



2013 Technology Business Plan

September 24, 2012



King County

Information
TECHNOLOGY

I'm pleased to present our 2013 Technology Business Plan. This plan communicates how our technology strategic direction supports our business customers in the delivery of critical county services and provides a foundation for business process transformation and service delivery improvements. Our plan lists the 2013 projects and how they align with a clear technology direction within specific strategic themes to properly communicate and add credibility to our approach. The approved projects were vetted by our Enterprise Architecture Leadership team ensuring that they align well with our architecture principles and support King County's strategic goals.



In 2013 King County continues to make a substantial investment in technology which reflects our government's reliance on IT systems in carrying out our diverse missions to ultimately deliver services to our residents and improve back office functions. Much like our counterparts in the private sector, we are looking at providing modernized technology platforms for alternate service delivery such as an increased use of services over the Internet to improve operations and the delivery of services. A wide range of efficiencies are emerging from this work, contributing to ongoing technology development, the improvement of business practices, a more streamlined government, and a more informed public.

A solid technology foundation is vitally important, because without it we cannot assist the various agencies and departments in their efforts to modernize their internal business processes and improve their service delivery to the residents of King County.

Over the past year I have already seen many significant accomplishments that are moving us towards our vision. Some of these accomplishments are:

- Completion of the consolidation of the county's servers to our state-of-the-art King County Data Center at Sabey
- The completion of the standard virtualized environment (SVE) server environment at our King County Data Center that will provide a standard environment for departments to quickly receive server and storage services
- Modernizing our critical infrastructure services such as email, King County Wide Area Network (KCWAN), and our fiber network (I-Net) that provides Internet access to school districts, Libraries, and public safety institutions
- Application modernization of critical business applications in multiple departments and separately elect agencies
- Completion of the KCIT service catalog with a transparent rate methodology and performance metrics
- Increased security monitoring and analysis to protect the King County infrastructure and our customers data
- Leveraging what we own by further standardization of key vendor contracts for new services such as Customer Relationship Management (CRM) and a transition from BPOS SharePoint 2007 to Office 365 SharePoint 2010
- We are modernizing our Internet services with the re-development of our Internet, intranet and building new services such as the Assessor Property Tax Appeal over the Internet
- Continued phasing on our Countywide Telephone System Replacement Project (CTSR) which provides unified communication services to our customers with voice, video conferencing, presence, and instant message capability
- Progress on key projects such as the replacement of our 30 year old mainframe system, Electronic Health Records for Public Health and Jail Health Services, procuring services from a private cloud vendor, adding key technology services to critical county services such as the new DOT Rapid Ride

Critical to success in all areas is a commitment to execution and continuous process improvement. Recent and on-going efforts to streamline and improve project execution and oversight as well as operational support will continue to improve our foundation. Even more important to our foundation is an increased priority on staff development and engagement. They are our most valuable asset and we need to empower them by providing appropriate tools, management interaction including clear expectations and direct feedback, and appropriate training on technologies, processes, and soft skills.

By matching strategies with our core values and driving principles of being a service focused organization, being committed to our customers and citizens, investing in and empowering our staff, and seeking to continually improve our processes; I'm convinced that we can accomplish our vision of becoming a world class technology services provider.

- Bill Kehoe, King County Chief Information Officer

A handwritten signature in black ink that reads "William S. Kehoe".

This is an annual plan for the upcoming year’s proposed technology projects; intended to align with individual agency’s business plans and budget requests, the countywide standards and policies, direction as set forth in the strategic information technology plan, aligned with King County’s Strategic Plan.

A proposed version is transmitted to the County Council with the Executive’s proposed budget. The final version incorporates final County Council decisions.

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Investment Decisions

Technology is increasingly important in the work and services that King County provides. In the paper-based world, IT was behind the scenes and referred to in conceptual terms like “network” or “firewall”, and included things that the average employee wouldn’t encounter in a normal work day. Now, however, it surrounds us. It is almost impossible to imagine a workplace without the advantages that technology tools bring, whether it is a mobile phone application, collaborative workspace, or integrated communications. Technological implementations have enabled staff to reach others throughout the world in a matter of seconds, with cost being increasingly negligible. Employees no longer need to be physically with their co-workers; instead they can communicate effectively at home or where ever there is wireless access. Technology innovations are making information cheaper, easier to access, and more customizable than ever before.

The Department of Information Technology (KCIT), as the county’s provider of IT services, is continuing to innovate and find ways to provide employees with powerful efficiencies - which creates an environment for empowered employees. At the same time, business system complexity is increasing. Empowered employees enable increased customer service and product customization and offer an opportunity to leverage the results of technology innovation in new and un-anticipated ways. This leveraging of technology is critical to continued efficiency within public sector operations, improvement to resident facing services, and increased value in government services.

Employee empowerment, product based service delivery that enables customer choice, and focusing on customer service are three primary tenets of the Executive’s reform agenda. Cultural changes of this magnitude require significant time and effort while deeply impacting people, process, and technology. KCIT is helping to lead the way on several fronts related to these reform agenda objectives.

