages based on the policy guidelines.
    - Information technology business continuity programs adhering to this policy shall align their

practices to the "Guidelines for Implementing an Information Technology Business Continuity Program for King County Organizations".

3. *What is the current baseline for this measure?*

- Alternate Data Center (ADC)
  - KCIT did not have a mitigation strategy for the Data Center
- Network Connectivity for the Alternate Data Center
  - KCIT did not have a mitigation strategy for Network connectivity
- Mainframe recovery services via SunGard
  - KCIT did not have a mitigation strategy for the mainframe
- Quick-ship equipment via Agility
  - KCIT did not have a mitigation strategy for systems and applications
- Emergency Notification System (ENS)
  - KCIT did not have a mitigation strategy for emergency notification
- Government Emergency Telecommunications Service (GETS)
  - KCIT did not have a mitigation strategy for telecommunication priority services
- Wireless Priority Services (WPS)
  - KCIT did not have a mitigation strategy for wireless priority services
- Information Technology Emergency Management Response Plan (EMRP)
  - KCIT did not have a mitigation strategy for Emergency Management response
- Networker Back Up and Recovery Services
  - KCIT did not have a mitigation strategy for backup and recovery
- Active Directory and Exchange
  - KCIT did not have a mitigation strategy for Active Directory and Exchange
- Disaster Recovery Exercises
  - KCIT does not conduct disaster recovery exercises
- Individual Disaster Recovery Plans
  - KCIT does not have disaster recovery plans for Essential Services
- Operating Budget
  - KCIT did not have an operating budget to sustain Business Continuity or Disaster Recovery
- Countywide IT Business Continuity Policy and Guidelines
  - KCIT did not have a Countywide IT business Continuity Policy or Guidelines

4. *What is the target for this measure? (How much improvement will this project achieve?)*

- Alternate Data Center (ADC)
  - **Completed June 2008**
  - **Transitioned to Quincy Data Center June 2015**
- Network Connectivity for the Alternate Data Center
  - **Completed June 2008**
  - **Transitioned to Quincy Data Center June 2015**
- Mainframe recovery services via SunGard
  - **Completed March 2008**
  - **Terminated contract March 2015**
  - **Transitioned to Mainframe Re-Hosting Project**
- Quick-ship equipment via Agility
  - **Completed April 2008**
  - **Terminated contract February 2015**
  - **Transitioning to Quincy Data Center and other Alternate Solutions will replace this service**
- Emergency Notification System (ENS)
  - **Completed April 2010**
  - **Testing conducted quarterly**
- Government Emergency Telecommunications Service (GETS)
  - **Completed November 2007**
  - **Cards are issued when requested**
- Wireless Priority Services (WPS)
  - **Completed November 2007**
  - **Service is provided when requested**
- Information Technology Emergency Management Response Plan (EMRP)
  - **Completed January 2010**
  - **Updated 2011**
  - **Updated 2013**

- **Updated 2014**
- **Updated 2015**

- Networker Back Up and Recovery Services
  - **Completed June 2008**
  - **Updated 2012**
  - **Transitioned to Quincy Data Center**
- Active Directory and Exchange
  - **Completed June 2008**
  - **Decommissioned 2014**
- Disaster Recovery Exercises
  - **One was conducted in September 2008**
  - **Transitioned to KCIT Enterprise Business Continuity Program**
- Individual Disaster Recovery Plans
  - **Transitioned to KCIT Enterprise Business Continuity Program**
- Operating Budget
  - Established operating budget 432024
- Countywide IT Business Continuity Policy and Guidelines
  - **Completed**
  - **Transitioned to KCIT Enterprise Business Continuity Program**

5. *When is the benefit likely to be achieved?*
   - ~~**Benefits are being realized as portions of the project are being implemented and completed.**~~
   - ~~**KCIT Testing, Training & Exercise Program is currently scheduled for completion by December 2016**~~
   - ~~**Business Continuity Plans, which will also include individual Disaster Recovery plans is currently scheduled for completion by December 2016**~~

   Targets have been 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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Example:

Metric Description	Metrics	Baseline	Target	Actual
• Alternate Data Center (ADC)	*Establish and implement alternate facility*	• *No physical location is available*	• *Facility established by September 2007*	*Facility established June 2008 and turned over to operations June 2008 *Transitioned to QDC*
• Network Connectivity for the Alternate Data Center	*Establish network connection to alternate facility*	• *No physical facility*	• *Establish connection by October 2007*	*Facility had network connectivity in June 2008 and was turned over to operations June 2008 *Transitioned to QDC*
• Mainframe recovery services via SunGard	*Establish a contract with SunGard*	• *No current contract*	• *Establish contract by August 2007*	*Contract established in March 2008 and turned over to operations September 2008. *Ended Contract – Mainframe Re-Hosting Project*
• Quick-ship equipment via Agility	*Establish a Quick-ship contract with Agility Services*	• *No current contract*	• *Establish contract by October 2007*	*Contract established in April 2008 and turned over to operations September 2008 *Ended Contract – QDC and*

				other Alternate Solutions
• Emergency Notification System (ENS)	*Application for use of service*	• *Currently not registered to use service*	• *Establish registration, input information, and test for use by December 2006*	*Registration completed June 2007 Initial test completed August 2007 Turned over to operations April 2010 *Transitioned over to KCIT Enterprise Business Continuity Program*
• Government Emergency Telecommunications Service (GETS)	*Application for use of service*	• *Currently not registered to use service*	• *Establish registration September 2007*	*Registration complete June 2007 and turned over to operations November 2007 *Transitioned over to KCIT Enterprise Business Continuity Program*
• Wireless Priority Services (WPS)	*Application for use of service*	• *Currently not registered to use service*	• *Establish registration September 2007*	*Registration complete June 2007 and turned over to operations November 2007 *Transitioned over to KCIT Enterprise Business Continuity Program*
• Information Technology Emergency Management	*Create an Emergency Management*	• *Currently no plan exists*	•	*Plan was written and tested in*

Response Plan (EMRP)	*Response Plan*			*August 2007 was turned over to operations in April 2010 *Transitioned over to KCIT Enterprise Business Continuity Program*
• Networker Back Up and Recovery Services	*Establish a secondary backup system*	• *No system exists*	• *October 2007*	*Implemented June 2008 was turned over to operations June 2008 *Transitioned over to QDC*
• Active Directory and Exchange	*Implement a secondary Exchange environment and extend the production Active Directory environment into the ADC*	• *No System exists*	• *October 2007*	*Implemented December 2007 was turned over to operations August 2008 *Transitioned to QDC*
❖ Disaster Recovery Exercises	*Conduct Disaster Recovery Exercises*	• *Currently no exercises are being conducted*	• *October 2007*	*A single exercise was conducted, in 2008; *Transitioned over to KCIT Enterprise Business Continuity Program*
❖ **KCIT Testing, Training & Exercise Program**	*Create for KCIT an industry standard Testing, Training & Exercise program (TT&E)*	• *Currently there is no TT&E Program*	•	**Transitioned over to KCIT Enterprise Business Continuity Program*
❖ Individual	*Create*	• *Currently no*	• *October 2007*	**Transitione*

Disaster Recovery Plans	*Disaster Recovery Plans for the Essential IT Components*	*Disaster Recovery Plans Exist*		*d over to KCIT Enterprise Business Continuity Program*
• **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*	**Transitione d over to KCIT Enterprise Business Continuity Program*
• 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*	**Transitione d over to KCIT Enterprise Business Continuity Program*
• **King County IT Business Continuity Policy & Guidelines**	*Current policy is not clear and concise on what department and agencies need to do*	•	• *December 2014*	**Transitione d over to KCIT Enterprise Business Continuity Program*
• CoCo Interoperable Communication s System	*Alternate communicatio n system*	• *No current system in place*	• *December 2006*	*October 2007 pilot was terminated. Not a viable solution*
•		•	•	
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IT Project Benefits Achievement Plan

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

King County Department/Agency Name	KCIT
Project Title	Business Empowerment & User Mobility (BEUM)
Project Number	1117291

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Bill Kehoe, CIO~~ Aaron Barak, Director of IT Operations

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Jayne Pendergast	DCIO	Project Sponsor
Bob Micielli	IT Enterprise Manager III	Steering Committee Member
~~John Storch~~	~~Enterprise Manager III~~	~~Steering Committee Member~~
Ralph Johnson	Chief Information Security/Privacy Officer	Steering Committee Member
Lori Dickneite	~~Engineering Supervisor~~ Network Services Manager	Steering Committee Member

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Funding Release	08-30-13	Lloyd Jordan	New, initial draft	.5 hrs
Project Implementation	02-12-14	Lloyd Jordan	Review Only	.5 hrs
Project Implementation	03-20-15	Lori Dickneite	Update	1 hr
Project Close	02-10-16	Lori Dickneite	Update	1 hr

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ 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

☐Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in*

complying with tax and regulatory issues.

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

Update 02/10/2016

The projects are to expand the existing network capacities in response to many business needs. The latest major network equipment upgrade was in 2006. Average life cycle is normally five years but it depends on the speed of technology changes and the adoption level of new technology in the County to support the County strategy. The BEUM project has replaced technology in the following areas of King County Technology Strategies:

Mobility:

To support the growth area in the use of mobile devices, network capacity had to increase in order to allow users of mobile devices in County building. The wireless backbone and remote access was not built to respond to current level of mobility use. Wireless could only connect 750 access points without redundancy, whereas after the upgrade it can accommodate 4000 access points with redundancy. The Remote access system limit was 500 concurrent users without redundancy and now after the upgrade can carry 5000 concurrent users with redundancy, and is scalable if needed. The project was completed and the infrastructure and met the target above.

EGovernment:

To expand Internet IP addresses. With the exhaustion of IPv4 addresses, the industry has moved to IPv6 which provides an unlimited number of addressing and has been adopted worldwide on the Internet. King County will be able to support IPv6 connections to the internet, and enable communication to agencies and partners that are using IPv6 to ensure there is no lapse in communication. IPv6 also has advanced security features and enables more efficient routing and improved data transmissions speeds. The project is completed and now King County will be able to support IPv6.

Service Maturity:

To increase site bandwidth. The Frame Relay/T1 network transport, provided by CenturyLink, connects 103 remote sites to the King County Network and reached end of support in 2014. In addition to replacing the network transport technology, these sites required bandwidth upgrades to move them from 1.54mb connection to 20Mb connection, enabling the sites to use today's tools and technologies such as remote imaging and unified communications, which require higher bandwidth. An example is a 1.54mb connection would take approximately 9 minutes to down load a 100Mb video. After the upgrades, users would see an improvement and are able to download a 100Mb video in less than 1 minute. The project was completed and the infrastructure

met the target above.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   Without the upgrades, King County would not be able to support the growth in mobility or provide adequate bandwidth to sites. Remote access will be limited and unable to support the demand, and support staff will need to go to remote sites to perform work locally due to slow network connections. Without IPv6, King County is in a risk of not being able to communicate with other agencies and partners using the new IP addresses.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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
Mobility	Access Points	750	4000	**1017**
Mobility	Users Access	500	5000	**13747**
Service maturity	Bandwith	1.54MB	20MB	**20MB**

The project was completed and closed in May 2015. The infrastructure is in place. The metrics below represented the infrastructure capability if the wireless system at the site is capable to further carry the capacity. The access points were tied to the enhanced wireless project. The number of access points will increase when the wireless project expands the scope.

IT Project Benefits Achievement Plan (Version 2)

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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

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Business Owner Name and Title: Bill Kehoe, Chief Information Officer, KCIT

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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:

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Budget Process	10/18/13	Mike Fisher	New, initial draft	4 hours
1Q 2014 Supplemental	12/04/2013	Mike Fisher	Updated for Q1 2014 supplemental	8 hours
Post review updates	12/12/2013	Mike Fisher	Q1 2014 supplemental	1 hour
Include 2012 appropriation in project cost/benefit calculations	12/16/2013	Mike Fisher	Q1 2014 supplemental	2 hours
Pre-submittal final updates	01/02/2014	Mike Fisher	Q1 2014 supplemental	1 hour
Post-submittal updates	02/10/2014	Mike Fisher	Q1 2014 supplemental	2 hours
Incorporate management feedback	02/11/2014	Mike Fisher	Q1 2014 supplemental	1 hour
2015 yearly review	03/02/2015	Mike Fisher	2015 yearly review updates	1 hour
2016 yearly review	02/10/2016	Collin Pedersen	2016 yearly review updates	2 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

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Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

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3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   This project will improve internal services by streamlining delivery and improving the timeline for providing hosting services. This is accomplished by replacing the outdated IT infrastructure delivery model in the county. In the past IT groups procured, deployed, configured, maintained, and eventually replaced physical hardware for individual business applications. That model is inefficient and doesn't maximize county IT infrastructure, facility, or personnel investments.

   By leveraging the power of server virtualization and automation the hosted environment allows for greater business agility by greatly reducing server deployment times. In addition, hardware is utilized in an efficient manner leading to better return on investment in IT resources.

   With departmental and agency IT teams unencumbered by the procurement and deployment cycle they are free to focus on more strategic and higher business value functions.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   We will know benefits are being achieved when average deployment time for servers goes down.

This can be measured by reviewing helpdesk ticket closure times associated with the time expended to deploy a server in the cloud or SVE against physical server deployment times.

3. *What is the current baseline for this measure?*
   Physical servers typically take 10 to 12 weeks to deploy into the King County data center.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   Standard Virtual Environment server requests take 48 hours.

5. *When is the benefit likely to be achieved?*
   The benefit is currently being achieved for the Standard Virtual Environment and the Virtual Private Cloud will begin showing benefits in 2014.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   Both the Standard Virtual Environment and the Virtual Private Cloud environments leverage the latest virtualization technology. Overall the industry is moving quickly to a virtual server strategy rather than the outdated one logical server to one physical server model.

   By leveraging virtualization in these environments King County will see decreased time to deployment, reduced management complications, improved troubleshooting, and increased disaster recovery capabilities.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   Server virtualization also reduces risks to mission critical applications. Since the application and logical server are no longer tied to an individual physical server, if there are problems the application is simply moved to a functional host server.

   In the Virtual Private Cloud these risks can be even further reduced by leveraging the massive scale and redundancy of the physical environment. By employing best practices in architectural design, an application can withstand not only the loss of a physical host machine, but of an entire data center.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *What is the target for this measure? (How much savings will this project achieve)*

   This project will avoid costs for data center hosting and purchasing of physical servers by replacing them with virtual servers. The total hosting cost reductions are $5,608,303 from 2012 to 2015 and the total server purchase cost reduction is $2,170,960 over the same period. Below is a breakout of the savings and how they were estimated and derived.

   Server Hosting Cost Avoidance

Server Hosting Cost Avoidance	Number of VMs	Cost Avoidance	VM Cost	Benefit
Hosted Environment VMs 2012	47	$ 316,216	$ 141,047	$ 175,169
Hosted Environment VMs 2013	123	$ 860,631	$ 383,883	$ 476,748
Hosted Environment VMs 2014	363	$ 2,641,551	$ 1,177,935	$ 1,463,616
Hosted Environment VMs 2015	833	$ 6,304,144	$ 2,811,375	$ 3,492,769

   **Note: Hosting cost avoidance happens each year, so the cumulative total number of servers expected in the Standard Virtual Environment is calculated each year.*

   Server Procurement/Hardware Purchase Cost Avoidance

Server Procurement Cost Avoidance	Number of VMs	Cost Avoidance	Per VM Project Cost	Benefit
Virtual rather than physical replacements 2012	47	$ 376,000	$ 260,051	$ 115,949
Virtual rather than physical replacements 2013	123	$ 984,000	$ 680,559	$ 303,441
Virtual rather than physical replacements 2014	240	$ 1,920,000	$ 1,327,920	$ 592,080
Virtual rather than physical replacements 2015	470	$ 3,760,000	$ 2,600,510	$1,159,490

   **Note: Procurement costs are only calculated in the year they are projected to happen, so the*

number of servers expected to move to the Standard Virtual environment each year are calculated.

The cost avoidance calculations above do not include potential savings from the Virtual Private Cloud which will be an option in situations where it is cheaper to utilize compared to a virtual machine in the Standard Virtual Environment. This will be reviewed on a case by case basis since not all applications are suitable for, or cost effective to host in, the Virtual Private Cloud environment.
Updated 2/11/2016: Moving the backup infrastructure to the Cloud environment is another use case that is cost effective.

Cost avoidance as the result of moving backup Tape Infrastructure to the Cloud:
It is projected that moving Backup infrastructure from Physical Tapes to the Cloud for offsite storage will result in a cost savings/avoidance of over $150,000 per year starting in 2016. The savings/cost avoidance is due primarily to the reduction in vendor costs and labor associated with managing tapes and tape infrastructure.

Below is estimated cost comparison based on yearly backup volume of 1,254.48 TB

Cost Components	Tapes	AWS Cloud
Labor	$ 241,239	$ 132,747
Hardware Maintenance	$ 52,027	
Software	$ 50,400	$ 85,400
Offsite Storage and backup tapes	$ 138,217	
AWS Cost		$ 155,000
Platform (SSD)	$ 39,138	$ 75,876
Hosting	$ 65,624	$ 6,815
Equipment Replacement	$ 217,143	$ 197,813
Average Annual Cost	$ 803,788	$ 653,651
Average annual savings		**$ 150,138**

A secondary benefit is that there is less complexity with the new solution since backup data is stored both onsite and offsite automatically compared with the old solution of using clone jobs which need to be setup and monitored manually in order to keep data both onsite and offsite.

A third benefit is that the geographic location of backups being stored in the cloud allows us to use this solution to fulfill the 50 mile requirement by Records Management/business continuity/disaster recovery

2. *When is the cost reduction likely to be achieved?*
Benefits should be realized in each year of the project – 2013 to 2016.