The demand for reliable, high performing information technology services continues to increase, and an enterprise view towards investments and TCO (Total Cost of Ownership) is needed to maximize value to the county. This means taking a look at the cost of business as a whole, and not just the cost of each part, like technology. By taking an enterprise approach, investments can be shifted to where they are most beneficial - to the products and services we are delivering to our customers, and as set in the King county Strategic Plan.

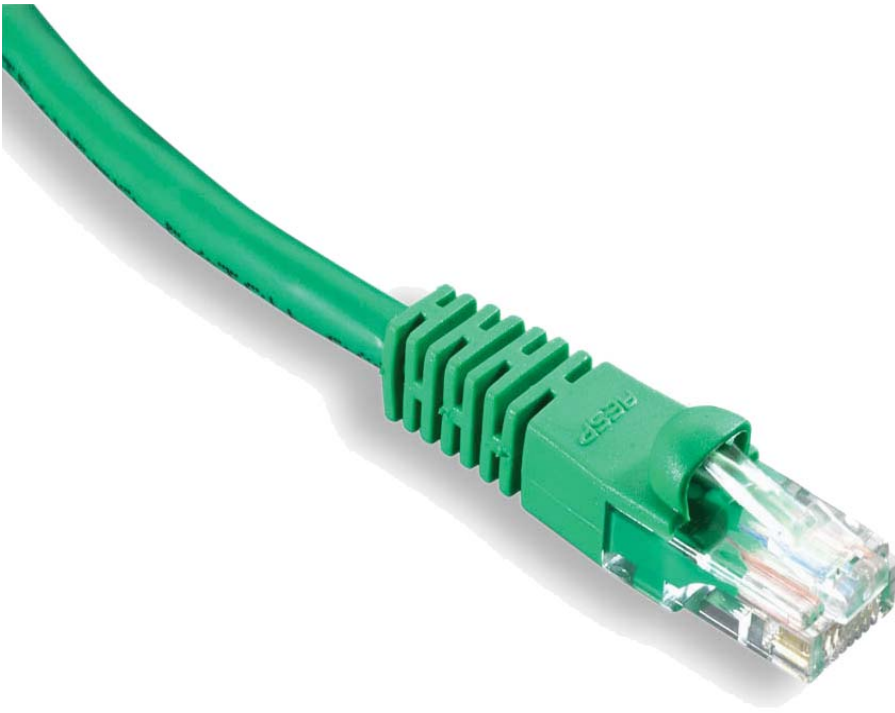
Benefits Realization

IT Project Benefits Realization and Reporting

The Office of Performance, Strategy and Budget (PSB) and KCIT have been working together to create clearer reporting about the benefits technology projects deliver. The process for benefits realization has been the subject of continuous improvement efforts, and the improvements for this year (2013 budget year) began back in January of 2012, with benefits realization as the primary focus for improvement. In the past, the largest obstacle for reporting on benefits and cost savings from projects has been the lack of accurate and timely data about benefits. In an effort to collect reliable and consistent data on technology projects over an extended timeline, a number of changes and initiatives were started. These include:

1. New forms on which to report benefits by category
2. Process changes to better track benefits through time
3. Funding and implementation of a new portfolio management system in KCIT
4. Communication about the need to report better and more useful data about projects and benefits

Additional information on Benefits Realization is available in Appendix C.



The county's IT project portfolio represents the county's investments in business efficiency and effectiveness through technology.

2013 TECHNOLOGY INVESTMENTS

In 2013 King County will invest over \$81M in operating funds to provide KCIT technology services to support existing business processes. Additional funds will also be invested outside of KCIT for technology services provided by separately elected IT organizations. How much is unclear as accounting for these services is not consistently reported and is contained within each agency's overall budget. For 2013 and beyond, each KCIT service will create a strategic roadmap to identify how and when it will evolve to better meet customer needs over time.

In addition, over \$21M will be invested in the new 2013 multi-year projects to improve business systems that utilize technology. This investment is in addition to prior year IT project investments that still have just under \$110M in unexpended budget. The investment process review included alignment with business and technology strategies as well as with overarching architecture principles. How each project impacts the strategic technology roadmap is documented in Appendix A.

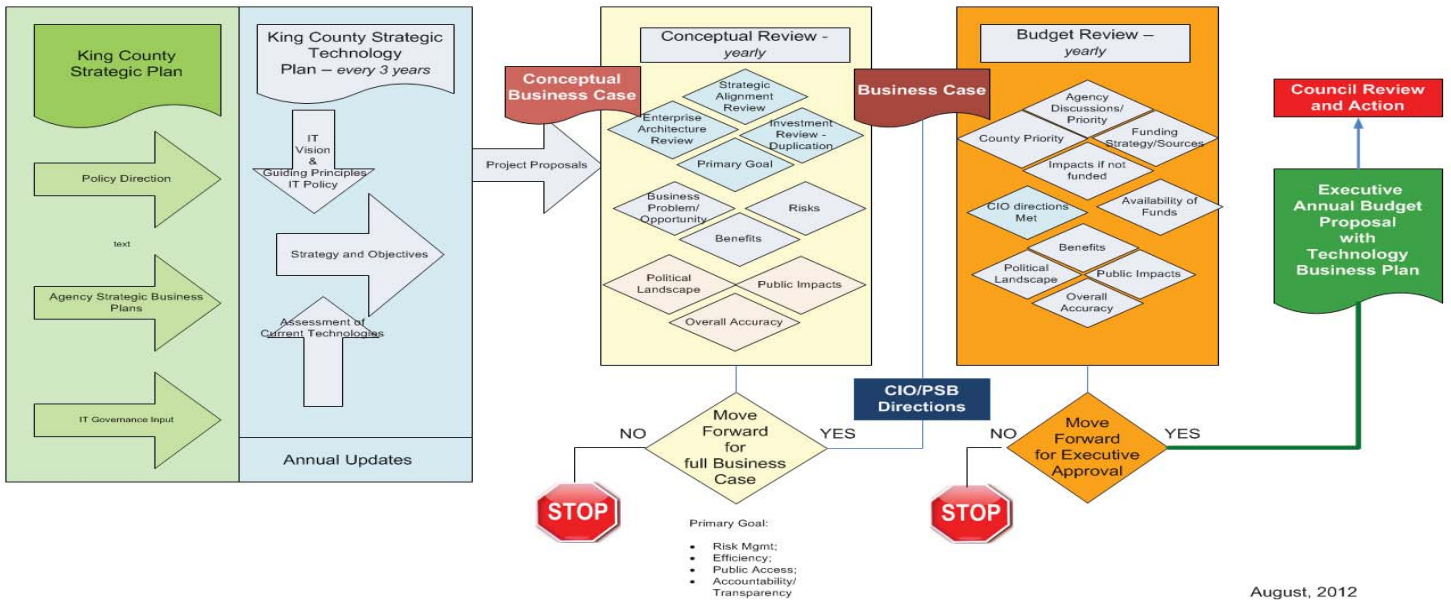


Figure 1 - IT Project Investment: Process and Criteria

IT OPERATIONS

In 2011, a majority of King County's technology operations in the executive branch were consolidated into a single department, the Department of Information Technology also called KCIT. Additional technology operations are performed in each separately elected agency as well. This section will focus on operations within KCIT. Following consolidation, KCIT adopted a service based model in alignment with the Executive's reform agenda. In this model, KCIT identified eight end-user services and multiple supporting internal IT services. After dialogue with our customers around service delivery in 2012, KCIT improved its service catalog for 2013 to include expanded service levels based on customer feedback (Figure 2). The 2013 service catalog was used to determine KCIT's 2013 budget based on customer orders using the catalog.

KCIT Lines of Business

KCIT Product Catalog

- End-user Services
 - Workstation
 - Application
 - Business Analysis
 - eGovernment
 - IT End-User Training
 - IT Project management
 - Regional Services
 - Voice
- IT-IT Services (6)
- Business Foundation Services (5)
- Mandated Services (4)
- Service Support (2)

Figure 2 - KCIT Services



References: 2013 End-User IT Service Catalog
Service Relationships & Rate Methodology

This table shows IT Service Orders for 2013 that are included in the 2013 budget by customer and by line of business.

(in dollars)	Workstation	Applications	IT Project Mgmt	eGov	Business Analysis	Voice	Regional Services	Countywide Rates	Total
DEPARTMENTS (Appendix F includes a glossary of acronyms)									
DAJD	\$1,868,511	\$2,460,600				\$531,499	\$371,275	\$241,906	\$5,473,791
DCHS	\$1,405,534	\$2,706,100	\$86,281	\$99,655	\$188,055	\$247,426	\$94,710	\$81,215	\$4,908,976
DES	\$2,445,076	\$4,917,324		\$97,240		\$577,102	\$588,461	\$217,648	\$8,842,851
EXECUTIVE	\$269,150	\$42,687		\$3,897		\$44,092	\$7,762	\$23,829	\$391,417
FINANCIAL ANALYSIS	\$7,509	\$3,543				\$1,247	\$115	\$648	\$13,062
PH	\$4,073,634	\$5,522,376		\$199,309	\$529,800	\$1,023,898	\$223,107	\$386,428	\$11,958,552
DOT	\$6,239,981	\$7,670,644			\$286,616	\$1,553,330	\$1,375,927	\$1,205,269	\$18,331,767
DNRP	\$5,122,364	\$5,730,011		\$1,364,232	\$27,861	\$1,370,252	\$2,587,928	\$391,844	\$16,594,492
DDES	\$301,912	\$227,807		\$7,796		\$92,510	\$463,439	\$19,839	\$1,113,303
KCIT	\$233,921	\$246,405				\$540,239	\$112,633	\$13,986	\$1,147,184
ELECTED OFFICIALS									
Sheriff's Office	\$1,575,337	\$391,971		\$14,942		\$450,801	\$1,549,377	\$274,799	\$4,257,227
DJA	\$380,180	\$87,361				\$75,921	\$2,154	\$56,462	\$602,078
Superior Court	\$655,465	\$348,344				\$295,404	\$11,817	\$103,069	\$1,414,099
District Court	\$469,762	\$206,830				\$201,824	\$3,824	\$65,268	\$947,508
Council	\$256,740					\$101,570	\$102,214	\$38,332	\$498,856
Elections	\$275,815	\$254,553				\$106,422	\$89,602	\$16,273	\$742,665
DOA	\$334,294	\$372,294				\$105,933	\$423,816	\$54,390	\$1,290,727
PAO	\$666,395	\$475,771		\$12,992		\$294,260	\$42,452	\$126,042	\$1,617,912
External						\$2,483	\$1,087,720		\$1,090,203
TOTAL	\$26,581,580	\$31,664,621	\$86,281	\$1,800,063	\$1,032,332	\$7,616,213	\$9,138,333	\$3,317,247	\$81,236,670