For 2013 the actual number of servers in the Standard Virtual Environment was 211 as of this writing. This led to the following realized benefits:

Update – 3/2/2015
For 2014 the actual number of servers in the Standard Virtual environment was 545, this led to the following realized benefits:

Update – 2/10/2016
For 2015 the actual number of servers in the Standard Virtual environment was 697, this led to the following realized benefits:

Server Hosting Cost Avoidance

Server Hosting Cost Avoidance	Number of VMs	Cost Avoidance	VM Cost	Benefit
Updated – 2/10/2016 Actual Hosted Enivonment VMs 2015	152	$1,168,424	$ 444,144	$ 572,280
Updated – 3/2/2015 Actual Hosted Environment VMs 2014	334	$2,430,518	$1,083,830	$1,346,688
Actual Hosted Environment VMs 2013	211	$1,476,367	$ 658,531	$ 817,836
Updated – 2/10/2016 Totals	**697**	**~~$3,906,885~~ $ 5,075,309**	**~~$1,742,361~~ $2,186,505**	**~~$2,164,524~~ $2,736,804**

Server Procurement/Hardware Cost Avoidance

Server Procurement Cost Avoidance	Number of VMs	Cost Avoidance	Per VM Project Cost	Benefit
Updated – 2/10/2016 Actual Hosted Enivonment VMs 2015	152	$1,216,000	$ 841,016	$ 374,984
Updated – 3/2/2015 Actual Hosted Environment VMs 2014	334	$2,672,000	$1,848,022	$823,978
Actual Hosted Environment VMs 2013	211	$1,688,000	$1,167,463	$520,537
Updated – 2/10/2016 Totals	**697**	**~~$4,360,000~~ $5,576,000**	**~~$3,015,485~~ $3,856,501**	**~~$1,344,515~~ $1,719,499**

Cost Avoidance as the result of moving backup infrastructure to the cloud:
Actual savings will be reported in the next BAP report

3. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

Server Hosting Cost Avoidance:
As a result of leveraging virtual servers in the hosted environment rather than physical servers, departments and agencies will realize the on-going cost avoidance listed above. These calculations include reduction in rack unit charges and in operating system licenses as those are included with a hosted environment virtual machine. The migration planning project will track conversion efforts over the planned time period listed in question 4 below. The cost of hosting physical servers will be calculated against the cost of the virtual servers used in their place and the difference is the benefit.

Server Procurement/Purchase Cost Avoidance:
As a result of replacing end of life physical server hardware with virtual servers in the hosted environment the difference between the cost of physical server replacements and the total project cost is the benefit. Overall server hardware costs will be reduced by deploying virtual servers in the Standard Virtual Environment or Virtual Private Cloud rather than physical servers. The cost to have individual physical server and storage devices at the Sabey Data Center will be compared to the cost of virtual servers in the Standard Virtual Environment and Virtual Private Cloud.

Moving backup to the Cloud Cost Avoidance:
We will track the actual cost of backup in the Cloud and compare it to the previous tape infrastructure.

4. *What is the current baseline?*
Server Hosting Cost Avoidance:

- 2012 cost to host a fully managed physical server = $6,728
- 2013 cost to host a fully managed physical server = $6,997
- 2014 cost to host a fully managed physical server = $7,277
- 2015 cost to host a fully managed physical server = $7,687

- 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 = $2,922

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

<u>Server Procurement/Purchase Cost Avoidance:</u>

- 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))

<u>Tape Infrastructure Cost Avoidance:</u>

The current baseline would be the annual operating cost of managing the infrastructure and cost of replacement

5. *Describe why you expect the proposed IT investment to reduce costs?*

The hosted environment strategy helps to solidify and strengthen one of our foundational components of becoming a service focused organization. The King County Hosted Environment, which will leverage both internal and external virtual server and storage infrastructures, will give county business and IT customers:

- Inexpensive, flexible, scalable, and standardized computing solutions to complex IT requirements;
- Enhanced productivity and increased efficiency by enabling agile response to changing business requirements;
- Secure and reliable infrastructure that adheres to the most rigorous industry certifications and principles;
- Centrally managed, high performance, services based environments that support an enterprise IT model.

Cloud service providers utilize a pay-as-you-go, or metered, charge-back model. This allows limited and specific usage environments, like development and test, to be deployed quickly, fully leveraged while required, and then turned off when not in use. This model removes the county from the cycle of purchasing hardware based on peak usage projections, only to see that hardware sit idle during usage

valleys.

It is estimated that servers in a physical server to application model are less than 20% utilized, where physical server hosts in a virtualized model are utilized at rates well over 60%. The increase in server utilization leads to hardware cost savings as well as maintenance, power, HVAC, and licensing cost savings.

The Hosted Environment – Phase III Cloud Implementation project will leverage the planning that has been started in the Enterprise Server Optimization Project (ESOP). The Migration Planning sub-project will leverage KCIT maintained server inventory lists and department maintained servers inventory lists as a basis for outreach to King County Executive and Separately Elected agencies. A proviso response report was submitted to Council that identified a 3 year plan for migrating county servers to the hosted environment.

As of ~~this writing~~ the end of 2015, the Standard Virtual Environment contains ~~211~~ ~~545~~ 697 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.

Moving the backup infrastructure from physical tapes to the Cloud is one of the great examples of using the cloud to reduce cost and achieve many other benefits beyond cost savings that are not available in physical tapes (as described in previous section)

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 less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

IT Project Benefits Achievement Plan (Version 2)

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

King County Department/Agency Name	King County Information Technology Department
Project Title	~~Enterprise Customer Relations Management (CRM)~~ Constituent Engagement Services (CES) Expansion
EBS Project Number	1121493

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Natasha Jones, Customer Service Director, and Bill Kehoe, Chief Information Officer

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Natasha Jones	Customer Service Director, King County Executive	Project Sponsor
Bill Kehoe	Chief Information Officer, KCIT	Project Sponsor
Dale Hartman	SDM, Elections	Pending customer
Steve Larsen	Chief Administrator, DAJD	Pending customer
John Bodoia	Chief Financial Officer, DNRP	Customer
Phillip Sit	Communications/Outreach Coordinator, DOA	Pending customer

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document

to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
2014 Budget Process	8/12/13	Natasha Jones	New, initial draft	4 hours
2014 Supplemental	12/11/13	KCIT/Customer Service CRM Development team	Updated to provide more detail based on 2013 post-budget decisions.	2 hours
Review of 2014 proviso	1/27/15	Jennifer Giambattista	Updated external service benefits section	30 minutes
2015 Supplemental appropriation	4/3/2015	KCIT Business Analyst	Reviewed and approved, in alignment with anticipated benefits of continued CRM Expansion. Note: Title and project number updated	1 hour
2015 Supplemental appropriation	4/24/15	Natasha Jones	Natasha Jones	30 minutes
Review of 2014 annual report	6/16/15	Council and Exec staff	Updated external service benefits to add a sentence from Exec staff	1 hour
2016 Update	2/10/16	Natasha Jones	Reviewed and approved	30 minutes
2016 Update - Revised	06/16/16	Natasha Jones	Revised	
2016 Annual Review	6/16/16	Jenny Giambattista	Revisions to clarify what will be measured and tracked	30 minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2

improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)
√ Category #1: External service benefits: Improving the quality or quantity of services provided to the public
□ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services
□ Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
□ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   Expanding CES to other Executive departments and Separately Elected offices will reduce turn-around time on customer responses, improve King County's ability to provide a seamless, coordinated customer experience when customer inquiries involve multiple departments, and reduce staff time tracking responses to inquiries and providing consistent responses to resident or customer requests.

   Updated 4/24/16: A coordinated system with shared information will improve residents' ability to reach the right staff more quickly to get services, information and referrals, rather than being turned away by technological and bureaucratic barriers. Furthermore, enterprise deployment of CES will set the stage for eventually implementation of a county-wide 311 information center, similar to what Baltimore and other jurisdictions are using.

   This will improve the customer and employee experience overall and possibly free up employee time for more value-added work, such as helping customers whose issues are more complex or who have language or other barriers that may make it difficult to access County services. Benefits will also likely vary due to the flexibility of the system, which will be used differently by some departments, based on business needs. But in most cases, benefits will relate to tracking customer inquiries for follow up or closure.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   ~~By a reduction in repeat calls for information, a reduction in staff time spent on duplicative responses, a reduction in resident calls to multiple departments, a reduction in complaints related to delayed or inconsistent information from county departments.~~

   We will use data from the CES system to better track ~~complaints, responses~~ ,time required to enter complaints/inquiries, and time to closure of new requests or incidents, ~~as well as identifying trends such as reduced complaints or increased compliments over time.~~

   Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CES implementation group will work to gather such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. With each rollout of a CES application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum,

response time and time to closure of new request.

We can use the bi-annual resident survey for some measure of baseline on resident perceptions of county customer service in a general sense

3. *What is the current baseline for this measure?*
There is no current baseline because departments are currently siloed and using disparate systems for customer tracking. We can use the bi-annual resident survey for some measure of baseline on resident perceptions of county customer service in a general sense. In the last survey, residents ranked our service level between 2-3 on a five point scale. Post-CES implementation, we expect to see this increase.

Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CES implementation group will work to gather such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. Additionally, with each rollout of a CES application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum, response time and time to closure of new request.

If baseline data does not exist, the project may establish the initial implementation period as the baseline and target improvements from that baseline. Updated 6/14/16: Please see attached report for baseline

4. *What is the target for this measure? (How much improvement will this project achieve?)*
Target result of Customer service survey post CES implementation is 4-5 on a five point scale

This will vary by department and will need to be quantified by increased efficiencies in work groups using CES. Each department will take a baseline of response time, complaints, etc. before implementation of CES.

We are working on setting countywide standards or baselines for customer response times.

We expect to see the bi-annual resident survey customer satisfaction results increase.

Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CES implementation group will work to gather such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. With each rollout of a CES application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum, response time and time to closure of new request.

Updated 6/14/16: Please see attached report for measurement target

5. *When is the benefit likely to be achieved?*
Benefits such as improved customer experience are likely ~~to be achieved~~ to start within three to six months of CES implementation, assuming that business processes are aligned with the system, rather than current, possibly inefficient processes being simply dropped into CES for implementation in a new tool. Countywide benefit will be achieved when CES expansion project is completed and the business processes are aligned with the system. For the Executive branch department, the target would be the end of 2016.

Most departments have no current baseline set due to a lack of a robust tracking tool for customer contacts. If no current baseline data for customer contacts exist, each new CES implementation group will work to gather such data during the first month of deployment to help set baselines and goals for improvement in subsequent months. With each rollout of a CES application tracking customer inquiries, the project will establish a baseline, target, and expected benefit achievement dates for at minimum, response time and time to closure of new request.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. ***Describe why you expect the proposed IT investment to produce the benefit(s).*** *Wider deployment of* Microsoft Dynamics CRM will improve customer service by creating a central hub to serve as a clearinghouse for constituent requests – making sure we get back to people in a timely manner, get them the correct information from the first contact, and create more efficient workflow so we handle requests effectively.

2. ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*** We should measure the benefits on the turn-around time for responding, ~~a lower number of people handling each inquiry~~, and comparison of before and after implementation staff time to handle the average inquiry.

3. ***What is the current baseline for this measure?***
   In most cases, there is currently is no baseline and one will need to be set prior to implementation.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   It is expected to save several hours per week per staff member currently assigned to respond and track customer issues. This total will vary by department or division implementing CRM.

5. *When is the benefit likely to be achieved?*
   This is likely to be achieved within six month of implementation and training.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance
This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will*

automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

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*	• *10 days processing time* • *10% of purchases are receiving discount* • *Savings of $100,000*	• *1 day processing time* • *30% of purchases are receiving prompt payment discounts* • *$400,000 savings*	*2 day processing time* *20% of purchases are receiving prompt payment discounts* *$200,000 savings*

Attachment

CUSTOMER ENGAGEMENT SERVICES BENEFITS MEASUREMENTS

Executive Customer Service - Started deployment: 2013
Functionality: Constituent's Tracking and Inquiries Management

			Status	
Measurement	**BASELINE**	**GOAL**	**2014**	**2015**
Response Time	Not Tracked	24 hours	24 hours or less	24 hours or less
Median Time to Close	Not Tracked	5 days	5 days or less	3.8 days or less
Entry Time per case	4 - 10 Minutes	2 - 4 minutes	30 sec to 1 min	30 sec to 1 min

Department of Assessments - Start deployment: March 2015
Functionality: Customer Tracking

			Status
Measurement	**BASELINE**	**GOAL**	**Not yet measured**
Response Time	48- 96 hours	24 hours	N/A
Median Time to Close	48 - 192 hours	5 days	N/A
Entry Time per case	4 - 10 Minutes	2 - 4 minutes	N/A

Executive Services - Office of Civil Right - Start Deployment January 2015
Functionality: Public Record Request

			Status
Measurement	**BASELINE**	**GOAL**	**2016**
Time to prepare report	5 days	3 days	3 days

Additional Benefits Provided by CES

Provides system generated remainder to send a five day response to ensure compliance with Public Record Act
Ability to view the status of all public records requests
Ability to link emails and electronic files to each request to keep communications
Ability to generate reports to measure public records activities
Easier to coordinate interdepartmental requests as all users can view all requests in the application

DNRP Solid Waste - June 2016 - replacing current system that will need upgrade
Expectations and baseline

			Status
Measurement	**BASELINE**	**GOAL**	**2016**
Cost to upgrade customer serv	$ 47,000	$ 6,000	Not yet implemented
Gaining Additional features	None	Abilility to combine customers contact	
		Abilility to run management reports	

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	King County Information Technology Department
Project Title	Enhance Wireless Connectivity
Project Number	1124574

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: ~~Jayne Pendergast, Deputy Chief Information Officer~~ Aaron Barack, Director of IT Operations

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Bill Kehoe	Chief Information Officer, KCIT	
~~Jayne Pendergast~~	~~Deputy Chief Information Officer, KCIT~~	Has left King County
~~John Storch~~	~~Regional Communication Manager~~, KCIT	Has left King County
Lori Dickneite	Network Services Manager, KCIT	Business Owner
~~Behzad Shirinzadeh~~	~~Network Services Manager, KCIT~~	Has left King County
Aaron Barak	Operations Director	Project Sponsor
Lloyd Jordan	IT Project Manager III, KCIT	Project Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	5/29/14	John Storch, Lori Dickneite	New, initial draft	1 hours
Conceptual review	6/28/14	Lori Dickneite	Updated final document	1.5 hours
Project Planning	3/20/15	Aaron Barack	Review	.5 hours
Project Implementation	2/10/16	Lloyd Jordan	Review	1.0 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)
   This investment will expand wireless experience for users in the county's facilities and will double the number of users from the current capacity with increased capabilities. The upgrade will support video, audio, and file downloads. Security access will also increase by leveraging virtual network logic to improve administration of access, security, and logical partitioning of public and business environment.

   Current wireless environment (about 1~~Meg~~ MB per user) allows average user ability to do only email, chat, phone text, but not large downloads, video, and most audio

2. *What is the current baseline for this measure?*
   - 10-25 users per wireless access point at 1 ~~Meg~~ MB per user. Allow only for email, chat,

phone text, but not large downloads, video, and most audio

- Lync is not available via wireless
- Connection/response time for email is about 3-5 seconds

3, What is the target for this measure? (How much improvement will this project achieve?)

- 50 users per wireless access point at 10 ~~Meg~~ MB per user. 10 ~~Meg~~ MB will support video, audio, and file downloads
- Lync will be available for conference calls or general communications throughout the building
- Average connection/response time for Email and Web access will be about 2-4 seconds. This is also depending on end user's device and other non-wireless factors such as email server load

4. When is the benefit likely to be achieved?

Benefit will be achieved upon deployment and installation of equipment throughout the project. The project has an estimated end date of 12/31/2016

As part of Project Management Institute (PMI) framework, the project went through an analysis phase, encompassing a detailed review of the requirements based on the wireless architectural design. From the analysis, it was determined that the existing funding would be insufficient to complete the stated deliverables. This was brought before the PRB and the project has been placed on hold until further discussion.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   The current wireless access points system serving King County high occupancy were installed in years 2007/2010/2011 and have passed end of life. Some equipment is no longer supported by vendor. The current system provides an average of 1 MB per user for up to 1950 concurrent users in a high user density building (eg. Chinook). Any additional users reduce the wireless speed/bandwith for everyone. The wireless industry rapidly upgrading the standard in response to demand in consumers' mobility and vast growing mobile devices that require more and more bandwith to keep up with consumers' demand of high speed connections. The latest industry standard that will be available 4th quarter 2015, provides a potential up to 100 MB per user. Average life of equipment replacement

would be five years, but business demands for higher speed over time may dictate a shorter replacement cycle.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   The current wireless system is more than five year old and must be replaced. Not upgrading the system will lead to degradation of wireless performance as more users (King County employees and visitors to County's facilities) deploy their mobile devices and depend on them. Not providing an optimum wireless performance will contradict the County's mobility strategy and discourage users to use their wireless device. New upcoming applications such as case management system will rely heavily on wireless infrastructure for usage in the courts environment.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

IT Project Benefits Achievement Plan (Version 2)

To complete this document fully, please read all of the colored sections and fill in the white cells.
For assistance in completing this form, please contact your PSB analyst.

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

King County Department/Agency Name	KCIT
Project Title	Exchange to Office 365 Adoption
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, King County Chief Information 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
Temujin Baker	IT Enterprise Manager I/KCIT	Service Owner
Molly Gordon	IT Business Analyst/KCIT	BA Assigned to Business Case Writing

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate “review only” in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Conceptual Review/Business Case	4/1/2015	Molly Gordon	New, initial draft	1 hour
Conceptual Review/Business Case	4/9/2015	Molly Gordon	Revision: Made updates based on recommendations of Service Owner (Temujin Baker)	30 minutes
Conceptual Review/Business Case	7/1/2015	Molly Gordon	Validate data with new dates	30 minutes
Conceptual Review/Business Case	7/31/2015	Temujin Baker	Validation and review of data	1 hour
Annual Reporting	2/12/2016	Temujin Baker	Annual BAP Reporting	
Council staff review of annual BAP	6/20/2016	Jenny Giambattista	Annual BAP Report	30 minutes
Adding category 2 and metrics per Council staff review	6/22/2016	Temujin Baker	Annual BAP Report	

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

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☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved*

by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

Update 6/20/16 : Added benefits and measures for internal operations

1. ***Describe why you expect the proposed IT investment to produce the benefit(s).***
   We're just moving employee email from on-premise servers to a cloud service. It is expected to be a seamless experience for the user. Larger mailboxes will enable employees to focus more on doing their jobs than managing email. Not having to maintain costly infrastructure (servers and storage) frees up engineer time for more value-added work. Being able to search in one place files (SharePoint and OneDrive) and email for public disclosure requests reduces time for collection. Cloud architecture builds into it an expectation of 100% uptime.

2. ***How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)***
   We will survey users and report on a summary of user experience with the new solution including at least
   1) overall satisfaction by user with the migration of their email
   2) overall satisfaction by user of the new cloud solution as compared to on-premise exchange
   3) improvement in managing e-mails and responding to public disclosure requests
   4) system uptime versus on-premise solution
   5) IT staff time to maintain cloud solution vs on-premise solution

3. ***What is the current baseline for this measure?***
   1) User satisfaction for migration: n/a; will conduct survey after migration
   2) User satisfaction for cloud: We don't have a current baseline for the on-premise, but will conduct one before mailboxes are migrated.
   3) E-mail management: We will poll PIOs and others involved in gathering data (investigations) to determine current time to deliver the requested information.
   4) System uptime: We will calculate total downtime for on-premise solution from all planned and unplanned downtime activities. We will monitor and verify any downtime of the cloud solution through the Microsoft Office 365 Administrator Portal combined with user experience.
   5) IT staff time to maintain: query operations staff on time to support on-premise solution.

4. ***What is the target for this measure? (How much improvement will this project achieve?)***
   1). We expect that 95% of users are satisfied with the migration of their email.
   2.) We expect that 95% of users are neutral, satisfied or report improvement with their email now in the cloud.
   3.) We expect that 95% of applicable users (eg. PIOs) report improvement in responding to public disclosure requests
   4.) We expect to have 99.99% uptime (availability)
   5.) We expect staff time for maintenance of the cloud solution to be zero.

5. *When is the benefit likely to be achieved?*
   Some of the benefits (1, 4) will be able to measure immediately upon completion of the project. For

the first two departments that will be 9/30/2016. Other benefits can be measured 6 months to 1 year after the project is completed due to time needed for users' familiarization with the new available features and operational transition period for staff.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. ***Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.***

~~King County currently operates email through on-premises servers and ad-hoc local license purchases, despite having an existing Office 365 Enterprise agreement that would allow email to be operated in the secure G-cloud. The county's current email/productivity app practices, developed two decades ago, contribute to several operational challenges, such as:~~

- ~~Limited and scattered email storage~~
- ~~Costly maintenance, support and monitoring (back-up) of on-premises servers~~
- ~~Costly, ad-hoc staff time associated with manual software updates and upgrades~~
- ~~Lack of access to collaboration, integration and security innovations~~

~~With SharePoint already successfully operating in the G-cloud, King County is now positioned to fully utilize its existing strategic investment. Without any extra capital costs, funding the migration to cloud-based email will reduce infrastructure costs, maximize IT enterprise investments, leverage modern industry-standard technology, and increase mobility.~~

~~Migrating to the G-cloud allows King County to increase its operations in the enhanced environment that is compliant with government regulatory requirements like CJIS and HIPPA.~~

Updated 02/12/2016:

We are currently running Exchange 2010 which is six years old software and no longer in Mainstream Support by Microsoft. We are in what's called Extended Support which means if they find any bugs with the software, they won't fix them. Only critical security issues.

Also, the server hardware is approaching end of life on 10/1/2016. If we simply upgrade what we have then we will need to purchase servers, training, and services to come up with an architectural design (as Exchange 2016 is vastly different than 2010), install Exchange 2016, and then help us migrate to Exchange 2016. We leverage the cloud or a new, costly infrastructure for on-premise Exchange. Either way, we will have to migrate the County off of our old system. Our proposal is to

the cloud.

King County currently operates email through on-premises servers and ad-hoc local license purchases, despite having an existing Office 365 Enterprise agreement that would allow email to be operated in the secure G-cloud. The county's current email/productivity app practices, developed two decades ago, contribute to several operational challenges, such as:

- Costly maintenance, support, and back-up of on-premises servers
- Costly, ad-hoc staff time associated with manual software updates and upgrades
- Continual hardware and software upgrades

With SharePoint already successfully operating in the G-cloud, King County is now positioned to fully utilize its existing strategic investment. Funding the migration to cloud-based email will reduce infrastructure costs, maximize IT enterprise investments, leverage modern industry-standard technology, and increase mobility.

Costs to run and support Exchange on-premise for the next 10 years are $8.4 million. Costs to migrate email and run it in the cloud for the next 10 years are $2.0 million.

2. ***If the primary reason for the project is risk reduction, please estimate the probability of the risk or describe how likely it is to occur.***

N/A –

The primary reasons for migrating email to the G-cloud are to contain and decrease operating costs, to maximize existing IT investments, to increase the utilization of the secure G-cloud environment, and to increase mobility.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

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2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

3. *What is the current baseline?*

4. *What is the target for this measure? (How much savings will this project achieve)*

5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.

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Example:

Metric Description	Metrics	Baseline	Target	Actual
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IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. 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	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
Ken Wyatt	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
Jim Keller	IT Project Manager/ Department of Information Technology	LSJ Phase Lead
Christine Chou	CFO/KCIT	Financial Analysis

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Project Implementation	3/5/14	Andy Hill	New, initial draft	2 hours
Project Implementation	3/9/15	Andy Hill	Update	1 hours
2015 Supplemental	4/28/15	Andy Hill	Update	
Project Completion	01/10/16	Christine Chou	Annual and Final BAP	1 hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

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3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   The mainframe project is to move all applications and data currently residing on the mainframe (MF) to the County's Windows Server based Standard Virtual Environment (SVE). The environment will be C#.net and SQL Server, current and prevalent technologies in place in the market used for applications and databases.

   The current mainframe was purchased as a replacement for $89,634 to facilitate an easy transition into the Sabey Data Center in December of 2009. The new Mainframe allowed a simplified transition of all hosted applications to be copied over from the old Mainframe. It was acquired from the IBM Reseller Division to bridge the gap until the county could modernize all of their applications into a virtual server environment. The total operational costs for this burning platform are 3.3 million dollars a year. By porting over the applications onto a virtual server environment the operational costs will be a fraction of existing mainframe operational expenses. The Mainframe is an aging technology inhibiting business process reengineering and costing the County millions of dollars each year to operate. The code is written in archaic programming languages and the skillset needed to manage the code is no longer readily available in the workforce. By upgrading the hardware and software to virtual servers, modern relational database and new era programming language, the hardware and support costs will be drastically reduced. Having the applications hosted in a modern computing environment will allow for greater access to data and programming enhancements. The data was originally stored in formats that required custom reports to be written by Analysts at KCIT. With the data modernized, this data can be made accessible to end users by building data warehouses, ad hoc report generators and pivot tables allowing users to do real time analysis of data without custom development for each request for data. The code generated will be in C#, a standard programming language that is the de facto standard at King County and across many organizations in the area. This will allow for a broader pool of resources available to be able to make code changes and ensure stability with the current systems and reengineering in the future as seen fit by evolving business demands.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   There are 3 main risks to not doing this project.
   First the cost of operating this archaic technology will continue to go up as fewer and fewer resources are available to support this. The hardware required to run the mainframe is increasingly becoming scarce and therefore harder to find and more expensive. The price tag for operating the Mainframe is fixed and does not scale up or down based on business/technical needs unlike the virtual server environment the project will move to.

Support for this technology, both in vendor and King County FTEs are rare. Vendor support is scarce and expensive because of the dwindling number of mainframes being used in organizations.
This will jeopardize key County functions like property assessments, property tax collection and the management of inmates at King County detention facilities. There is less and less workforce that is readily available to maintain, operate or program on the Mainframe environment with the exception of current staff providing on the job training.

Finally, businesses have been severely constrained in their ability to reengineer their business process and reacting to legislative changes to their operations. Not doing this project will not allow business to adopt a more dynamic approach to delivering on their mission, and reduce their effectiveness to the citizens of King County.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
   By moving the application to the more modern platform, the ongoing platform cost will be at least 2/3rd less than the current mainframe operating cost ($3.3M vs. $1M)

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
   ~~Starting in 2015 2016 budget, the new platform cost charge would be $1M to replace the prior year mainframe on-going cost of $3.3M. This will be validated after year end 2015 2016~~
   In 2015 budget, customers already enjoyed the savings. The annual charge is $1M instead of $3.3M, created $2.3M annual savings. However, the extended project timeline in 2015 will cost and additional $0.5M to mainframe operations that will reduce the savings for 2015. The mainframe operation cost is no longer applied in 2016 after the mainframe was decommissioned in December 2015.

3. *What is the current baseline?*
   $3.3M

4. *What is the target for this measure? (How much savings will this project achieve)*
   Savings will be $2.3M

5. *When is the cost reduction likely to be achieved?* ~~2015~~ 2016 for full annual benefits. Vendor contracts were discontinued and support staff retired or took over the new platform.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

Description:

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.

Metrics:

Annual savings/cost avoidance upon completion of the project

Baseline:

$3.3M infrastructure operating cost

Target:

$1M ongoing infrastructure operating cost starting in 2015

Actual:

$1M ongoing infrastructure operating cost starting in 2016

Getting off the mainframe has mitigated the risk, the primary reason for this project.

In addition, we are already able to facilitate business enhancements in the new .NET environment and access to data is much easier with SQL versus the legacy, proprietary mainframe databases. For example, we redeveloped key interfaces such as the Washington State Patrol using modern tools that do not need to be redeveloped when a new jail management system is purchased that will save the county at least $500k and potentially more. Manual cut and paste processes on the mainframe were converted to automated reports that will save hundreds of hours in the records section of the jail

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	KCIT
Project Title	PSERN (Puget Sound Emergency Radio Network) Project
EBS Project Number	1126875 (Project # for Phase 3 and subsequent project phases)

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Bill Kehoe, CIO

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Tony Minor	Manager/KCIT	Technical Input (O&M)
Sean Douglas	Electronic Communications Specialist /KCIT	Technical Input (O&M)

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

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Annual Reporting	2/12/16	Hai Phung	New, initial	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:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

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■ 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 criteria for the system design calls for a more stringent level of radio signal throughout the radio service areas. Because of this the system vendor has been asked to design a network that will increase the amount of signal present in any given location within the service area. The service area is also defined in a new and enhanced manner which also equates to a greater probability that signal will be present at locations within the service areas. Rather than having a single large area of coverage, the county was divided into 43 separate areas (39 Cities, 3 major highways in the mountains, plus a large portion of unincorporated county) with each of these areas having specified coverage requirements.

2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

Extensive coverage testing will be completed over several months after all infrastructure operational and functional testing is complete and before users are placed on the system. During this testing teams of testers will conduct several types of tests in "test tiles" that are 1/10th of one mile by 1/10th of one mile square. Each test tile accessible by automobile or boat will be tested by measuring the radio signal strength (for informational purposes only), by measuring the data accuracy (called a Bit error rate, or BER test) and lastly in a subjective "can you hear me now" test (known as a delivered audio quality, or DAQ test). For each accessible test tile both the BER and DAQ tests must both pass to pass the tile. 97% of all tiles must pass the testing to be considered a pass. This compares today with approximately 94% coverage of the county where there is a single coverage area is specified. With a single coverage area coverage holes can be very large and yet still meet the standards. By splitting the county into 43 coverage areas, this will ensure not only increased coverage but that the coverage holes are much smaller.

3. What is the current baseline for this measure?

The current baseline is 94% coverage.

4. What is the target for this measure? (How much improvement will this project achieve?)

97 % Coverage of the Primary Bounded Coverage area, which is the area of the county west of a line at 1250' above sea level. Also, the 3 highways heading to the east (US-2, I-90, and SR-410) will have 95% coverage requirements.

5. When is the benefit likely to be achieved?

The benefit will be achieved when the infrastructure is completely built, all radio sites have been proven to be operating according to specifications, system optimization has been completed and testing has been satisfactorily completed.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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   Extensive coverage testing will be completed over several months after all infrastructure operational and functional testing is complete and before users are placed on the system. During this testing teams of testers will conduct several types of tests in "test tiles" that are 1/10th of one mile by 1/10th of one mile square. Each test tile accessible by automobile or boat will be tested by measuring the radio signal strength (for informational purposes only), by measuring the data accuracy (called a Bit error rate, or BER test) and lastly in a subjective "can you hear me now" test (known as a delivered audio quality, or DAQ test). For each accessible test tile both the BER and DAQ tests must both pass to pass the tile. 97% of all tiles must pass the testing to be considered a pass. This compares today with approximately 94% coverage of the county where there is a single coverage area is specified. With a single coverage area coverage holes can be very large and yet still meet the standards. By splitting the county into 43 coverage areas, this will ensure not only increased coverage but that thee coverage holes are much smaller.

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Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   The current emergency radio system (ERS) contains electronic components that are eighteen (18) years old. Typically emergency radio systems have a life cycle of approximately twenty (20) years. The likelihood and frequency of component failures is increasing as the system ages and Motorola no longer sells or supports some of the system's critical components and plans to discontinue the sale and repair of all components in phases over the next few years. Components are still available on the secondary market; however, reliance upon the secondary market equipment is risky because the needed version of a critical component may not be available and the condition and service history of the components is unknown. In addition, certain geographic areas within the service region require improved radio coverage to meet the needs of a growing population within King County to include boundary limits that were not considered when the initial ERS was built eighteen years ago. At this time, radio sites cannot be added to expand coverage because Motorola no longer sells the necessary new equipment.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the*

risk or describe how likely it is to occur.

Radio System technology is extremely complicated. There are layers of operability, failure modes and redundancy that are purposely built into the system to ensure that it will meet end user needs. Today, when something breaks, it often does so without indication to the end users because of the requirements for 99.999% reliability. Single components in the radio system fail nearly every day. This could mean that one radio channel in one location is no longer available, but 22 other channels are available. It could also mean that a device called a "system controller" fails, but a redundant device takes over operations for the failed component. Again, these could go unnoticed by end users in nearly all "normal' use scenarios today. What is clear is that as time advances, the risk of failures increase due to system component age. Simultaneously, the ability to repair parts and get new parts is decreasing. The ability of the County to get parts on any secondary market is fraught with problems such as incompatibility, parts unavailability, and lack of functionality of the parts with our system. It is therefore probable that at some point after the secession of parts support from the vendor, the system will begin to suffer failures that will decrease capacity, reliability and/or coverage if something is not done to address this. It is not a sudden "event" that will occur on a certain date, but rather is likely to be a gradual chain of events that will impact the radio system over a period of time. By implementing a new more reliable system with new components, the potential for the risk of equipment and software failures, service outages and system interruptions will be reduced. The need for replacement parts will no longer be a concern and the risk of using secondary parts will be eliminated.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

3. *What is the current baseline?*

4. *What is the target for this measure? (How much savings will this project achieve)*

5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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

IT Project Benefits Achievement Plan (Q1 2015 Version 1)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

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: Kristin Colburn , King County ITSM Strategy and Process Manager

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
~~Bob Micielli~~	~~Technical Services Manager~~	~~Project Point of Contact~~
Krista Bautista	IT Service Center Manager / KCIT	IT Service Center Manager
Kristin Colburn	ITSM Strategy and Process Manager	Development of ITSM strategy and implementation of processes

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
Annual report	3/9/15	Kristin Colburn	Changes to Category 2 Benefits 1a, 1b, 1d, 2 and 5. Section 7.	2 hours
Annual report	2/12/16	Kristin Colburn	Change in Business Owner; Strikeout name of Project Point of Contact who is no longer with KCIT; benefit	1 hour

				will be measured in April, one year after implementation.	

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

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.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s). This project is to implement Information Technology Infrastructure Library (ITIL) recommended industry best practices and its supporting tools, the following benefits relate to increased quality of service:*

    a. *Update – 3/9/2015:*

    Reduced number of high-impact technology outages. Implementation of best practices for problem management and change management and the tools that support these practices will allow for more proactive solutions to prevent technology outages rather than reactively dealing with these major incidents after they have affected business operations. Implementing the change management tool in LANDESK will enable automated and consistent tracking and reporting of change-related incidents. The improved change management process will support a more disciplined approach to assessing risk associated with making changes, resulting in higher volumes of successful changes. Implementing the problem management tool in LANDESK will enable higher visibility into the types of recurring issues that require long-term solutions and provide information to help reduce the duration and frequency of service

outages. In addition, a shared best practice vocabulary will result in more meaningful conversations and more accurate reporting associated with "incidents", "problems" and "changes" across agencies and support groups.

~~*Reduced number of major incidents causing technology outages – Implementation of best practices for problem management and tools that support these practices will allow for more visibility of technology allowing for more proactive rather than reactive resolution of major incidents before they occur. Implementing the Change Management tool in LanDesk will enable tracking of major incidents caused by controlled changes; and implementing the Problem Management tool in LanDesk will enable better and more consistent problem management to prevent more major outages. Meanwhile, the problem caused by the use of various definitions of "major incident" across agencies and support groups and inconsistency of reporting process will be resolved by following best business practices and common terminology that will result in a more accurate counts and comparison.*~~

b. *Update – 3/9/2015:*

The application of ITIL best practices and improved tools will result in quicker and more effective response and resolution of incidents related to unplanned technology outages. The addition of the problem management module in LANDESK supports the separation of incident records from problem records, which is impossible today, enabling us to identify and invest in the permanent resolution of issues that are chronic and continue to interrupt business operations. Adopting and implementing standard and consistent problem management practices will reduce the frequency and duration of service outages. Currently, the average time it takes to resolve a major incident is 3.4 hours. By applying new problem and incident management techniques, we expect to reduce this by 30% in the short term.

~~*Reduced meantime to resolution (MTR) of technology outages during major incidents – Applying ITIL best practices and enhancing existing tools will allow for more visibility of technology, allowing for quicker response and resolution of major incidents. The Problem Management tool in LanDesk will allow for incidents and problems to be separated into groups, which is not done today. Better incident organization along with best practices will enable better and more consistent problem management to resolve issues more quickly and prevent more major outages. At this time, the average MTR to fix a major incident is about 3.4 hours. The goal is to reduce this by 30% by the close of the project.*~~

c. *Better customer satisfaction through reduced hold time with the Service Center. Implementing standards and improving ~~LanDesk~~ LANDESK will ensure better visibility on the status of incidents and problems and accessibility for both Service Center agents and customers. This resolves a problem of high number of calls related to same incidents, creating long hold times for customers. Because there is no standard process for responding to incidents or problems, there are customers that are left on hold for long periods of time while Service Center agents attempt to respond to similar calls. This can create a backlog of customers on hold. We are anticipating that by putting out a system that actually will identify the incident early and communicate that, we will prevent or decrease the calls that will be made due to that incident. The goal is to reduce the number of calls during major incidents by 30% after implementation.*

d. *Update – 3/9/2015:*

Reduction in change-related incidents. By providing change management process automation in LANDESK and applying change management best practices, incidents related to authorized changes will be reduced. There will be a single focal point for changes to supported services, minimizing the probability of conflicting changes and potential disruption. Standard methods and procedures will be used for efficient and prompt handling of all changes in order to minimize the impact of change-related incidents on business continuity, service quality and re-work. The impact and information related to these types of incidents will now be tracked, measured and analyzed for improvement. An improvement goal will be determined after a reliable baseline is identified.