BUSINESS SYSTEM INVESTMENTS UTILIZING TECHNOLOGY

2013 Proposed Projects *		Project Request
Assessor	Accounting System Update - Study & Business Process	\$233,681
Assessor	Mobile Devices phase II	\$188,400
DAJD	Jail Management System (JMS) Study Project	\$1,316,759
DAJD	Pretrial Risk Assessment Planning	\$87,585
DAJD	Roster Management System	\$383,129
District Court	Business Case for Online Mitigation (MITS)	\$25,000
Public Health	MEO & Vital Stats and Medical Examiner's Web portal	\$159,189
Public Health	Health Information Technology (HIT) project for Public Health & Jail Health Services	\$8,338,397
Public Health	Electronic Medicine Administration Record (eMAR)	\$208,443
DCHS	Demographic Data Consolidation	\$240,748
DCHS	DMHP and Public Safety	\$411,774
Public Health	Sytemwide Enhanced Network Design (SEND)	\$154,025
KCIT	Hosted Environment phase III (Cloud Computing)	\$4,695,961
KCIT	Business Empowerment & User Mobility	\$4,892,099
Total 2013 proposed projects		\$21,335,190

Agency investments which leverage technology of over \$21M are included within the 2013 budget for multi-year projects. These investments are primarily focused on modernizing existing business systems in order to reduce risks around operational failure and to improve efficiency. In addition to these new investments, prior investments will also be expended in 2013 on active projects that were approved prior to the 2013 budget.

Additional details for each of these projects can be seen in Appendix B. Projected benefit information is available in Appendix C. Business case information is available upon request.

* administrative costs and equipment repl. for the general fund are not included in totals

KING COUNTY STRATEGIC PLAN

Working Together for One King County

Vision Statement

King County: a diverse and dynamic community with a healthy economy and environment where all people and businesses have the opportunity to thrive.

Mission Statement

King County government provides fiscally responsible, quality-driven local and regional services for healthy, safe, and vibrant communities.

Guiding Principles

Collaborative • Service-oriented • Results-focused • Accountable
Innovative • Professional • Fair and Just

Goals

What we deliver

How we deliver

Justice and Safety

Support safe communities and accessible justice systems for all.

1. Keep people safe in their homes and communities
2. Ensure fair and accessible justice systems
3. Ensure offending individuals are appropriately detained or sanctioned
4. Decrease damage or harm in the event of a regional crisis

Health and Human Potential

Provide opportunities for all communities and individuals to realize their full potential.

1. Increase the number of healthy years that residents live
2. Protect the health of communities
3. Support the optimal growth and development of children and youth
4. Ensure a network of integrated and effective health and human services is available to people in need

Economic Growth and Built Environment

Encourage a growing and diverse King County economy and vibrant, thriving and sustainable communities.

1. Support a strong, diverse and sustainable economy
2. Meet the growing need for transportation services and facilities throughout the county
3. Shape a built environment that allows communities to flourish
4. Preserve the unique character of our rural communities in collaboration with rural residents

Environmental Sustainability

Safeguard and enhance King County's natural resources and environment.

1. Protect and restore water quality, biodiversity, open space, and ecosystems
2. Encourage sustainable agriculture and forestry
3. Reduce climate pollution and prepare for the effects of climate change on the environment, human health, and the economy
4. Minimize King County's operational environmental footprint

Service Excellence

Establish a culture of customer service and deliver services that are responsive to community needs.

1. Improve our customers' satisfaction with King County
2. Build a culture of performance and improve the effectiveness and efficiency of county programs, services, and systems
3. Foster an ethic of working together for King County
4. Increase access to King County services, personnel, and information

Financial Stewardship

Exercise sound financial management and build King County's long-term fiscal strength.