~~*Reduced issues related to scheduled changes – By implementing the Change Management tool*~~

~~*in LanDesk and applying ITIL Change Management best practices, issues related to planned changes will be reduced. At this time, there is no ability to count the number of incidents that are related to scheduled changes. By implementing the Change Management tool, we can begin tracking and monitoring those issues. Also by using the LanDesk Problem Management tool and ITIL best practices, those issues can be resolved and prevented. After implementation of the Change Management tool, we can create a baseline and count the number of change related issues reported. The goal would be determined after the baseline is identified.*~~

e. *Each of the above benefits can provide avoidance of employee time spent waiting for technology outages to be resolved.*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   - *Update – 3/9/2015:*
     Reduced number of technology outages resulting in major service interruptions
   - ~~*Reduced number of major incidents causing technology outages,*~~
   - *Reduced time to restore service during a major incident*
   - *Reduced number of Customer calls during major incidents*
   - *Tracked and reduced number of issues related to scheduled changes*

3. *What is the current baseline for this measure?*
   Update – 3/9/2015:
   We will use current Metrics as captured in ~~*the LanDesk*~~ *LANDESK (our incident ticket tracking system) and manually from 2013. We also have a Root Cause Analysis process that we do after every major incident that we manually capture as a metric. We will use this as a baseline to see a decreased # of major incidents and amount of time to resolution.*

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   - *Major Incidents reduced by 30%, currently at 42 major incidents per year*
   - *Reduce the meantime to resolve major incidents by 30%, current average is 3.4 hours*
   - *Reduce number of customer calls during major incidents by 30%, currently at 5,013 per year*
   - *We will start measuring, tracking issues, and setting improvement target related to scheduled changes after the implementation of the project that will enable this effort.*

4. *Update - 3/9/2015:*
   When is the benefit likely to be achieved? We expect to start seeing some benefits in the middle of ~~*2014*~~ *2015 once we have the training and some processes in place for Major Incident* ~~*Reduction*~~ *resolution. The metrics will really show the results after a process has been in place for a year (mid* ~~*2015*~~ *2016).*

   Note: Timelines for benefit realization have been changed. When the BAP was written the project was expected to start at the beginning of 2014, but didn't kick-off until April of 2014. In addition, the implementation of the tool to enable the improved processes will not be complete until April of this year (2015). Due to these changes the described benefits will not be reported until 2016.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in*

complying with tax and regulatory issues.

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

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3. *What is the current baseline?*

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Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

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Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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
Update – 3/9/2015: Reduce technology outages causing major incidents. ~~*Reduce major incident causing technology outages.*~~	*Number of incidents per year*	• *Update – 3/9/2015: 42 major incidents per year* ~~*42 incidents per year*~~	• *Update – 3/9/2015: 29 major incidents per year* ~~*29 incidents per year*~~	
Reduced time to	*Meantime to*	• *3.4 hours*	• *2.4 hours*	

restore service during a major incident	*resolve (MTR) a major incident*			
Reduce number of customer calls during major incidents	*Number of calls during major incidents per year*	• *5,013 calls per year*	• *3,509 calls per year*	
Ability to track issues related to planned changes	*Availability of metrics*	• *N/A*	• *Reporting metrics one year after project implementation*	

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

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King County Department/Agency Name	**KCIT**
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~~ Aaron Barak, IT Operations Director**

Service Owners: Mike Berman ITDSM-DOT, Sue Delaat ITDESM-DNRP, James Marsh ITDSM-DES

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
~~Belinda Rose~~	~~Customer Service Director, KCIT~~	~~Sponsor/Business Owner~~
Aaron Barak	CSS Owner	Business Owner
Mike Berman	ITDSM, DOT-KCIT	Steering Committee Member/Service Owner
Sue DeLaat	ITDSM, DNRP-KCIT	Steering Committee Member/Service Owner
James Marsh	ITDSM, DES-KCIT	Steering Committee Member/Service Owner
Scott Peterson	Project Manager, KCIT	Project Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies

(the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
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Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Conceptual review	9/12/13	Scott Peterson	New, initial draft	2 hours
Conceptual review	10/30/13	Scott Peterson	New From	30 min
Conceptual review	11/5/2013	Mike Berman	Added answers	30 min
BAP Review	3/20/2015	Mike Berman/Scott Peterson	Council's questions answered	1 hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
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4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

X Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

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☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

~~Each agency in the Executive Branch currently spends time and resources maintaining their own image process and images. By creating a standard image process and baseline standard image, each agency will have more time and resources to concentrate on other support needs~~.

Updated 3/20/2015

Each agency in the Executive Branch currently spends time and resources maintaining their own image process and images. By creating a standard image process and baseline standard image, a wide range of computer build automation can eventually be achieved, reducing actual core system build time and increasing quality of the finished product. These efficiencies will give each agency more time and resources to concentrate on other support needs and ensuring the same high quality with other manual portions of the build process.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

We will compare the average time it takes to build a computer from scratch today and compare it to the time it takes after the project and following the new process.

3. *What is the current baseline for this measure?*

~~County-wide the measured number of incident tickets for a six-month period was 16,350. Extrapolated to one year would equal 32,700 incident tickets. The conservative projection is that we can impact 10% of all incidents =3,270 incidents at 30 minutes each incident = 3270* 30 minutes/60 =1,635 support hours of end user time saved. The current time it takes to build a computer from scratch is _____.~~

Updated 3/20/2015

Currently the build time takes an average 1.5 hours. The new image takes an average 1 hour. We eliminated the measurement based on the number of tickets since the tickets may represent other causes not related to image standardization.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   ~~**The target is 10% or if we average the typical labor cost of a KC employee at $65/hr., then this would result in a 1635*50 cost savings of $106,275. Subtract the time it takes after the new image is complete from the time it takes today with the new image.**~~

Updated 3/20/2015

The target is reduction of 10% of staff time currently involved or about 1,635 hours. These efficiencies will be redirected to other support activities to ensure high quality of the build process.

5. *When is the benefit likely to be achieved?*

~~**Each agency will see this savings as soon as they adopt the new standard image process and new standard baseline image.**~~

Updated 3/20/2015

Efficiency will be achieved within 1 year of the completion of KCIT alignment or roughly Q2 2016.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.* **This project is standardizing the process to image a computer with one standard baseline image. This upgrade is necessary because each agency currently completes this work in silos and they all use a different image. Moving to a standard process and standard baseline image, the County will save time and money by allowing each agency's support teams to concentrate more time supporting the ever-increasing number of automated devices that require technical set up and support.**

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

2/11/16

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the*

measures identified above. If not achieved, explain why.

This project to standardize the workstation imaging and configuration process has been successfully completed in January 2016. The anticipated benefit was to reduce the average amount of time required to install the standard base image (consisting of Windows OS, hardware drivers, virus protection software and other standard enterprise system components) by 10%. At the beginning of the project the estimated amount of time spent on applying the base image components to a workstation was 1.5 hours. The work was being duplicated in all agencies, by a large number of IT staff.

Currently, the process of applying the "Universal Workstation Build" (base image) to a standard laptop (Dell Latitude E7450) takes about 40 minutes. This process is largely unattended. The KCIT CSS Provisioning Center is equipped to run up to 98 systems for unattended imaging simultaneously.
To quantify the benefit, the amount of time to apply the base image has been reduced by 44%. Additionally, systems are no longer imaged 1 or 2 at a time, but 50 or 60 at a time.

The benefits achieved go beyond what was expected.

With the same tools used to install the base image, other software installation will be automated to the degree that end user requests can be, in many cases, fulfilled by the Service Center on first contact, or by the end user in a self service capability.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*
PC Provisioning Time	*Amount of time required to*	*1.5 hours per workstation*	*1 hour per workstation*	

	image a workstation with operating system and base software load			*40 minutes per workstation*

IT Project Benefits Achievement Plan (Version 3)

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

King County Department/Agency Name	KCIT / King County GIS Center
Project Title	2015 Regional Aerials Project
Project Number	1124187 (Award 115936)

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Bill Kehoe, CIO

Section 3. Who is involved in developing the BAP?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Gary Hocking	ITSDM / KCIT-DNRP	Process guidance
George Horning	KCGIS Center Manager / KCIT-Regional Services	Project sponsor
~~Scott Lackey~~ ~~Michael Fisher~~ David Curtiss	Project Manager / KCIT-PMO	Project management
Mike Leathers	KCGIS Center Data Coordinator / KCIT-Regional Services	Technical guidance

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during “gate two” phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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 BAP?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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	3/12/14	George Horning	Initial draft	7 hours
Budget process	6/27/14	George Horning	Changed primary project benefit to Category 3, updated and added benefit descriptions	1 hour
Budget process	7/29/14	George Horning, Mike Leathers	Updated based on feedback from Council staff.	1.5 hour
Standard BAP periodic updates	3/6/15	Scott Lackey	Standard regular updates as requested by Karl Nygard	1 hour
Annual BAP Review	5/24/16	David Curtiss	Changed PM assignment & added clarity in cost reduction section.	3 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*
5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites 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.***

   There is a vital need to replace the county's 2012 aerial imagery (vertical photos taken from aircraft which are geometrically corrected to create an accurate representation of the earth's surface). These photos have aged beyond the desired two year replacement cycle established by the King County Geographic Information System Technical and Oversight committees. It will be a full three year interval when the proposed 2015 aerial imagery is finally captured. There has been significant development activity in King County since 2012 and the new imagery will provide a detailed view of up-to-date ground conditions enabling county agencies to make better informed decisions to serve the public. Aerial imagery is a key data component for agencies in performing mapping, query, analysis and decision-making in support of their business functions such as facilities management, natural resource conservation, property assessment, building permit and land development review, and situational awareness during emergency operations. For example, King County Assessments depends heavily on aerial imagery to determine changes to real property, and the Road Services Division uses the imagery to map maintained infrastructure increasing the accuracy of their asset inventory and reducing the need for field visits.

2. ***If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.***

   The primary risk in not obtaining new aerial imagery is a continuing degradation in the county's

ability to understand conditions on the ground. As the accuracy of the 2012 imagery diminishes, land use decision making will suffer, emergency situational awareness will decline, needless site visits will be scheduled, asset management will suffer, property appraisal will become more difficult, etc. The degradation is currently already impacting some groups due to rapid urban development changes impacting various infrastructure areas include utilities (due to asset relocation, impacting their maintenance and disaster response costs); planning and permitting; tax assessments; storm water runoff calculations; etc.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Updated 2016-05-24*

   Describe why you expect the proposed IT investment to reduce costs?

   Reduced Costs to the County: The project will reduce cost for the County to acquire aerial imagery through leveraging volume discounts and sharing costs with around 100 partner agencies (mainly cities and utility districts). The 2012 Regional Aerials Project, with over 50 participants, generated cost reduction of 57% for the County. The team is working toward better results for the 2015-16 project, having almost twice the number of participants than in 2012. In addition to volume and shareing cost savings, all the participants are able to acquire higher resolution and quality imagery, than in 2012. Higher resolution imagery equates to better detail, thereby satisfying a wider range of business needs and increasing the return on investment.

2. *Updated 2016-05-24*

   How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)

   The cost reduction measures will be calculated as the sum of volume discounts received, plus the additional savings the county realizes by sharing with participants the costs of 'imagery of joint interest', divided by the total costs if without discounts and sharing.

3. *Updated 2016-05-24*

   What is the current baseline?

   The baseline is the total costs of ordered imagery, priced as if unshared.

4. *Updated 2016-05-24*

What is the target for this measure? (How much savings will this project achieve)
The target for the 2015-16 project is to save 60% of total unshared unit costs through volume discounts based on the size of the project, plus additional costs KC realized by sharing the cost of common interest imagery with participants.

5. *Updated 2016-05-24*
When is the cost reduction likely to be achieved?
As deliverables are accepted and invoices paid for, following the completion of each vendor implementation milestone.

As contributions to the project occur funding the work for the stated deliverables and the invoices the deliverables are paid. The County's contribution to this project is lower than the 2012 Regional Aerial project.

There are also possible time and cost savings to be realized for the next project (due to re-usability of RFP data, specification clarity, project management diciplines, and Quality Assurance documentation) shortening project initiation, speeding RFP development, and other soft but important benefits.

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
Reduce cost to deliver service. This project reduced processing time from the current average of 10 days to <1 day allowing us to take advantage of prompt payment discounts.	*Processing time, annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10% of purchases are receiving discount* • *Savings of $100,000*	• *1 day processing time* • *30% of purchases are receiving prompt payment discounts* • *$400,000 savings*	• *2 day processing time* • *20% of purchases are receiving prompt payment discounts* • *$200,000 savings*

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

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 IV, King County Regional AFIS	Project Manager
Carol Gillespie	Manager, King County Regional AFIS	Project Sponsor
Ryan Abbott	Deputy, King County Sheriff's Office	Pilot participant and RFP evaluator

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	11/12/13	Patty Klopp	New, initial draft	2 hours
Annual Report	03/18/15	Patty Klopp	Update Section 7	1 hour
Annual Report	05/19/16	Patty Klopp	Update Section 7	30 minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

   This project will provide law enforcement officers throughout King County with mobile handheld fingerprint capture devices that they can use to identify subjects in the field. This project will improve operations in three ways:

Benefit 1: Officers will be able to get the results of their Question of Identity (QID) checks faster providing them with the information they need to make critical decisions about a subject.

Benefit 2: This project will increase the amount of time officers are on the street providing law enforcement services. In the current environment when a subject's identity is in question, the officer has the option to transport the subject to a stationary electronic fingerprint capture workstation (livescan) site for fingerprint processing. The

amount of time this takes can vary from one (1) to two (2) hours depending on several variables. With the mobile device, the officer will have the ability to ID a subject on-the-spot.

Benefit 3: Easier for officers to use. The new device is much easier to use than the livescan. It requires neither extensive training nor consistent use to remain proficient.

2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

Benefit 1: Comparison of the time it takes to receive a response with the mobile device versus existing QID livescan submissions.

Benefit 2: We will measure whether officers have more time on the street from not transporting subjects for QIDS by surveying officers to ask in cases of non-jail bookings whether they used the mobile device in lieu of transporting the subject to a livescan site for identification.

We are not able to track additional time on the street because in some cases officers will use a mobile device and then need to transport the subject to jail anyway, thus there would not be a savings of transport time. We will not have data that distinguishes between the use of the mobile device in the field and then the subject being booked in the jail versus those mobile IDs that are not transported.

Benefit 3: We will survey officers to learn their opinion on the ease of use and functionality of the new device.

3. What is the current baseline for this measure?

Benefit 1: Our estimate is it currently takes up to one hour to receive results from the existing livescan submissions. This is because the officer must roll a full set of fingerprints (fourteen images), fill out a form that must be faxed to the AFIS Tenprint Unit, the officer must also call and notify the Tenprint Unit of the QID, the Tenprint Unit manually processes each submission and then calls and faxes the results to the officer. The amount of time it takes the officer to roll the fingerprints depends on the officer's experience with livescan and the quality of all of the subject's fingerprints. In addition, it takes time to transport the subject to a livescan location.

Benefit 2: Using a conservative number, we estimate officers currently are off the streets for 2,000 hours a year in order to transport subjects for QID livescan processing.

Benefit 3: Based on informal user interviews with officers, we know that some consider the current livescan system to be cumbersome and not user friendly.

4. What is the target for this measure? (How much improvement will this project achieve?)

Benefit 1: We expect officers to be able to receive a response within two (2) minutes of electronically submitting the fingerprints.

Benefit 2: In identifying non-booking subjects, we anticipate officers will use the mobile devices consistently in place of transporting the subject to a livescan site.

While we won't be able to verify due to the data limits described above, we estimate officers will be able to be on the street for 500 more hours a year. This is based on 2012 QID statistics of approximately 2,000 QIDs. Approximately 50% of those are known to be booked (1,000) so the officer would have been off the street anyway for transport only (approximately 1,000 hours). There are no statistics to support the remaining 1,000 QIDs, but we would estimate 50% end up not being booked generating 500 hours in savings.

Benefit 3: We anticipate 99 percent of surveyed officers will find the mobile technology user friendly and functional. KCRA's target goal is for the mobile devices to be consistently used by the agencies where they are distributed. A plan will be in place to monitor usage and redistribute as appropriate.

5. *When is the benefit likely to be achieved?*

   We would expect to see an immediate benefit within the first quarter of deployment of devices.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *<u>Reduced cost to produce service</u>. 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: *<u>Cost Avoidance.</u> 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	*Processing Time annual savings, and percentage of purchases receiving prompt*	• *10 days processing time* • *10 percent of purchases are receiving discount*	• *1 day processing time* • *30 percent of purchases are receiving prompt payment discounts*	*2 day processing time* *20 percent of purchases are receiving prompt*

of prompt payment discounts.	*payment discounts*	• *Savings of $100,000*	• *$400,000 savings*	*payment discounts $200,000 savings*

Benefit Achievement Summary

Benefit 1: We expect officers to be able to receive a response within two (2) minutes of electronically submitting the fingerprints.
On average, officers are receiving a response within two (2) minutes from submission.

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.
For 2015, there were 4,680 uses. Using our methodology estimate of 50% not being transported for booking, this equates to approximately 2,340 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.

A survey was distributed in 2015 to all trained officers. Responses were received from 22% of the officers.