1. Keep the county's cost of doing business down, including keeping growth in costs below the rate of inflation
2. Plan for the long-term sustainability of county services
3. Provide the public with choices about which services -King County delivers within existing resources and for which services they would like to provide additional funding

Public Engagement

Promote robust public engagement that informs, involves, and empowers people and communities.

1. Expand opportunities to seek input, listen, and respond to residents
2. Empower people to play an active role in shaping their future
3. Improve public awareness of what King County does

Quality Workforce

Develop and empower King County government's most valuable asset, our employees.

1. Attract and recruit a talented county workforce
2. Develop and retain quality employees
3. Utilize employees in an efficient, effective, and productive manner

Immediate Priorities

1

Set standards and expectations for the immediate improvement of customer service

2

Build lasting regional partnerships

3

Stabilize the long-term structural budget problem

4

Build a culture of performance

5

Empower our workforce and work together as one King County

6

Implement the King County Strategic Plan



King County

Office of Performance, Strategy and Budget

www.kingcounty.gov/strategicplan

Strategic Planning

Investment decisions are aligned through the Strategic Technology Plan (STP) and the STP aligns with the King County Strategic Plan. Each project investment that is proposed also identifies its strategic alignment both with business and technology strategies.

KCIT supports many existing applications that support the King County Strategic Plan 'What' goals. These are goals that focus more on 'What' services King County delivers as opposed to "How" those services are delivered. The chart titled "King County Strategic Plan - Working together for One King County" identifies "What" and "How" goals that comprise our strategic plan along with the objectives for each of those goals. As we populate KCIT's applica-

tion portfolio this fall, we will be able to identify the applications that align with each goal, objective, and strategy. As we also populate the county's project portfolio, we will be able to more easily identify which projects are most closely aligned with each of the 'How' goals. Currently, each project identifies how it aligns with both business and technology strategy as part of their business case.

In the summer and fall of 2012, KCIT will be working to update the countywide Strategic Technology Plan and its related goals, objectives, and strategies. Work has already begun through the newly formed IT strategy governance sub-team. The new Strategic Technology Plan will focus on meeting current and future business needs. As a starting point, current strategies and themes will be assessed to determine if they have been accomplished, need to remain as strategies, or are no longer relevant. Existing themes that were shared in 2012's Technology Business Plan are provided here along with 2013 investments.

eGovernment is the utilization of the Internet and the world-wide-web for delivering government information and services to citizens. Expanding and improving the eGovernment services that King County provides will result in:

- Easier access to and transaction of King County provided services
- Increased citizen involvement in King County
- Improved transparency of government
- Reduced environmental impact and footprint related to service transactions

The Web Re-Architecture project is in progress to implement a number of tactical changes to the King County internet environment at www.kingcounty.gov that will provide the tools, structure, policies, and models for all agencies to adopt progressive interaction and collaboration with customers.

This project will address key components of the strategies outlined in the 2010-2012 Strategic Plan, especially promoting robust public engagement that informs, involves and empowers people and communities, and fostering a culture of service excellence that is responsive to community needs.

eGovernment / **SERVICE EXCELLENCE**

Business Case for Online Mitigation (MITS)

Alternative way for the public to mitigate a case (such as a traffic violation) online than through the mail. Currently the only way to submit mitigation is by mail. District Court would like to explore other online possibilities, such as online form submission, mitigation by chat, or even mitigation by video.

eGovernment & Technology Modernization / **HEALTH & HUMAN POTENTIAL**

Electronic Medicine Administration Record (eMAR)

The implementation of an Electronic Medication Administration Record will yield the following benefits:

- Improved legibility and ease of medication administration nursing documentation
- Saves staff time to produce, print, scan and file initial and revised (paper) MARs
- Electronic documentation of Keep On Person medication delivery rather than manual entry into a paper log
- Online patient medication reports replaces provider time to research paper MAR documents
- Provide real-time information to providers on a patient's medication adherence

Unified Communications

This strategy provides the infrastructure needed to deliver on our collaboration and mobility strategies. Unified Communications enables all types of communications (voice, video, data) to be transported through a single system (Microsoft Lync) and accessible through a single point of access at the desktop. Voice and video calls can be placed from your desktop computer. Co-workers status and contact information can be easily obtained and used to quickly contact them regardless of where they are working that day.

This convergence of technologies produces new dynamics between IT systems and communications, including the ability to link computer functions with communications tasks. Based on new technology, daily telephone functions become a part of a highly flexible toolset of interactive communication products.

COLLABORATION

Collaboration means working together to achieve a goal. Effective teams are critical to accomplishing much of the work that is performed in today's workplace. Technology tools can play a critical role towards improving team communication, cohesiveness and results. Our collaboration strategy is to provide the tools that knowledge workers need in order to work more effectively together in various teams and work groups.

Tools that are currently available include team workspaces (through sharepoint) that enable task coordination, document sharing and group editing, discussion forums, group calendaring and planning, instant/easy communication, meeting tools, and other capabilities. Most of these tools are made available through a countywide enterprise agreement that ensures all county employees have the same tools available to be able to work together effectively.