Metric Description	Baseline	Target	Actual
Officers receive results of their Question of Identity checks faster.	Up to one hour	Within two (2) minutes	79% report receiving responses within 2 minutes.
Increase the amount of time officers are on the street providing law enforcement services.	2,000 hours per year *this is not a feasible baseline for follow-up purposes	Officers will use the mobile device consistently in place of transporting a subject to a livescan location	84% report using the device consistently. Of the 9 who responded "No", two had just begun using the device and one had changed to a position that does not have much opportunity to use the device.
Easier method to use	Current method cumbersome and not user friendly	99% will find the technology user friendly and functional.	96% The remaining 4% is comprised of two (2) responses: one reported "No" due to connectivity issues and one answered they found it user friendly and functional "Sometimes".

Since that survey was conducted, the number of officers trained has quadrupled. Usage is monitored on a quarterly basis and agencies are contacted if a device is not getting used.

As of May 16, 2016:

Officers trained	1074
Devices issued (out of 260)	215
Agencies with signed ILA/MOU (out of 43 eligible)	38

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	**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 (no longer with King County)**~~
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:

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?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Initial – conversion of existing documentation into new format.	Feb 11, 2014.	Janielee Amina Osborne	Collecting and coalescing pre-existing documentation for the project into the new BAP format.	1 hour
Edited – based on 'notes/comments' in document on SharePoint.	Mar 24, 2014	Janielee Amina Osborne	Re-formatted to conform to requested standards.	1 hour
Reviewed	Feb 5, 2015	Janielee Amina Osborne	Reviewed to ensure continued accuracy.	½ hour
Reviewed with Amy Tsai.	Jun 16, 2015	Janielee Amina Osborne	Added 'Other Business Benefits.'	¼ hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☑ **Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services**

☐ Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

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1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

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3. *What is the current baseline for this measure?*

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5. *When is the benefit likely to be achieved?*

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Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

Per the original Grant write up by Joe Lewis for ORI: WAKCS00:

- *Describe why you expect the proposed IT investment to produce the benefit(s).*
  The goal of this request is that first level supervisors spend the majority of their time in the field providing direct oversight to line level employees. Additionally, the Sheriff desires to have available the tools necessary to effectively manage the scheduling of personnel from all Sections. To this end the Sheriff's Office has identified a software product that is believed to have the capability of automating most of the scheduling and reporting tasks and processes currently done manually. It is believed that implementing this software program will free up significant first level supervisor and manager time that can be spent directing and overseeing the work of the Sheriff's Office; consequently, enhancing community policing efforts and reducing risk to King County and its' employees. In addition to the above, Superior and District courts, prosecutors and public defenders will be able to make inquiries as to an employee's availability in scheduling activities such as interviews and trials. This program also provides rapid identification and automated contact to specialty groups and available team members, such as hostage negotiators or bomb technicians, for emergency events.

- *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
  Implementation will accomplish two major measurable goals. It will allow for the accurate collection and reporting of employee work and leave information that will allow the Sheriff to make thoughtful policy, supported by data. Additionally, it will free first-level supervisors and managers from the tedious time consuming tasks of scheduling and result in better oversight of employees in the field.

- *What is the current baseline for this measure?*
  First level supervisors and managers spend an inordinate amount of time filling absences to provide minimum shift coverage. Patrol sergeants can spend 30% to 40% of an eight-hour shift covering short-notice vacancies for the current day and trying to fill planned shortages on future days.

- *What is the target for this measure? (How much improvement will this project achieve?)*
  Each user group (Comm Center, SeaTac, Metro, Patrol units, etc.) will have their own specific measurements and benefits based on their realized time savings.

- *When is the benefit likely to be achieved?* ***Beginning in 2015 with larger benefits realized in 2016.***

Additional/Other business Benefits:

The Scheduling Project Purpose:

- Automate Scheduling Functions, interface with Human Resources, and interface with Payroll PeopleSoft (Time & Labor, Leave Banks).
- Meet KCSO overtime approval and contract billing requirements.
- Provide more equitable Overtime opportunity to employees. "System Ready" (NOT the Business Process) for Bi-Weekly Payroll.
- The Automated Scheduling Function of the project is to:
  - Eliminate IRIS OT slips,
  - Eliminate Paper Absence forms,
  - Eliminate use of Big Board, and
  - Provide an Integrated Communication system for automatic contact to Deputies regarding Scheduling.

Other Business Benefits:

- Provide more equitable Overtime opportunity and uniform application of rules for employees:
  - Rules based application structured to follow 9 union Collective Bargaining Agreements.
  - Date/Time stamp on electronic files for approval.
- Coalesced data for Human Resources, Payroll, Operations, Scheduling, and Training.
- Reduce Supervisor/Sergeant time spent for leave management.
- Reduce Supervisor/Sergeant time spent for time-collection.
- Reduce Supervisor/Sergeant time spent for scheduling.
- Reduce Supervisor/Sergeant time spent for timesheet review.
- Daily labor costing capabilities.
- Reduce time in collecting and researching information by using Reports functions.
- Improve business management decisions by using Overtime Reporting by Job Class, Specific Reason, Units, Section, etc.

- Minimize handling of approvals to KCSO Payroll. Example: a record entered by a Supervisor is automatically approved and listed for KCSO Payroll validation within the system.
- Reduced misapplication of premiums such as 4 hour minimums, Court No Show, etc.

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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3. *What is the current baseline?*

4. *What is the target for this measure? (How much savings will this project achieve)*

5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

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Example:

Metric Description	Metrics	Baseline	Target	Actual
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IT Project Benefits Achievement Plan (Version 2)

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King County Department/Agency Name	King County Sheriff's Office
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: Patti Cole-Tindall, Chief of Technical Services Division

Section 3. Who is involved in developing the Benefit Achievement Plan?

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Name	Title / Agency	Project Role
Judy McDermott	IT Project Manager / KCSO	Project Manager
Lynda Kamrath	IT Supervisor	Team member

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	2/11/14	Judy McDermott	Review existing project documents and compile into BAP	3 hours
Annual Report	2/10/15	Judy McDermott	Review Only	10 min
Annual Report	5/23/16	Judy McDermott	Review Only	10 min
Annual Report	6/8/16	Judy McDermott	Update Benefit Summary	2 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   The current system has old technology that is past its life cycle. The Total Enforcement (TE) system is built on newer technology and is more robust. It addresses Officer Safety concerns and potential liability issues we have with the current system. TE provides KCSO with new features (i.e. interface to Department of Licensing, attaching media files or pictures, Bing maps) that will assist the Officer in solving crimes and improve service to the public. KCSO will be compliant with Federal Government National Incident Based Reporting System (NIBRS) requirement.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   KCSO will have fewer system failures and be able to receive assistance from the vendor for ones that do occur. Eliminate the liability if a laptop is lost/stolen since there will not be any data residing on the laptop. Officers will have more historical data available to them when doing pre-incident investigations for calls. This will improve officer safety. KCSO maintain a 4% error rate when

reporting NIBRS.

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   Improvement for this project is hard to measure since this is new technology with new features.
5. *When is the benefit likely to be achieved?*
   After full implementation is complete in 2016.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   This project is meant to consolidate and replace three systems.
   - *IRIS (Incident Reporting and Investigation System) – For criminal activity*
   - *TESS (The Evidence Support System) – For evidence management*
   - *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*
  - *Currently the officers only have one year of data available in the car. With the new system they can access the entire database from 2006. When they receive a call, with the new system they will be able to perform pre-incident investigation on all calls and get the entire history. They will know the suspect was arrested two years ago for attacking police officers when they were called to a domestic disturbance. The officer will know that he should request back up for this call.*
- *New: Ability to attach media files to case files*
- *New: Interfaces to local, state and regional data systems*
  - *Ability to query local, state and regional systems from within the application (Department of Licensing, NCIC/ACCESS, SeaKing, etc.), eliminating multiple logons and improving efficiency.*
- *New: Full audit logs for case and evidence management*
  - *The current system does not have any audit logs of what is done on the system.*
- *New: Encoded and validated addressing*
- *Reduced liability with lost/stolen laptops*
  - *Currently one year of data is stored on each Officer's laptop. If the laptop is lost/stolen, KCSO must notify every person who's Personally Identifiable Information (PII) is at risk of compromise from the loss/theft. With the new system there is no data stored on the laptop. They connect directly to the server.*
- *Streamlined B138 process*
  - *Automates a process to request status and disposition on evidence being held at the Property Management Unit (PMU).*
- *Federal crime stat reporting*
  - *Compliant with National Incident Based Reporting (NIBRS) for the Federal Government.*

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

Benefit Achievement Summary

Benefit 1: Officers will have increased information access for officer safety.

When officers receive a call, with the new system they are able to perform pre-incident investigation on all calls and get the entire history.

Benefit 2: It significantly reduces potential liability issues we have with the current system.

Eliminates the liability if a laptop is lost/stolen since there will not be any data residing on the laptop. The current system does not have any audit logs of what is done on the system.

Benefit 3: Full audit logs improve the ability to research and identify problem causes.

The full audit logs for case and evidence management with the new system have given us the ability to identify the cause of certain problems 90% of the time.

Benefit 4: Officers are able to interface to local, state and regional data systems.

The ability to query local, state and regional systems from within the application (Department of Licensing, NCIC/ACCESS, SeaKing, etc.), eliminates multiple logons and improves efficiency. Officers are able to verify the person is who they say they are by querying DOL and NCIC/ACCESS.

Metric Description	Baseline	Target	Actual
Officers receive access to more history	Access to one (1) year of case history	Access to entire case history	100% of case and evidence history is accessible from 2006 forward.
Potential liability issues are reduced	Average of 6 liability issues per year from lost/stolen laptops per year.	Liability is zero since there isn't any data residing on the laptop.	Zero (0) liability for lost/stolen laptops.
Ability to identify cause of certain problems are increased	Current system does not have audit log.	Ability to identify the cause of certain problems 90% of the	90% ability to identify cause of certain problem with full audit

		time due to full audit log.	log.
Improved ability to access data necessary to fight crime	Zero access to local, state and regional system within application	Access to local, state and regional systems within product, eliminating multiple logons and improving access to crime solving data	100% access to systems like Department of Licensing, NCIC/ACCESS, LInX, SeaKing, etc. within the product. Eliminated seven (7) separate logons.

As of May 28, 2016

TE Statistics	Total #	Deputy Total #
Officers and Professional staff trained	350	193
Total **Case** records created	2446	605
Total **Arrest** records created	168	167
Total **Impound** records created	44	42

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	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.

Patty Cole-Tindall, 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:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

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Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Annual Report	2/9/15	Pat Butschli	Project Update	1 hours
Annual Report	5/18/16	Pat Butschli	Project Update	30 min

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☒ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

The Mobile CAD project has provided important Criminal Justice Information to Deputies on demand in the Field. This allows individual Deputies to make inquires quickly to help investigations. This is an improvement over the previous method of conducting these checks over a radio or driving to a location that had these services available. Investigations are more accurate, completed in less time and allow detained individuals to be processed much faster.

The final stage of this project is adding a GPS component that will allow the agency to track patrol vehicles in the field. This will improve call coordination and response and allow us to send the closest deputy to the call. This was previously done by sending a deputy assigned to a district. This should improve response times to calls for service. The last phase of the project is the GPS installation and it is approximately 50% complete. We estimate this will be done by the end of 2016.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

(Previous completed phases of this project) Due to the success of earlier phases of this project deputies have the ability to run license plates and names remotely through a laptop computer in their police car. In addition, deputies have access to the CAD system reducing the need for communication to occur over busy radio frequencies. This portion of the project has been successfully implemented and has improved the capabilities and safety of deputies working in the field. This allows deputies to work faster and increases productivity and safety.

(The current and final phase of this project) The final phase of the Mobile CAD project is adding the capability to GPS locate deputies working in our communities. This will allow a dispatcher to instantly know what unit is the closest to any request for service. This should modestly improve response times and safety for both the community and our deputies. We can compare unit response time both before and after the implementation of the GPS component of this project to measure the impact of the GPS implementation. Response times are currently measured in minutes and seconds based on call priority. Since these response times are already very quick we anticipate a modest lowering of these response times, perhaps 10% faster. This benefit should be achieved following rollout and implementation of the GPS system.

In addition to anticipated improvements in efficiency GPS will allow us to know where patrol deputies are located while on duty. This will allow us to send help to a deputy who is unable to communicate over the radio. At present we have no way of locating a deputy if they cannot advise us of their location over the air.

The project is currently awaiting the outcome of contract negotiations with the King County Police Officer Guild. This contract is currently in the final stages and awaiting King County Council approval. Initial testing on equipment to accomplish the GPS location has begun.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older

technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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.*

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Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

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If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

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Example:

Metric Description	Metrics	Baseline	Target	Actual
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	We are beginning to see the benefits of the GPS in the locations where the installation has taken place. Knowing where vehicles are located allows for a greater ability to coordinate incident response. We have some work to do to begin fully using this new capability but the process has started. We are in the middle of deploying GPS units to patrol vehicles. This is the final step of this project. The work is about 50% complete and we anticipate the final units will be installed by the end of the year.

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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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

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	Finance Director – PAO	Department Finance Director
Kassie Tadsen	Karpel Program Manager - KCPAO	Project Manager
Latasha Battle	IT Project Manager – KCIT	Project Manager
Mike Fisher	Karpel Program Manager – KCPAO	Program Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Annual report	1-28-14	Dan Clark	New, Initial Draft	3 hours
Annual report	3/19/14	Kassie Tadsen	Revisions for council	3 hours
Annual report	3/20/14	Kassie Tadsen	Revisions for council	4 hours
Annual report	3/13/15	Latasha Battle	Review, no changes	1 hour
Annual report	3.9.16	Mike Fisher	Review and minor updates	1 hour
Annual report updates	3.29.16	Mike Fisher	Updates requested by Elly Slakie	1 hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The IDX project was created to integrate with the new PAO Case Management System launched in June 2013 entitled PROSECUTORbyKarpel (PbK). Currently, law enforcement must bring original hard copy paper cases to our office for processing. The data associated with these cases must be entered by PAO staff, and the documents must be scanned and uploaded into PbK. Large files such as audio and video are submitted on DVD or CD, and these disks must be copied by PAO staff to provide discovery to defense.

The IDX project will create a unified, integrated system called eLODI for the 40 law enforcement agencies in King County to submit criminal case data and documents and digital evidence electronically into PbK. There are two of components to the IDX project: eLodi and eEvidence.

With eLODI, Law Enforcement agencies will submit data concerning the identification of a suspect and a crime, including victims and witnesses, in a consistent and uniform way, and will be able to upload voluminous police reports, photographs and other digital evidence electronically. PAO staff will be able to transfer this electronic information directly into PbK without having to manually type the data or scan the documents.

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 <u>after</u> a filing decision has been made. Victim information is fleshed out by the Victim Assistance Unit, also after filing. This means that prosecutors are making filing decisions without the benefit of knowing much about the background of the people involved in the case. For example, a prosecutor may think twice about filing charges in a case that rests entirely on a witness who has significant convictions for Perjury and Making False Statements. Under the new IDX system, the witnesses' names will be submitted by law enforcement up front, allowing a prosecutor to check witness history at the time of the filing decision and perhaps avoid filing a charge at all.

E. Reduce time spent on follow-up discovery by receiving post-referral materials electronically instead of having to scan, and storing/transferring large files electronically instead of retaining disks that must be circulated around the office and be copied for discovery to defense. In recent months, our office had to move two paralegals and four LAS staff from their trial-preparation functions just to upload and process these materials.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

There are a number of different metrics that can be employed to measure the benefits of IDX. Some of the most important benefits, however, are less quantifiable than others.

A. Electronic submission of case data, documents and evidence to the PAO will result in the savings of hundreds of hours each year when 40 police agencies and 5000+ police officers are no longer required to print out their cases on paper, drive to the PAO offices in Seattle or Kent and physically submit their cases or follow-up work in person. Allowing police to remain on patrol in their respective jurisdictions is an enormous benefit in terms of both public safety and productivity. We will conduct a survey of police agencies to determine how their adoption of the system has impacted them.

B. The temporary staff are spending approximately 800-1000 person hours a month scanning and loading documents into PbK, and could cost the PAO up to $500,000 until the eLODI/eEvidence system is in place. The IDX project essentially moves this work to the originators of the information, law enforcement, who will be doing the initial data entry and uploading of digital evidence at the time of electronic submission. Now law enforcement will be doing all of this from their desks at their own offices in a fraction of the time it took to print out hard copies of reports and evidence, burn disks, print photos, etc., and drive to our office to hand-deliver them. The measure for this benefit is whether we are still reliant upon temporary workers and word processing to manually enter witness information and case documents into the system, or are able to accommodate this task within our existing sustainable resources.

C. We can measure the average time between two key case events (case receipt and assignment to a prosecutor). This will let us determine how much sooner prosecutors are able to receive and work on new cases, that is, the reduction in lag time, especially for prolific offenders, thereby reducing the impact of recidivism.

D. Under the new IDX system, the witnesses' name will be submitted by law enforcement up front, allowing a prosecutor to have that information at the time of the filing decision and perhaps avoid filing a charge at all. A decision to not file a charge and keep a suspect from entering the criminal justice system is obviously hugely impactful to the suspect, but also significantly saves resources for everyone in the system: public defense, courts, jail, etc. We will survey the deputy prosecuting attorneys for their assessment of the quality and quantity of victim and witness information available to them to make filing decisions and prioritize repeat offenders before and after the implementation of eLODI.

E. If post-filing follow-up materials were uploaded, categorized and processed by IDX, then the 6 employees currently assigned solely to discovery could return to their trial-assistance functions.

3. *What is the current baseline for this measure?*

A. Currently, we receive approximately 7,000-8,000 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.

Update:

C. We will develop a report in PbK to monitor the lag time between case intake and assignment to a DPA. This report will compare traditional LODI cases to eLODI cases. Historical numbers to follow. This report has not been developed yet, but will be before final BAP submission. The historical data is in the source system so it is just a matter of developing the SSRS report.

Update:

D. We will need to do the survey to get a baseline for this. A baseline survey was not done, but the report discussed in item C will be used instead.

E. Currently we have 6 reassigned employees working on discovery.

With IDX we hope that 100% of the potential witnesses will be uploaded into PBK prior to a charging decision. This will result in a much better informed charging decision.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

A. We will be doing acceptance testing with police in 2Q-3Q2014 and should have more information at that point for this target.

Update:

a. The project has received feedback from police agencies and we are currently in the requirements gathering stage for enhancements to the e-LODI application. This feedback has been gathered from comments made to staff since the deployment of eLODI.