2013 funded projects that support Collaboration goals include:

Collaboration / **HEALTH AND HUMAN POTENTIAL**

Systemwide Enhanced Network Design (SEND) Enhancing the existing Emergency Medical Services (EMS) data network will increase the quality and timeliness of EMS data, thus improving patient care by improving: quality of EMS data, timeliness of EMS data, utilization of patient outcomes, transmission of data en-route to hospitals, and will be adaptable to a range of participating EMS agency needs.

Collaboration & eGovernment / **HEALTH AND HUMAN POTENTIAL**

Vital Stats and Medical Examiner's Web Portal

Web portal for life events that will serve as a single entry point to the various services provided by the Medical Examiner and Vital Statistics offices. This effort will increase the quality of our services and mitigate risk in an economical way.

Collaboration & Tech Modernization / **SUPPORT SAFE COMMUNITIES & ACCESSIBLE JUSTICE SYSTEMS**

Pretrial Risk Assessment Planning

Efficiency of the pretrial release process will be improved with the implementation of a new risk assessment technology to support judicial efforts to make consistent release decisions and improve public safety. Process efficiency in data collection integration, easily digestible reports with useful defendant information for the courts, Office of Public Defense and the Prosecuting Attorney's Office can increase public safety by keeping the most serious offenders in jail and reduce future crime costs.

Collaboration & eGovernment / **QUALITY WORKFORCE**

Roster Management System

Self-Service, as promoted by the Accountable Business Transformation, will save time and money for the Department of Adult and Juvenile Detention (DAJD) by providing employees with automated tools to enter and manage Leave Requests, Overtime Availability Requests, Annual Assignment Requests, and Transfer Requests. DAJD captains and sergeants will no longer be required to manually enter all of this information and can focus their attention to on other critical job functions.

As our society continues to evolve and more and more of the information and tools needed to perform business functions are maintained electronically, the physical location of an employee becomes less important than their access to the information and tools needed to perform a business function. In fact, business processes can be greatly improved when employees are empowered to access and process information regardless of their location so that multiple workers are able to interact with the same piece of information at the same or differing times.

By extending and enhancing mobility solutions in the workplace, we enable business processes to become more efficient by removing the barrier of location from the equation and we also improve the potential for enhanced opportunities for work/life balance, which not only increases employee satisfaction but tends to make employees more efficient as well.

Our mobility strategy extends the collaboration strategy to ensure that teams can form and work together regardless of a team members location. A large part of our mobility strategy is to be able to provide knowledge workers with access to all the information and tools they need to do their job through a single, portable, and wireless workstation. Pilot efforts are already underway to experiment with how physical office space can be re-configured to better accommodate mobility enabled workers while also reducing the footprint supporting them.

2013 funded projects that support Mobility goals include:

Mobility / **SERVICE EXCELLENCE & QUALITY WORKFORCE**

Business Empowerment & User Mobility

Mobility Services Current Remote Access (SSL VPN and “Go to My PC”) has reached capacity. This project will upgrade and enhance the ability for remote workers’ snow day access and disaster response. It will allow mobile workers to access internal systems securely and will build upon current controls and best practices.

Mobility / **ECONOMIC GROWTH AND BUILT ENVIRONMENT**

Mobile Devices phase II

Innovation in the iPad application for property assessments, iRealProperty, has set a new level of efficiency, effectiveness and productivity for Department of Assessments (DOA) employees in the field. This project is version 2 of iRealProperty, which will pursue further enhancements and integration identified by DOA staff, and includes planning for commercial deployment. Deployment of iRealProperty v2 , combined with availability of a tablet version of Microsoft Office and robust cellular connections means dozens of DOA staff will spend more days in the field and are able to do their work without being physically tethered to the office or dependent upon a hard wire connection.

CUSTOMER SERVICE

Excellent customer service has long been a strategic goal for KCIT. Providing technology services that not only meet but exceed our customers' needs and expectations drives all of our activities. There are many areas of focus related to this strategy that we are addressing including:

- Service Catalog for 2013 utilized to determine KCIT budget
- Full costing of supporting internal services included in end-user rates
- Customer choice available in quantity and options selected
- Service level agreements identified for each service, including internal services
- Performance monitoring and report outs to customers (through IT governance) underway in 2012
- Continued product evolution through road maps and on-going customer dialogue
- Survey Customer Satisfaction on our services
- Align/Adopt operational methodology that is customer based and crosses our product line
- IT Portfolio Management for applications and projects

ENTERPRISE ARCHITECTURE

King County continues to move forward with the Enterprise Architecture (EA) Program that was established in late 2011, which provides King County with a framework for decision making that better aligns IT decisions with county business direction.