B. The goal is to be able to complete the work with regular employees without for extra temporary staff.

C. The target will be that the case is received into PbK from eLODI and assigned to a prosecutor within 2 days of receipt.

D. We would like to see an improvement of 30% in prosecutors' opinion of the quality and quantity of victim and witness information they have to make fining decisions.

E. This number should drop to 2 once IDX allows for police to upload and submit this information electronically.

5. *When is the benefit likely to be achieved?*

IDX should be completed and implemented by the end of 2014. Within 6 months after IDX is fully implemented and working properly we hope to see less demand for our temporary staff and can minimize those extra resources. As police adopt the use of the system, the benefits will increase over 2015.

Update:

While we have seen some adoption of eLODI by the police agencies, the full benefit of IDX is still under review and the PAO and IDX project team have identified a number of areas for improving the system. Once this second phase is implemented the surveys and measures discussed abvove will be taken so the full impact of the system can be measured.

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

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	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
Mike Fisher	Karpel Program Manager – KCPAO	Program Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

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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
Annual report	1/30/14	M. Buening	Initial draft	2 hours
	1/30/14	K. Tadsen	Added additional supporting information	2 hours
	3/14/14	K. Tadsen	Rev 2	2 hours
	3/18/14	K. Tadsen	Rev 2	1 hour
Annual report and benefits measurement	3/18/15	K. Tadsen, A. Summers, D. Clark, E. Ehlert	Rev 3	4 hours
Annual Report updates	3/09/16	M. Fisher	Rev 1	1 hour

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

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2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
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Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

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Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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3. *What is the current baseline for this measure?*
4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

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Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

PROSECUTORbyKarpel (PbK) will allow the PAO to do justice with significantly more and better information. PbK replaced the PROMIS system and multiple side systems and paper files with an integrated system for case tracking and management, workload management, event management, calendar generation, victim and investigative services, and case document generation and storage.

PbK has the capability to provide a wide variety of historical person data to assist with risk assessment and provide criminal case data. The integration of all the data and electronic documents in one system instead of multiple systems gives the Deputy Prosecutors much greater ability to view the case data “holistically” and will allow them to prioritize the cases on which to spend their limited time and resources.

The added information will assist in nearly every decision the prosecutor makes. For example: By identifying the most prolific offenders it will help prioritize which cases to address sooner. By having more information about the background of witnesses and victims, a prosecutor is better able to make charging decisions, and potentially decide which cases should not be filed at all. Knowing when a defendant is arrested for a new charge, it will assist in negotiating his pending cases potentially avoid the filing of new charges.

By having all person and case data in one system will greatly improve the office’s ability to manage cases after filing. Maintaining a central location for officer unavailability will assist in ensuring that witnesses are subpoenaed for days they can actual appear in court.

Maintaining contact information in one location will help locate and contact witnesses. Storing certified copies of criminal history will reduce the number of times paralegals need to reorder documents from agencies around the country.

The Sexually Violent Predator Unit and Involuntary Treatment Unit will be able to see the criminal cases for their respondents, which will better inform their commitment cases. The DV Unit will be able to see protection order case history for both defendants and victims, and know about escalation of violence.

By having more accurate and comprehensive information all in one system earlier in the prosecution process, it will be possible to identify and move forward with cases with merit.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

The PAO will survey the deputing prosecuting attorneys to determine if they believe that the new case management system has allowed them to prioritize cases better, and has resulted in better, more informed decisions in their work and management of their cases.

3. *What is the current baseline for this measure?*

Since the PROMIS system was around for nearly 40 years, including in the survey a simple comparison between the two systems should be fairly straightforward to assess if employees believe that PbK has resulted in a more informed system to achieve just results.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

An overall satisfaction rating of 70% would be a success.

5. *When is the benefit likely to be achieved?*

The benefit will be achieved over several years as more complete case data is entered, including documents, and as we are able to bring the District Court and Juvenile Units onto the system.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

The 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 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:

- Microsoft SQL Server database along with the robust SQL Server Reporting Services for reporting and statistical analysis;
- Microsoft Word for document generation and Microsoft SharePoint for a document repository;
- Adobe Acrobat for electronic discovery;
- Web services for interface development;
- and a web-based architecture to make all of these capabilities accessible to the PAO, as well as to its criminal justice partners.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

The probability of these risks occurring was 100%. KCIT has a current project for moving the mainframe applications to another platform, and KCIT and PAO employees that know PROMIS continue to approach retirement age.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or

internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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 implement a modern case management system for the PAO was implemented for the felony criminal division, Sexually Violent Predator Unit, Involuntary Treatment Unit, Appellate Unit, and three small units in the District Court Unit (DV Court, Mental Health Court, and Regional Veterans Court). We went live with the system in June 2013 with basic case processing and have continued to streamline our processes and implement new features and functions. The District Court Unit was deployed in Q4 2015 but we have not yet implemented the Juvenile unit.

Our measure is the users' opinion on whether the system provides the benefit of allowing the PAO to do justice with more and better information. We conducted our first survey in 1Q2015. Based on 100 responses to six questions (with only two questions skipped once each), we have easily exceeded our target of a 70% approval rating with an overall score of 86%.

We will be conducting another survey in 3Q2016 to measure the District Court division, and an additional survey will be conducted when the Juvenile division is deployed on PbK.

Metric Description	Metrics	Baseline	Target	Actual
Allow the PAO to do justice with significantly more and better information. Greater ability to view case data holistically and better prioritization of cases. Improvement in the office's ability to manage cases after filing.	*Satisfaction rating by users of the system:* *1. More information to perform duties* *2. More information about criminal cases.* *3. More information about*		*1. 70% agreement* *2. 70% agreement* *3. 70% agreement* *4. 70% agreement* *5. 70% agreement* *6. 70% agreement*	*Strongly agree or agree:* *1. 89%* *2. 91%* *3. 93%* *4. 89%* *5. 73%* *6. 83%*

		defendants. *4. More information about witnesses.* *5. More ability to organize information.* *6. Access to information more quickly*				

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	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~~, Michele Plorde, 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 (Revised 3/19/15)	EMD QI Program Manager, EMS Division, PHSKC	QI Manager, product testing

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

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Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	2/14/14	Linda Culley	New, initial draft	45 Minutes
Annual BAP	3/19/15	Linda Culley	One name correction in Section 3; one date correction in Section 6, Category 3 (1).	15 minutes
Annual BAP	2/12/16	Linda Culley	Update provided in Section 6, Category 3.	10 minutes
Annual Benefits review	6/16/16	Linda Culley	Updated Director name and a few minor updates to Category 3, Item 1.	5 Minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☒ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*

3. *What is the current baseline for this measure?*

4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved, inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.*

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

Example: *The Active Directory Consolidation project is part of an overall effort to promote IT standardization. This project will make the current management of user accounts, applications, and devices easier for IT administrators at Public Health because the end user experience will also be improved by having a single sign-on to applications such as Lync, SharePoint, and Outlook. Our success will be measured by having a single set of procedures and security models rather than the multiple ones that now exist.*

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4. *What is the target for this measure? (How much improvement will this project achieve?)*

5. *When is the benefit likely to be achieved?*

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   NORCOM was ~~is currently~~ using an eCBD/Tri Tech interface developed in 2006. In 2008, NORCOM decided to purchase a new CAD from vendor New World Systems. The original project proposal was to develop an eCBD application for New World CAD. In 2013, NORCOM abandoned their efforts to procure a New World CAD and currently continue using the Tri Tech CAD, Version 4.5, which was released in 2006.

   NORCOM has upgraded to Version 5.5 of Tri Tech CAD. Due to the advancement of technology from 2006 to 2014, this required updates to the current eCBD product and interface in order to be compatible with NORCOM's CAD. These updates to eCBD Software were completed in 2014.

   This proposal ~~is now~~ included an ~~to~~ update the current eCBD/Tri Tech interface due to changes in technology. Average life cycle replacement of CAD is 6-8 years. The TriTech interface was developed, tested and implemented in February 2016. ~~updated in 2015 and is currently undergoing final testing~~. The project is closed. ~~in close out phase and should be closed out by the end of February, 2016~~.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   This is not a risk reduction project. The primary reason is to ensure compatibility with the new version of Tri Tech CAD at a major communications center in King County.

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payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

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1. *Describe why you expect the proposed IT investment to reduce costs?*
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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.*

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Example:

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IT Project Benefits Achievement Plan (Version 2)

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King County Department/Agency Name	Department of Public Health – Emergency Medical Services Division, Community Programs Section
Project Title	Regional Emergency Medical Dispatch (EMD) and Telecommunicator-CPR (T-CPR) Quality Improvement (QI) Application Replacement (EMDQI)
Project Number	1123857 KCIT-DPH EMS EMD AND T-CPR QI APPLICATION REPLACEMENT

Section 2. Business Owner Accountability

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~~Jim Fogarty~~ Michele Plorde, EMS Division Director

Section 3. Who is involved in developing the Benefit Achievement Plan?

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Name	Title / Agency	Project Role
Jim Fogarty	Director, EMS Division	Project Sponsor
Linda Culley	Community Programs Section Manager, EMS Division	Program Manager/Project Contact
Cleo Subido	EMD Program Administrator	EMD Training and QI Oversight
Julie Buckingham-Lofink	Emergency Medical Dispatch (EMD) Quality Improvement (QI) Program/Project Manager, EMS Division	EMD QI Manager
Tracie Jacinto	IT Business Analyst, King County Information Technology Department	IT Business Analyst
Dan Anderson	IT Project Manager - KCIT	IT Project Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

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5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

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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 2015-2016 budget process	5/30/14	Julie Buckingham-Lofink/ Tracie Jacinto	New, initial draft	4 hours
BAP Update	2/10/15	Linda Culley/Dan Anderson	Draft update	30 min
BAP Update	2/11/16	Linda Culley	Significant draft rewrite due to changes in scope after cancellation of RFP	90 minutes
BAP Benefits Review	6/17/16	Linda Culley	Changed Business Owner,	10 min

				otherwise review only.	

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

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Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

   Although this project is primary aligned with Category #2 benefits, this project will enable a regional solution for emergency medical dispatch quality improvement oversight that will directly benefit our constituents through the following two benefits that will stem from improved telecommunicator performance:

   Reduced number of emergency medical calls involving incorrect instructions given by telecommunicators (B1): Telecommunicators that receive and respond to 9-1-1 calls involving emergency medical situations may deal with a stroke patient or someone that may require CPR. Our telecommunicators act as our first line of defense to instruct the caller to perform life-saving techniques over the phone.

   Reduced number of emergency medical calls involving incorrect resources dispatched to incidents (B2): Another important aspect of the telecommunicator's role is to dispatch the correct medical resources to the scene of the medical incident. If a telecommunicator dispatches the incorrect medical resources to the scene, a person's life could be at risk. Telecommunicators may dispatch advanced life support resources or basic life support resources, which have varying levels or abilities to respond to and treat emergency medical situations. With the tough economic conditions that King County faces, dispatching the correct resources the first time, without error is critical to avoid any unnecessary expenses.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   As part of the EMS Division's ongoing quality improvement program, we will continue to track and the number of emergency medical calls involving incorrect instructions given by telecommunicators. Additionally, we will continue to track the number of emergency medical calls which involve inappropriate resources to be dispatched to the scene. The benefits of this project will be achieved by observing a downward trend and reduction in incidents which involve incorrect instructions provided by telecommunicators or inappropriate resources being dispatched to the scene.

3. *What is the current baseline for this measure?*
   In 2013, EMS' QI staff identified 237 emergency medical calls which involved incorrect instructions given by telecommunicators. This represents 9% of total calls reviewed for EMD QI purposes. As of May 2014, telecommunicators are meeting performance standards goal set forth by the EMS Division.

   In 2013, 451 emergency medical calls involved inappropriate resources being dispatched. This represents 18% of total calls reviewed for EMD QI purposes.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   The EMS Division anticipates that 85% of all telecommunicators calls reviewed for QI purposes will involve the correct instructions provided to telecommunicators and the appropriate resources to be dispatched to respond to the emergency medical incident.

5. *When is the benefit likely to be achieved?*
   These benefits will likely to be achieved by the end of 2016 after this project is fully implemented, following the go-live of the solution at each dispatch agency.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Example: *If this project to acquire hand-held devices and develop custom software is approved,*

inspectors will be able to check an average of 10 sites per day compared with the average of 6 currently checked. This will allow the agency to handle the 20% increase in workload projected in the next three years without adding more staff.

Example: *If this project to implement a systems management tool for the Service Center is implemented we will be able to reduce the duration of technology outages during major incidents by 30 percent. We also will reduce the wait time for customers on hold with the Service Center. These improvements will allow us to redirect an existing position to other priorities.*

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

The EMS Division conducted a formal RFP procurement process in 2015 to identify and implement a best-fit, third-party commercial-off-the-shelf solution to optimally meet the business needs related to EMD quality improvement of both the County and our partner, regional dispatch agencies – Valley Communications Center (Valley Com) in Kent; North East King County Regional Public Safety Communication Agency (NORCOM) in Bellevue; Port of Seattle; and Enumclaw.

The scope of this RFP was scaled back in Q2 of 2015, after learning that the 911 Communications Centers could not agree to a Regional Voice Recording system that would create a single repository of 9-1-1 recordings (accessible near real-time after a call is completed) for reasons of potential security breach to their secure networks. The revised RFP continued to seek a vendor that could offer a quality improvement and feedback module, including the ability to provide playback calls, annotate calls, generate interaction analytics, and perform quality assurance, coaching, and performance reporting functionality. The RFP also leveraged third-party implementation services and 24/7 ongoing support and maintenance. Only one vendor submitted a proposal in response to the RFP. After thorough review, the project team determined this vendor was not qualified to provide the desired level of functionality and the cost of licensing for the software was too high and over budget. The RFP was withdrawn from procurement.

The EMS Division is currently preparing a scope of work to meet the desired QI functionality using an internal product similar to the EMS Division Cardiac Case Review linked to the EMS Online platform. We will continue to work collaboratively with our partners to develop a standardized approach to emergency medical dispatch quality improvement. The following internal service benefits are expected:

<u>Dispatchers will have easy and timely access to the annotated call and feedback via an existing EMS Online Platform (B1)</u>

<u>Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to manually copy, rename and send files to agencies, annotate calls using an internal process rather than OTS software, and have a single point of data entry. (B2)</u>

<u>Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3)</u>

Dispatch agency supervisors will have easy and timely access to annotated audio feedback and reports and all agencies will have audit tracking capabilities to view if dispatcher viewed feedback, audio and annotation (B4):

2. How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)

We propose the following measures for each benefit listed above, followed by a brief description of indicators of success that the benefit has been achieved:

Dispatchers will have easy and timely access to the annotated call and feedback via an existing EMS Online Platform (B1): This will be measured by using the audit tracking tool and evaluating the percentage of QI reviews retrieved and reviewed by dispatchers and supervisors. We will also survey dispatchers and supervisors to determine ease of use and satisfaction with retrieving EMD QI feedback via EMS Online and satisfaction with the annotated audio recording process.

Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to look for and identify audio recordings, manually copy, rename and send files to agencies, annotate calls using an internal process rather than OTS software, and have a single point of data entry. (B2): As each call is reviewed, the QI staff member utilizes a Microsoft Access database to enter approximately 50 to 60 data elements which is stored in a SQL database. EMD QI reports are then generated from SQL by logging in to the PH Portal Reports section. The reduction in time to identify audio recordings, manually copy, rename and sent files and reports to agencies will result in significant gains in employee productivity in performing more QI reviews.

Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3): After gaining access to call recordings, EMD QI staff must perform its QI reviews to provide feedback and to recommend training targeted to correct deficiencies in telecommunicator performance or dispatch agency systems. Currently, it takes anywhere between four- (4) to six (6) weeks to provide QI feedback to the telecommunicator due to the limitations of the current system to efficiently generate reports by dispatch agency and individual telecommunicator. We expect to reduce this time to 2 weeks or less.

Dispatch agency supervisors will have easy and timely access to annotated audio feedback and reports and all agencies will have audit tracking capabilities to view if dispatcher viewed feedback, audio and annotation (B4): The EMS Online platform provides a familiar and user friendly front end for agency staff to retrieve their QI feedback. The annotated process will allow call receivers to see QI feedback tied specifically to their audio recordings. In addition, supervisors will no longer need to enter their Voice Recording system and look for and retrieve audio recordings.

3. What is the current baseline for this measure?

Dispatchers will have easy and timely access to the annotated call and feedback via an existing EMS Online Platform (B1): Dispatchers do not currently have direct access to annotated call feedback and reports. The current QI review does not include audio annotation and reports are emailed to supervisors who must then review the report with the dispatcher. The average baseline for the number of audio's and reports presented to dispatchers is approximately 45%.

Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to manually copy, rename and send files to agencies, annotate calls using an internal process rather than OTS software, and have a single point of data entry. (B2): QI reviews are performed on a daily basis. The process to identify which calls to review once all audio call files are downloaded takes approximately two (2) to three (3) business days each month. If the new process is implemented, there would be a decrease in the amount of time used to identify which calls to review because the QI reviewers would be able to identify calls taken in the current eCBD Software Tool.

Currently, EMD QI staff performs approximately 2,400 call reviews annually.

Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3): Once a call is reviewed for QI purposes, it takes approximately four to six weeks after the call is received to provide feedback to individual telecommunicators due to inefficiencies in the current process which require EMS EMD QI staff to have to generate individual feedback reports and mail it to the dispatch agencies to be disseminated and reviewed by the telecommunicator.

Dispatch agency supervisors will have easy and timely access to annotated audio feedback and reports and all agencies will have audit tracking capabilities to view if dispatcher viewed feedback, audio and annotation (B4): Supervisors currently must retrieve the audio on their own if they desire to review the audio and the QI report simultaneously with the dispatcher. EMS QI reviewers do not have tracking and audit capabilities. Baseline is zero.

4. What is the target for this measure? (How much improvement will this project achieve?)

Dispatchers will have easy and timely access to the annotated call and feedback via an existing EMS Online Platform (B1): The target is 75% of calls reviewed by dispatcher in Year 1, 85% in Year 2 and 95% in Year 3.

Increased employee productivity to perform EMD QI reviews due to the reduction in EMD QI staff time and effort to manually copy, rename and send files to agencies, annotate calls using an internal process rather than OTS software, and have a single point of data entry. (B2) : We anticipate that EMD QI staff will save approximately two (2) to three (3) business days each month across two EMS staff members that perform QI to not have to manually identify audio files from our regional dispatch agencies' audio recording systems. The target for this measure is to perform 300-400 more EMD QI call reviews annually after this project is implemented at each of the dispatch agencies.

Reduced time to provide QI feedback to telecommunicators and dispatch agencies (B3): We anticipate that EMD QI call review feedback will be provided back to the telecommunicator within one week of completion of the report. Monthly reports for the dispatch agency will maintain the current schedule and will be delivered approximately one week after the close of each month.

Dispatch agency supervisors will have easy and timely access to annotated audio feedback and reports and all agencies will have audit tracking capabilities to view if dispatcher viewed feedback, audio and annotation (B4): 100 % access of the report by supervisors

5. When is the benefit likely to be achieved?

We anticipate that all benefits will be achieved immediately after the solution is implemented and utilized by each dispatch agency. EMS will monitor and track the benefits achieved as a result of this project over the course of one year after go-live at each dispatch agency.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County*

to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

   The current technologies being used do not fully align with King County's technology standards as a Microsoft Access database is still being used to enter data elements. Additionally, the reports that are currently available do not fully meet the business' needs. The current EMD QI solution (Microsoft Access, Microsoft SQL Server, Microsoft SQL Server Reporting Services reports) had recently been upgraded to address short-term business needs, however, it does not provide a regional EMD QI solution that may be utilized by other non-King County dispatch agencies (Valley Com, NORCOM, Port of Seattle, Enumclaw). The average life cycle replacement for the new technology is approximately four to five years prior to a major system upgrade.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*
   Not applicable.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*

3. *What is the current baseline?*

4. *What is the target for this measure? (How much savings will this project achieve)*

5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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*

IT Project Benefits Achievement Plan (Version 2)
12/31/2013

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

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. An extension is being negotiated for 2015. No upgrades are available and as a result, Public Health must replace the system and views this as an important opportunity to achieve a consistent, efficient and unified system for the entire agency.

Public Health plans its new system to include an integrated EHR including Jail Health Services integrated practice management system (PMS), electronic dental systems, with a robust and scalable system that will interoperate successfully with business requirements for Public Health and meet the federal standards. This project is expected to span multiple years.

Project Success and Benefits

Success of this project can be measured by the realization of benefits as outlined in section 6 in this document. In addition the Project has established a Vision and Goals by which to guide the success of the project. They are:

Vision

- *Public Health will develop and maintain state of the art tools and systems to; protect the public's health, promote healthy communities and provide an integrated, high quality, efficient public health and clinical services.*

Goals/Objectives

- *Better information to provide care for the patient*
- *More efficient care*
- *Engaging the patient in their care*
- *Providers will have more time to engage their patients and prioritize health care and whole patient care*
- *Better care across systems through integrated health information*

- *More timely access to information*
- *Assurance of adequate privacy and security protections and accountability of access to safeguarded Protected Healthcare Information as required by Federal Law*
- *Benefit: Meet Federal Meaningful Use Criteria which will also allow for Public Health to receive Medicaid Incentive Dollars*

Alignment to Business Strategy

The PH-HIT project is strategically aligned with the broader vision and goals of the County through the Public Health Operational Master Plan (PHOMP) and the King County Strategic Plan.

- *Develop and maintain state of the art tools and systems to; protect the public's health, promote healthy communities and provide reliable, high quality public health services.*
- *Adhere to sound operational practices and systems including assuring the transparency, cost effectiveness, and accountability of its activities, services and outcomes.*
- *Raise capability to match modern public health practice needs with the organizational attribute domains of workforce quality, obtain information for decision making, basic systems and infrastructure.*
- *Rapidly and accurately assess key infections and environmental health threats and response efforts through selected enhancements in: (1) Collection and analysis of electronically transmitted data (2) Methods for measuring the health of vulnerable populations (3) Capability to monitor the health care delivery system.*
- *Improve the capability of Public Health to fulfill its functions through selective enhancement of key system elements including, modernizing key business tools and administrative systems to improve business efficiency.*

Section 2. Business Owner Accountability

Business Owners are responsible for achieving project benefits and ensuring this Benefit Achievement Plan (BAP) is regularly updated and completed when benefits are achieved. Business Owners are required to be at the deputy department director or higher.

Business Owner Name and Title: Michael Gedeon, Chief Administrative Officer

Section 3. Who is involved in developing the Benefit Achievement Plan?

The development of the BAP should include significant involvement from the business operations or management staff related to this project and the services it will support. Consider involving staff who will be using the technology to help identify the benefits of the project. KCIT business analysts or technology project staff may assist in benefit identification and documentation. List the staff who contribute to the benefit achievement plan below:

Name	Title / Agency	Project Role
Kristi Korolak	HSA II	Project Manager
Michael Gedeon	Chief Administrative Officer	Project Sponsor
Lisa Hillman	IT Service Delivery Manager	Steering Committee Member
David Bibus	Deputy Division Mgr, Prev	Steering Committee Member
Moffett Burgess	Dental Director	Steering Committee Member
Maureen Peterson	Finance & Administrative Services Manager, CHS	Steering Committee Member
vacant	CFO	Steering Committee Member
Dorene Hersh	Chief of Nursing	Steering Committee Member
Bill Kehoe	Chief Information Officer	Steering Committee Member
Judy MacCully	Regional Health Admin, JHS	Steering Committee Member
TJ Cosgrove	Deputy Division Director, CHS	Steering Committee Member
Ben Sanders	Medical Director	Steering Committee Member
Cristin Burris	PPM IV	HIT Project

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Budget Process	2/7/14	Jeff Boudreau Cristin Burris	New, initial draft	
Funding Release Request	8/1/14	Cristin Burris Wendy Seese	Minor updates	30 minutes
Annual update	3/12/15	Cristin Burris	Minor updates for clarification purposes. Added targets achieved to-date.	90 minutes
Annual update	2/11/16	Cristin Burris	Minor updates for clarification purposes. Added targets achieved to-date.	90 minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

◉ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Please respond to each question listed below rather than provide a summary.

Public Health will know that it has achieved benefits through reviewing reports and data to demonstrate meeting the Meaningful Use Standard outlined in the American Recovery and Reinvestment Act. Benefits will begin at the time that the first clinic go-live can meet Meaningful Use criteria and continues as each clinic is rolled-out and meets criteria.

B-1 Benefit: Better information to provide care for the patient through integrated health information.

1. *Describe why you expect the proposed IT investment to produce the benefit?*
   - When providers can find the right information or critical information better, they make better and more personalized treatment decisions.
   - Electronic health records provide access to information that otherwise can be "buried" or misfiled in thick paper charts.
   - Prescriptions and prescription refills with pharmacies will be managed through the provider using e-prescribing technology, reducing errors and waiting times.
   - Care provided by other participating organizations is accessible through records share technology, so patients' providers can quickly get "up to date" not matter where the patient last received care.
2. *How will you measure the benefit?*

Patients seen by a medical* provider will have :

- At least one problem identified or indication that no problems are known on the problem list.
- At least one medication allergy identified or indication that no allergies are known on the allergy list.
- Height, weight and blood pressure recorded.
- Smoking status recorded.

Patients seen by a provider who have medication or lab orders will have:

- ~~At least one medication on their medication list~~Medications and labs ordered using Computerized Physician Order Entry (CPOE).
- Prescriptions transmitted electronically to identified pharmacy.

3. *What is the current baseline for this measure?*

   The use of paper records means that baseline data for any of these activities is difficult to know, except for those activities that do not occur in the absence of CPOE (electronic medication orders, electronic transmission of medication orders to identified pharmacy).

4. *What is the target for this measure?*

   Patients seen by a medical* provider will have all of the above that are age and developmentally appropriate for each visit they access care at a site using the electronic health record. Our target is to achieve 80% of the above for each provider clinic visit once all sites have implemented the electronic health record. These targets exceed the federal mandates.

* A medical provider is defined as an independent health care provider (MD, Nurse Practitioner, Physician Assistant) in Primary Care, Family Planning, STD Clinic, TB Control program or Jail Health Services.

B-2 Benefit: More efficient care.

1. *Describe why you expect the proposed IT investment to produce the benefit?*
   - Results and information on tests, treatments and procedures that were provided at other Public Health Sites or external providers are more readily available and will not need to be repeated.
   - Patients won't have to repeat the same history over and over, since the electronic health record allows for quick review and update
2. *How will you measure the benefit?*

   Patients seen by a provider who have clinical lab tests ordered will have their results either in a positive/negative or numerical format incorporated in the EHR as structured data.

3. *What is the current baseline for this measure?* 0%
4. *What is the target for this measure?*

   Our target is to achieve 80% of the above for each provider clinic visit once all sites have implemented the electronic health record. These targets exceed the federal mandates.

B-3 Benefit: Engaging the patient in their care.

1. *Describe why you expect the proposed IT investment to produce the benefit?*
   - At the end of every visit, patients will be offered a printed visit summary, as well as health education and a list of necessary follow-up items.
   - Patients will be able to access their record electronically through a patient portal.
2. *How will you measure the benefit?*

   Patients seen by a medical* provider will have clinical summaries provided after office visits and/or access to their patient portal.

   Patient specific education resources are provided to patients.

3. *What is the current baseline for this measure?* 0%
4. *What is the target for this measure?*

   For patients seen by a medical* provider, our target is to achieve 80% of the above for each provider clinic visit once all sites have implemented the electronic health record. These targets exceed the federal

mandates.

* A medical provider is defined as an independent health care provider (MD, Nurse Practitioner, Physician Assistant) in Primary Care, Family Planning, STD Clinic, TB Control program or Jail Health Services.

B-4 Benefit: Providers will have more time to engage their patients and prioritize health care and whole patient care.

1. *Describe why you expect the proposed IT investment to produce the benefit?*
   - When providers don't have to wait for paper records to be found and spend time "digging" through paper records to find key information, they can spend more time examining and counseling their patients
   - Electronic health records provide summary screens so that *all* aspects of a patient's care can be considered, including the psychological and social factors affecting health and wellness.
2. *How will you measure the benefit?*

   Patient and provider surveys post implementation

3. *What is the current baseline for this measure?*

   No current baseline

4. *What is the target for this measure?*

   Patients and providers will rate their level of satisfaction with time spent in encounters post implementation at "Satisfied" or higher 50% of the time.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

Please respond to each question listed below rather than provide a summary.

B-5 Benefit: More timely provider access to information.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   Availability of complete patient records/health information that leads to better outcomes for patient care and for clinical decision making

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   Records available to provider for patient visit at another King County ~~site~~ location or with other providers.

3. *What is the current baseline for this measure?*
   66%
4. *What is the target for this measure? (How much improvement will this project achieve?)*
   99%
5. *When is the benefit likely to be achieved?*
   Benefits will begin at first clinic go-live (December 2013) and continue through the roll-out of each clinic location.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

B-6 Benefit: Assurance of adequate privacy and security protections and accountability of access to safeguarded Protected Healthcare Information as required by Federal Law.

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   All Certified electronic health records (EHR) must comply with Meaningful Use requirements, which include protecting electronic health information created or maintained by the Certified EHR through the implementation of appropriate technical capabilities. The EHR will be able to provide timely reports on workforce access to Protected Health Records to meet HIPAA requirements.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Please respond to each question listed below rather than provide a summary.

B-7 Benefit: Meet Federal Meaningful Use Criteria which will also allow for Public Health to receive Medicaid Incentive Dollars.

1. *Describe why you expect the proposed IT investment to reduce costs?*
   Public Health will be eligible to receive approximately 4.3 million over 6 years if additional funds by implementing a Certified Electronic Health Record and using the system in a meaningful way as out lined in the Meaningful Use Standards criteria. If Public Health does not implement the system we will not receive the funds.

2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
   Receipt of payment.

3. *What is the current baseline?*
   N/A. PHSKC is not currently meeting Meaningful Use criteria.

4. *What is the target for this measure? (How much savings will this project achieve)*
   Revenue is projected to be 4.3 million over 6 years.

5. *When is the cost reduction likely to be achieved?*
   Benefits will begin at the time that the first clinic go-live can meet Meaningful Use Criteria and continues as each clinic is rolled-out and meets criteria for five years.

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
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*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	***1.*** *1 day processing time* ***2.*** *30 percent of purchases are receiving prompt payment discounts* ***3.*** *$400,000 savings*	*2 day processing time* *20 percent of purchases are receiving prompt payment discounts* *$200,000 savings*
B-1 Better information to provider care for the patient through integrated health information	*1. At least one problem or no known problem on problem list* *2. At least one medication allergy or no know allergies on allergy list* *3. Vitals: Height, weight and BP recorded* *4. Smoking status recorded*	• *Unknown*	*4. 80% of provider clinic visits*	*For visits at live clinics in 4th Quarter 2014:* *1. Problem list = 83%* *2. Med Allergy = 98%* *3. Vitals = 83%* *~~3.~~4.*
	Note: These measures are no longer part of the Meaningful Use program and OCHIN no longer tracks/reports on them. Goal achieved 4th Quarter 2014.			
	~~4.~~5.Medication and lab orders through CPOE *~~5.~~6.Electronic*	• *0%*		*For visits at live clinics in 4th Quarter 2015:*

	prescribing (E-Rx)			*5. CPOE = ~~99~~100%* *6. E-Rx = 92~~94~~%*
B-3 Engaging the patient in their care	*1. Provide electronic access to patient portal* *2. Patient specific educational resources*	• *0%*	*7. 80% or above*	*For visits at live clinics in 4th Quarter 2015:* *1. Patient Portal = 66%* *2. Ed resources = 71%*
B-5 More timely provider access to information	*Records available to provider for patient visits at another King County location or with other providers*	• *66%*	*8. 99%*	*For all patients that have been seen since the clinic went live on Epic, 99% of the time the record is now available.*
B-7 Meet Federal Meaningful Use Criteria which will also allow for Public Health to receive Medicaid Incentive dollars	*Receipt of payment*	• *N/A*	*~~8.~~9. $4.3 million over 6 years*	*$1,147,500 has been received as of Feb 10, 2016. Another $42,500 is pending approval.*

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

1. To achieve a clear understanding and focus on the benefits of a project prior to its beginning
2. To update projected benefits of the project as it moves through stages of project approval, implementation, and post-project closure
3. To establish accountability for identifying and achieving benefits
4. To ensure that benefits are achieved

To complete this document fully, please read all of the colored sections and fill in the white cells. For assistance in completing this form, please contact your PSB analyst.

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
Kerry Maccini	Nursing Supervisor/JHS	Process Owner
Shawna Harris	FA - II	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:

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?
Please use conceptual review,	*Date*	*Who did the*	*A brief summary of what*	*How long*

	budget process, funding release, annual report, project implementation, or project completion.	*this docume nt was updated*	*document updates?*	*changed in the document. If this is an initial draft, please indicate new. If nothing has changed, indicate "review only".*	*did it take to complete or revise the form at this stage?*
	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
	Project put on hold	6/1/2015	Casey Cassidy	Vendor failed to meet contractual terms, contract cancelled. JHS has been focused on successfully implementing HIT OCHIN/EPIC.	15 minutes
	Annual update	3/15/16	Tom Thompson	Status update	10 minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☐ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☒ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
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).*

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."**

2. 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.

3. 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.

4. 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.

5. 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

Update 3/15/16: This project has been put on hold pending implementation of the Epic electronic health record, currently scheduled for May of 2016. Implementation planning for Electronic Medication Administration Project will begin again as resources become available starting in Q1 of 2017.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay, has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs?*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved)*
3. *What is the current baseline?*
4. *What is the target for this measure? (How much savings will this project achieve)*
5. *When is the cost reduction likely to be achieved?*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment	*Processing Time annual savings, and percentage of purchases receiving prompt payment*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of*	• *1 day processing time* • *30 percent of purchases are receiving prompt payment discounts* • *$400,000*	*2 day processing time* *20 percent of purchases are receiving prompt payment*

discounts.	*discounts*	*$100,000*	*savings*	*discounts $200,000 savings*

IT Project Benefits Achievement Plan (Version 2)

Section 1. What are the purposes of the Benefit Achievement Plan (BAP)?

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4. To ensure that benefits are achieved

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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: Ann Doll, PPMIII, 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
Ann Doll	PPMIII, EMS	Project Manager
Dan Anderson	IT Project Manager/KCIT	IT Project Manager

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
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Section 5. How long will it take to complete the benefit achievement plan?

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Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this document was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
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
BAP - First Report	02/12/15	Michele Plorde	BAP Report	2 hours
BAP – Last Report	02/05/16	Ann Doll	BAP Report	2 hours

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☑ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology, reducing risk of system failures, or providing regulatory compliance

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
   Complete, accurate, and timely information is integral to the management of all aspects of the Emergency Medical Service (EMS) system in King County. The SEND project modernized the network and technical infrastructure components (e.g. ESO-hosted secure servers, ESO data hub) supported by a third-party vendor, ESO Solutions. This critical infrastructure supports the transfer of patient data between EMS agencies' staff that respond to emergency calls in the field and participating hospitals en-route to the hospital to improve patient care. This project will achieve one benefit in this category that will improve quality of service for our King County constituents described below.

   Benefit #1 (B1) Improved Patient Care: Following implementation, EMS personnel capture medical incident report data in the field electronically using rugged tablet computing devices. Prior to this project, they communicated important information critical to a patient's treatment plan via telephone prior to patient arrival then transferred written patient records to the receiving emergency room staff upon arrival at the emergency department.

   Benefit #2 (B2) Satisfaction of Participating Hospitals: The data received in advance of a patient's arrival enables the receiving hospital to obtain the supplies required to treat the patient, as well as the ability to assemble the necessary professional medical staff to provide treatment to the patient immediately upon arrival at the emergency room. Additionally, having patient information electronically simplifies the hospital's record keeping tasks. This capability may not benefit every patient to the same degree, but having patient information in digital format prior to the patient's arrival will improve access to data in the emergency department when and where needed.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   Improved quality of service may not be prudent to use as a measure of these benefits since there are various contributing factors associated with improved patient outcomes. The following benefit measures reflect an output due to limited ability to attribute true service quality benefits and an approximation of the benefit to users.