In 2012, the program reviewed all 2013 project proposals for alignment with previously developed overarching principles for King County. Feedback was also provided to project teams, to the CIO, and to the Office of Performance, Strategy and Budget (PSB) as part of the technology investment process in several ways including:

- where significant risks might occur - recommendations on how to avoid or minimize that risk
- potential re-use or sharing with other projects or existing systems
- unique feedback based on the circumstances of each request

The EA program will continue to evolve through 2013 and beyond in order to meet our identified goals and objectives. Significant architectural review and advice has already been initiated on projects identified in this report including cloud computing efforts, CRM strategy, and other areas. Going forward, architecture review points are being added to the solution Development Life Cycle (SDLC), Project Management Methodology (PMM), and Project Oversight function (PRB) so that it integrates and coordinates across these methodologies. Additional efforts include:

- Completing the EA framework that provides a holistic view of the our information, application, and technology assets
- Formalizing data architecture and application architecture as King County disciplines
- Finishing the county's EA governance structure by establishing the Architecture Review Team and remaining Domain (Subject Matter Expert) Teams
- Performing architecture reviews at the conceptual and design levels

The objectives of the Enterprise Architecture program are:

- Better alignment to our business strategies in order to improve the business units ability to deliver services, and to focus business and technology resources on highest value areas
- Decisions that adhere to the county's business-driven EA principles
- Guidance to projects & initiatives that achieves cost-effective, manageable, and consistent service delivery
- A more effective way to leverage the expertise of Subject Matter Experts (SMEs)
- Better definition of, and movement to the desired future state for information, applications, and infrastructure

Regional Partnerships

KCIT is placing an increased importance on the regional work that we do. KCIT has created a section focused on regional communication services, which aligns with our focus on providing primary customer facing services. Regional services include the Institutional Network (I-Net), Geographic Information Systems (GIS), Radio Communication Services (RCS), and other, smaller regional services. Recently the county has begun leading a tri-county regional effort which is exploring the concept of implementing an 800MHz emergency radio system that would operate as a single three county network and increase the level of interoperability and usability throughout the Central Puget Sound as never seen before. This effort is working under the group named the Radio Executive Policy Committee (REPC) which is currently examining technical, governance, and operational alternatives available to such a network.

Information Assurance

Information Assurance focuses on the management and reduction of risks to the county's information assets by implementing controls to protect the confidentiality, integrity and availability of such assets in compliance with legal, regulatory, and contractual obligations, while exercising care and due diligence with the information entrusted to the county by residents and others. Projects that support Information Assurance goals include:

Information Assurance / **SUPPORT SAFE COMMUNITIES AND ACCESSIBLE JUSTICE SYSTEMS**

Two Factor Authentications

U. S. Department of Justice - Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Security Policy Version 5.0, Section 5.6.2.2 requires all criminal justice agencies and partners to implement **Advanced Authentication** by September 30, 2013. This project will acquire and implement an appropriate solution to achieve the required compliance.

The following departments and agencies within King County have been actively collaborating in the selection and implementation for this project: Adult and Juvenile Detention, Sheriff's Office, Superior Court, District Court, Prosecuting Attorney's Office, and Information Technology (operational sections and Information Assurance)

Information Assurance / **FINANCIAL STEWARDSHIP**

Log Management and Security Information Event Monitoring (SIEM)

Information Assurance is implementing a system which will retain logs (system activity records) from critical servers and infrastructure equipment for an appropriate period of time. This log information will then be transmitted to an analysis engine (SIEM) which will review and evaluate the log information for inappropriate or improper activity. Such activity may be malicious or nefarious in nature. If inappropriate or improper activity is discovered appropriate alert message will be sent to technical staff to address the issue.

This system will allow us to meet a contractual requirement for PCI DSS (Payment Card Data Security Standard). Meeting this standard permits King County to accept credit card transactions from citizens. Additionally log retention is a requirement of the Public Records Act (42.56 RCW). Of even greater benefit will be the visibility of activity on King County's network. Technical staff will be alerted of improper activity and can promptly act upon the information to better protect the County's information assets from inappropriate or inadvertent disclosure and misuse.

County Utility Computing Service (Cloud Services)

A technology project is required to fully provide the architectural components needed to move to a utility computing or cloud based service delivery model for our infrastructure services. The utility computing model is already providing value to the county by reducing risk of failure by locating in a highly redundant data center, and by leveraging existing unused capacity in our current infrastructure, primarily from stand-alone servers that are moving to a virtual environment. As the service grows, it will include computing platforms scaled to application needs, optimal data storage also scaled to customer needs, consistent back-up and recovery processes reducing risk, and appropriate business continuity failover also significantly reducing risk.

This approach leverages the county's current investment in a state-of-the-art, energy efficient data center, reducing risk of failure for all supported applications. It also enables improved customer service through improved availability and reduced cost to deliver services. 2013 funded projects that support Cloud Computing goals include:

Utility Computing / **SERVICE EXCELLENCE**

Hosted Environment phase III (Cloud Computing)

This technology project is required to provide the architectural components needed to move to a utility computing or cloud base service delivery model for our infrastructure services. Moving from stand-alone physical servers to a virtual environment over the past two years has already provided great value to the county by reducing the risk of failure by locating in a highly redundant data center and by leveraging the existing unused capacity in our current infrastructure. As the cloud service grows, it will include: computing platforms scaled to application needs, optimal data storage also scaled to customer needs, consistent back-up and recovery processes, and appropriate business continuity failover both necessary for reducing significant risk. This approach leverages the county's current investment in a state-of-the-art, energy-efficient data center thereby reducing risk of failure for all supported applications. It also enables improved customer service through improved availability and reduced cost to deliver services.

Technology Modernization

Providing a modern technology environment better enables the flexibility and capacity to rapidly respond to business needs. It also makes it easier to incorporate new technology innovations, reducing the effort related to each upgrade in technology. One of the largest impacts to King County from having outdated technologies in place is our inability to effectively perform business analytics on the information that we own and maintain. The first step in our modernization strategy is to migrate the applications and supporting information that currently exists on our mainframe platform to modern platforms that enable data and application sharing and re-use. As applications are migrated to modern infrastructures, there is an increased reliance on networks to ensure acceptable response time and availability for increasingly 24 hour user uptime needs. To support this need, modernization of our I-Net infrastructure is required and also included as a capital project request. 2013 funded projects that support Modernization goals include:

Technology Modernization / **HEALTH & HUMAN POTENTIAL**

Health Information Technology (HIT) project for Public Health & Jail Health Services

Migration to a modern Practice Management System including Electronic Health Records for both Public health and Jail Health Services will provide many critical benefits to our employees and county residents.

- Improved coordination of care for the at-risk and vulnerable populations who receive clinical services from Public Health (PH) at all PH sites
- Strengthened partnership between clinicians at jail and non-jail Public Health sites
- Reduced complexity and risks of supporting multiple patient care systems results in better support for patients and system users
- JHS will be able to respond to upcoming changes, including billing, which will be identified under the Patient Protection and Affordable Care Act
- Increased stability that comes with a well-established Electronic Health Record vendor
- Improved communication/collaboration with other care providers

Technology Modernization / **ECONOMIC GROWTH AND BUILT ENVIRONMENT**

Accounting System Update - Study & Business Process

Modernizing the current Cobol-based Property Based System (PBS) will provide a high value upgrade for the Department of Assessments (DOA). This project will deliver improved levy rate and tax roll processing for both DOA and our central finance group by reducing cycle time for producing levy rates from weeks to hours. The modular implementation strategy of this project will save millions by avoiding the cost of an entire vendor replacement system. Future plans include building a Washington State-based PBS platform to integrate field data collection, assess value and levy setting, and tax roll certification, that could be offered to other counties for cost-sharing.

Technology Modernization / **EQUITY AND SOCIAL JUSTICE**

Demographic Data Consolidation

Data is critical to provide consistent reporting of services. This project will build a centralized department services data repository for the Department of Community and Humans Services to provide a single, unified location for data storage, retrieval and analysis, and an aligned department view for reporting. A unified data repository will provide new flexibility in data analysis, allowing for consistent reporting of services in different ways, such as by geographic area, ethnicity or age, which is especially relevant to the Equity and Social Justice Initiative.

Technology Modernization / **HEALTH AND HUMAN POTENTIAL**

Designated Mental Health Professionals (DMHP) and Public Safety

Electronic records reduce costs and increase availability to staff both in the office and the field. Rather than relying on paper, staff would create records and document cases directly into the system, and they would have online access to scanned clinical and court records. This would also allow integration with e-filing legal documents, and will improve the safety of residents by making records available online for emergency psychiatric detentions.

Technology Modernization /

SUPPORT SAFE COMMUNITIES AND ACCESSIBLE JUSTICE SYSTEMS

Jail Management System (JMS) Study Project

Automation is a key area of technology efficiency. This proposed project will provide DAJD with the means to acquire and implement a comprehensive and integrated automated system that meets current and future business drivers for the department. With this type of system in place, DAJD will be positioned with the tools and reporting capability that permit easier, faster, and more automated compliance with the legal requirement imposed by governing agencies, and with the capabilities to step up its role as a leader in the regional criminal justice community. Further, the department will be positioned to examine its current operations and evaluate opportunities to implement business process re engineering to improve the quality, quantity, and visibility of these processes.

For more information please see:

www.kingcounty.gov/tbp

Appendix A: King County Strategic Technology Enterprise Plan

Appendix B: IT Project Details

Appendix C: Benefits Realization

Appendix D: KCIT Business Plan

Appendix E: Line of Business Plan

Appendix F: Acronyms



Achievements in 2013 will be documented in the Annual Technology Report, which focuses on raising awareness of the many benefits associated with leveraging IT everyday, in internal business practices, and in government's activities and interactions with citizens. The report specifically addresses many critical IT components, including: the status and accomplishments of technology projects, and can be viewed as a companion report to the Technology Business Plan.

King County Technology Business Plan

www.kingcounty.gov/tbp

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King County

Information
TECHNOLOGY

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