   B1 Measure - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: The EMS Division will track the number of patient cases where pre-hospital data is transmitted en route to the receiving hospitals. A benefit will be achieved when a pre-hospital record is successfully received by the receiving hospital. The number of patient cases where pre-hospital data is successfully transmitted en route to the receiving hospital will be divided by the total number of patients delivered to participating hospitals.

   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.

3. *What is the current baseline for this measure?*
   B1 Measure Baseline - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: Prior to the go-live of ESO's ePCR solution, 0% of patient cases transmit pre-hospital data en route to the receiving hospital.

B2 Measure Baseline - Satisfaction of Participating Hospitals: No baseline exists.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
B1 Measure Target - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: The target goal is to transmit 100% of all pre-hospital data for patient cases where applicable. EMS agencies currently transport approximately 75% of the over 150,000 patient cases per year.

B2 Measure Target - Satisfaction of Participating Hospitals: The target goal is to be very satisfied with access to available information based on survey results. The long-term goal is to have pre-hospital data used consistently by hospital staff prior to patient arrival.

5. *When is the benefit likely to be achieved?*
B1 Measure Target Date - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: The benefit will dramatically increase as more regional partner agencies implement ESO's ePCR solution and hospital interfaces are built. Major milestones include: the acquisition and implementation of ruggedized tablet PCs, the go-live of the ESO ePCR solution, implementation of computer aided dispatch systems (CAD), and the development of required interfaces from hospitals to the ESO data exchange.

B2 Measure Target Date - Satisfaction of Participating Hospitals: EMS will begin realizing this benefit after go-live of the fully implemented ESO ePCR solution and hospitals as they opt in to receiving pre-hospital data by developing the required interfaces to the ESO data exchange.

Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services. Be sure to explain the value of such improvements to your operations.

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The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*
This project implements ESO's software-as-a-service (SaaS) solution and automates EMS agencies' administrative support staff's (not EMS personnel) business processes to realize operational efficiencies. Additionally, it reduces EMS agencies' reliance on a paper-based medical incident report

form. The acquisition of ruggedized tablet PCs enables EMS personnel to serve as a mobile workforce. This also reduces the risk of inaccurate data entry by enabling EMS personnel to work remotely in the field using ruggedized tablet computer devices to electronically capture information for the Medical Incident Report Form (MIRF). Implementation of this project improves timeliness of the complete patient care record and allows the EMS Quality Improvement (QI) Program to provide more rapid feedback to EMS personnel regarding the delivery of patient care.

Benefit #3 (B3) Reduction in EMS Division Administrative Staff Time: EMS Division administrative staff (originally 2 FTEs) will no longer data enter the paper medical incident report form. EMS paramedics will be able to enter MIRF data directly into the electronic patient care record system either in the field or on their desktop.

Benefit #4 (B4) Direct and Immediate Access to Patient Outcome Data for QI Purposes: Patient outcome data is used by the EMS QI Program to track patient outcomes, including cardiac arrests, stroke patients, and chest pain. Direct access to patient outcome data directly through the ESO data repository is critical to EMS QI staff that develops training materials and medical protocols and procedures based on a review of the patient care record and the outcome. Without this project, EMS QI staff must manually retrieve patient care records by coordinating with the hospitals that receive and treat EMS patients to obtain outcome data.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
B3 Measure - Reduction in EMS Division Administrative Staff Time: EMS Division administrative staff will see a reduction in the amount of time and effort dedicated to entering the medical incident report forms into the database. The reduction of administrative staff time spent on MIRF data entry will be eliminated or re-allocated to supporting other valuable activities that could not have been previously worked on due to time constraints.

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.

3. *What is the current baseline for this measure?*

B3 Measure Baseline - Reduction in EMS Division Administrative Staff Time: Two full time (FTE) administrative staff data enter MIRF information.

B4 Measure Baseline - Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange: Prior to the go-live of ESO's ePCR solution, 0% of patient outcomes are obtained directly from the ESO data exchange.

4. *What is the target for this measure? (How much improvement will this project achieve?)*

B3 Measure Target - Reduction in EMS Division Administrative Staff Time: We anticipate a full reduction of the data entry workload. This time and effort savings will enable staff to be re-allocated to perform other job functions or to enable a reduction in FTE numbers. For example, the time saved will be re-directed to valuable activities such as the gathering of patient outcome data from the ESO data exchange or generating reports that would be used to make informed business decisions.

B4 Measure Target – Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange:

The EMS Division target goal is to retrieve patient outcome data electronically for 100% of all transported patient cases (approximately 75% of all patient cases per year).

5. *When is the benefit likely to be achieved?*
   B3 Measure Target Date - Reduction in EMS Division Administrative Staff Time: This benefit was achieved by Q4 2014.

   B4 Measure Target Date – Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange: EMS will begin realizing this benefit immediately after go-live of the fully implemented ESO ePCR solution and will dramatically increase as more hospitals opt in to receive pre-hospital data by developing the required interfaces to the ESO data exchange.

Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

Example: *This project will implement an Advanced Authentication solution which will allow King County to comply with U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2. Effective September 30, 2013, advanced authentication (AA) must be in place in order to access sensitive CJIS information.*

1. *Describe why you are proposing to upgrade or replace existing technology. Please include age of existing technology and the average life cycle replacement for this type of technology.*
   Modernization of the EMS data network and technical infrastructure (e.g. ESO hosted secure servers, ESO data hub) was a critical component of the SEND project. As a Software as a Service (SaaS) model, ESO Solutions will be responsible for the ongoing system maintenance and operability assurance. This functionality will be monitored by the following two metrics:

   a. Performance metrics to ensure adequate performance under peak load conditions.

   b. Metrics for monitoring the vendor's performance.

2. *If the primary reason for the project is risk reduction project, please estimate the probability of the risk or describe how likely it is to occur.*

   Not applicable.

Category #4: Reduced cost to produce service (external or internal) or cost avoidance

This category is for those projects that will reduce the costs to deliver a county service (external or internal). The information provided here should be consistent with the information in the cost-benefit analysis (CBA) form. Please describe how the cost savings will be used by your organization. This category also includes cost avoidance. Cost avoidance is those costs that the County would need to pay,

has the capacity and intent to pay, but will be avoided due to the project.

Example: *Reduced cost to produce service. If this project to install accounts payable software is approved, we will automate three tasks that are currently done manually by agency and central purchasing employees. Based on experience of other users of the software, this will reduce processing time from the current average of ten days to less than one. This will allow us to take advantage of prompt payment discounts for over $15,000,000 of annual purchases. These discounts average 2%, yielding annual savings of about $300,000. This will result in savings in department expenditures for those items qualifying for prompt payment discounts.*

Example: *Cost Avoidance. Moving to this new vendor that uses a SaaS product, we will avoid the need to upgrade the system to the newest version which goes end-of-life at the end of next year. We were required to make this upgrade due to regulatory reasons, so this represents a cost avoidance of $100,000.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to reduce costs? N/A*
2. *How will you measure the cost reduction or cost avoidance? (How will you know if the benefit has been achieved) N/A*
3. *What is the current baseline? N/A*
4. *What is the target for this measure? (How much savings will this project achieve) N/A*
5. *When is the cost reduction likely to be achieved? N/A*

Section 7. Benefit Achievement Summary

Benefit Achievement Summary

To be completed when benefits have been achieved or no further benefits are expected. *For each of the benefits you identified above, explain whether benefits were achieved at target levels. Please include both quantitative measures and qualitative descriptions of benefits, including any monetary benefits. Use the measures identified above. If not achieved, explain why.*

Example: *This project, to repair an emergency radio tower, was successfully completed in April 2014. The anticipated benefit was to maintain current service levels at 99.999% up time for an additional five years. This project is currently functioning at 99.999% up-time and will report annually for the next five years on up-time levels.*

If one of these towers failed physically, the cost to the county would be enormous, generally in the neighborhood of $500K - $1 Million per tower depending on the construction techniques and size. User agencies on the emergency radio system will benefit by having infrastructure systems in place that will be assured of not experiencing catastrophic failures due to lack of maintenance.

Example: *This project to automate accounts payable software was implemented and did improve the processing time average. The average time was reduced from 10 days to 2 days, not quite reaching the 1 day target. Additionally, only 20 percent of purchases received a prompt payment discount resulting in less cost swings than anticipated. We did not meet the target because there were fewer purchases that qualified for prompt payment than originally estimated.*

Example:

Metric Description	Metrics	Baseline	Target	Actual
Reduce cost to deliver service. This project reduced processing time from the current average of ten days to less than one allowing us to take advantage of prompt payment discounts.	*Processing Time annual savings, and percentage of purchases receiving prompt payment discounts*	• *10 days processing time* • *10 percent of purchases are receiving discount* • *Savings of $100,000*	• *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 SEND Project close-out occurred in 2014 following completion of the infrastructure build and validation of the technical design. Benefits reporting was expected for a few years as additional EMS agencies signed on to participate in the system and new hospital interfaces were built. However, further benefits related to technical implementation are not expected.

B1 Measure - Percent of Patient Cases Where Pre-Hospital Data is Transmitted En Route to the Receiving Hospital: Approximately 11% of overall transported patients in King County were transported to Northwest and Evergreen hospitals in 2015, providing valuable patient care information prior to the arrival of EMS patients.

B2 Measure - Satisfaction of Participating Hospitals: Feedback from hospitals is very positive for receiving patient information prior to arrival. In addition, the receipt of information in digital format greatly simplifies access to data in the emergency department when and where needed.

B3 Measure - Reduction in EMS Division Administrative Staff Time: There is no longer staff time dedicated to MIRF data entry. Administrative time has been re-allocated to support other EMS Division activities, such as running reports to assist the EMS finance team, entering data for the Cardiac Case Review program, and providing EMS Online *ad hoc* program support.

B4 Measure - Percent of Patient Outcomes Obtained Directly from the ESO Data Exchange: When the patients are discharged from hospitals connected to the ESO data hub, this triggers an automated transmittal of valuable patient outcome data to the transporting fire departments. EMS agencies received outcomes for over 10% of the overall transported cases in King County, enabling valuable patient care quality improvement activities to occur.

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	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~~, Michele Plorde, 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	EMD QI Program Manager, EMS Division, PHSKC	QI Manager, product testing

Section 4. When should the Benefit Achievement Plan be started, updated and completed?

The BAP is intended to be an iterative, evolving document that will be updated as the project evolves, as information is refined or scope changes, and when benefits are finally achieved. Department and agencies (the business owners of project benefits) are required to update this document at the following times or actions:

1. To support initial project request during "gate two" phase of conceptual review.
2. For the annual Benefits report that PSB compiles.
3. To support funding release requests. If there are no changes, simply indicate "review only" in the revision table.
4. When a material scope change is identified and reported.
5. Up to one year after project completion and then annually until it is determined by the business owners that anticipated benefits have been achieved or no further benefits are expected.

Once the project is complete and benefits are achieved and reported, no additional reporting is required.

Please update the document online. Do not delete your previous text. Update the text as necessary and date those updates. Make sure that you upload the updated version to Innotas. The intent is for this single document to show the history of benefits over the course of the project. List any changes in the table in section 5. (If there are no changes, type none)

Section 5. How long will it take to complete the benefit achievement plan?

Completion of the BAP depends on the project's complexity. In general, it should take a few hours to complete this BAP form once there is a shared understanding of the project and what value it will bring to the County. More complex and costly projects may require more extensive analysis. To improve this process in the future, please record the time spent on this in the table below at each stage of revision:

Revision History Table

Stage	Date	Revised By	Description	How long did it take?
Please use conceptual review, budget process, funding release, annual report, project implementation, or project completion.	*Date this docume nt was updated*	*Who did the document updates?*	*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".*	*How long did it take to complete or revise the form at this stage?*
Conceptual review	2/14/14	Linda Culley	New, initial draft	3 hours
2015 Annual BAP	3/19/15	Linda Culley	One name correction in Section 3; .	10 minutes
2016 Annual BAP	2/12/16	Linda Culley	No changes	5 minutes
2016 Benefits Review	6/16/16	Linda Culley	Changed Director name	10 minutes

Section 6. Description of Project Benefits

Identify the category(ies) of benefits your project will provide and include narrative descriptions of estimated benefits. The benefits of IT investments generally fit into the following four categories:

1) External service benefits: Improving the quality or quantity of services provided to the public
2) Internal service benefits: Improving internal operations, including the quality or quantity of internal services
3) Maintaining service levels by replacing or upgrading older technology or reducing risk of system failures
4) Reduced cost to produce services (internal or external)

Each category is described below. Most projects will have benefits in one or two categories. If the project does not have benefits in a category, there is no need to provide information for that category.

What is the primary benefit of your project? After reviewing the benefit categories below, please identify the primary type of benefit for the project. For most projects, the primary type benefit will be Category #2 improving internal operations or Category #3 replacing or upgrading older technology.

Primary project benefit? (Check only one)

☒ Category #1: External service benefits: Improving the quality or quantity of services provided to the public

☐ Category #2: Internal service benefits: Improving internal operations, including the quality or quantity of internal services

☐ Category #3: Maintaining service levels by replacing or upgrading older technology

☐ Category #4: Reduced cost or cost avoidance to produce services

Category #1: External service benefits: Improving the quality or quantity of services provided to the public. This category is intended for projects that directly benefit the public. This includes improved quality of service, such as faster response times and better access to services for the public.

Example: *If this project to upgrade our licensing software is approved, licenses will be issued in two business days instead of the four days currently required. This is largely due to the ability of the new software to check national and state databases more efficiently. About one-quarter of our customers currently complain about the delay in obtaining a license and this time reduction is expected to eliminate almost all complaints and allow staff resources to be directed to other customer services.*

Example: *If this project to accept on-line reservations is approved, residents will be able to schedule athletic fields over the Internet and make payments by credit card. This will allow scheduling to occur at any time, rather than the current limited hours available for in-person or phone reservations. In-person and phone reservations will still be available.*

The above examples are summaries. Please respond to each question listed below rather than provide a summary.

1. *Describe why you expect the proposed IT investment to produce the benefit(s).*

An electronic Criteria Based Dispatch (eCBD) application that successfully interfaces with the communication center CAD system will benefit our customers, i.e. the 9-1-1 communication centers, dispatchers, and King County residents who call 9-1-1 during medical emergencies.

This interfaced application will improve internal and external access to county records, services and resources. It will integrate existing systems, enhance system reliability and improve the quality, accuracy and transparency of data that is used to make decisions about revisions to the emergency medical triage system.

The goal of the CBD Guidelines is to implement methods to manage costly, existing EMS resources more effectively and efficiently. Enhanced technology will enable data collection on Emergency Medical Dispatch (EMD) call processing, improving the ability of the EMS Division to perform efficient EMD case review.

A. Benefits to dispatchers include:
   1) Increased functionality of their primary call processing tool during medical emergencies. This increased functionality will produce process benefits including but not limited to:
      a. Increase instances of appropriate resource deployment as a result of inadequate triage.
      b. Increased opportunity for provision of medical pre-arrival instructions (PAI).

B. Benefits to Communication Center Supervisors and EMS Division staff include:
   1) Ability to collect accurate and timely documentation for the purposes of quality improvement to evaluate 9-1-1- call handling techniques;
   2) Ability to identify calls by specific call type and employee for Quality Improvement (QI) review .

C. Benefits to EMS Administrators include:
   1) Access to aggregate data and reports for purposes of quality improvement review, trend identification, training needs analysis and EMS levy performance standard compliance review.

2. *How will you measure the benefit(s)? (How will you know if the benefit has been achieved?)*
   A. EMD QI performance outcomes:
      1) Correctly Rule Out Cardiac Arrest
      2) Appropriate Level of Response (LOR) Chosen
      3) Applicable PAI Provided
      4) Assigned Correct Initial Dispatch Code (IDC)
   B. Access to call data based upon chief complaint or employee in order to perform QI reviews.
   C. Access to performance and trending reports.

3. *What is the current baseline for this measure?*
   A. The baseline for Item 2.A., 2013 performance outcomes:
      1) Correctly Rule Out Cardiac Arrest: 62%
      2) Appropriate Level of Response (LOR) Chosen: 78%
      3) Pre-Arrivals Given When Needed: 83%
      4) Assigned Correct IDC: 74%
   B. The baseline for Item 2.B., prior to project implementation is zero eCBD call records could be accessed.

C. The baseline for Item 2.C., prior to project implementation is zero performance or trending reports can be accessed.

4. *What is the target for this measure? (How much improvement will this project achieve?)*
   A. The target for measure 2.A., is
      1) Correctly Rule Out Cardiac Arrest
         a) Year 1: 75%
         b) Year 2: 80%
         c) Year 3: 85%
      2) Appropriate Level of Response (LOR) Chosen
         a) Year 1: 75%
         b) Year 2: 80%
         c) Year 3: 85%
      3) Pre-Arrival Instructions Given When Needed
         a) Year 1: 75%
         b) Year 2: 80%
         c) Year 3: 85%
      4) Assigned Correct IDC
         a) Year 1: 75%
         b) Year 2: 80%
         c) Year 3: 85%

   B. The target for measure 2.B., Within one year of implementation, 95% of 9-1-1 calls under EMD QI review will have an eCBD call record available.
   C. The target for measure 2.C., is nine performance or trending reports available to EMS staff.

5. *When is the benefit likely to be achieved?* The benefit is expected to be achieved within 6 months to 3 years of project implementation. There are different target milestones for each benefit.

   6/16/16 – The interface project has been put on hold due to technical upgrades to the Monitors at Valley Com. As a result of this technical upgrade, the eCBD Software must also be upgraded, as the software was not coded to work with the monitors to be used by Valley Com. The eCBD Software is now 10 years old and has only had one upgrade during that time. An eCBD Modernization project has begun to bring this software up to current standards prior to developing the interface with Tiburon CAD. The eCBD Modernization Project is expected to take 6-9 months and the interface project is expected to be started in Q1or Q2, 2017.

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?)*
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Category #3: Projects that maintain service at current levels by either replacing or upgrading older technology, reducing the risk of system failures, or providing regulatory compliance. If the project will result in improvements to external or internal services or cost savings, please note those benefits in the appropriate categories.

Example: *This project will upgrade PeopleSoft from 9.0 to 9.2. This upgrade is necessary because vendor support for 9.0 will be ending in 2015 and that creates a large risk for the County. Without vendor support the County will not receive tax and regulatory updates and will likely result in errors in complying with tax and regulatory issues.*

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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

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