


King County


Seattle & King County Public Health's Chief Financial Officer and the Electronic Health Record Team

Back row: Jenny Escriba, Carole Mullin, Cindy West (PH CFO), Wendy Seese, Jeff Boudreau
Front row: Jane Grinnell, Kristi Korolak (HIT Project Manager), Cristin Burris

May, 2013

About this photo: Cindy West won the cover of the Strategic Technology Plan at the Rate Day raffle in May of 2012. For more information on rates and our internal service catalog, please visit <http://www.kingcounty.gov/operations/it.aspx>

Enterprise planned; Project implemented

The Public Health Health Information Technology Project (HIT) illustrates strategic alignment to our vision and goals by implementing software as a service (SaaS) technology that is designed to attain a higher level of Health & Human Potential. Benefits of migrating to a practice management and electronic health record system include improved coordination of care, strengthened partnerships, reduced complexity and risks, and implementation of electronic tools.

**STRATEGIC
TECHNOLOGY**
 2013-2015 PLAN

Executive Summary

A strategic technology plan is critical in order to effectively align technology services and supporting infrastructure with anticipated future business needs. This importance only magnifies as technology becomes increasingly more embedded in the services that King County provides and as innovations are making technology solutions easier to access and more customizable than ever before. At the same time, business system complexity is increasing as organizations are departing from top down control structures and rigid procedures of the past. Residents expect improved customer service, expanded access to services, increased product customization, and empowered employees who are able to serve them. Empowered employees can leverage the results of technology innovation in new and unanticipated ways, which is critical to continued efficiency within public sector organizations, improvement to constituent facing capabilities, and increased quality and value in government services.

This Strategic Technology Plan anticipates these innovations and communicates King County's technology vision over the next three years. The goal of the plan is to align technology activities and investments with business strategy and goals, resulting in improved King County service delivery to the public.

The Strategic Technology Plan 2013-2015 sets this technology vision by establishing four key objectives, supporting strategies and success indicators. The four objectives, along with the resulting benefits of accomplishing the objectives, are listed in Table 1 on the following page.

The key objectives for 2013-2015 were identified by reviewing input from business and technology leaders on technology governance teams throughout King County. Of primary importance was alignment with the King County Strategic Plan and our business partners' strategic business needs.

Pro-actively leveraging Information Technology enables higher-value, convenient and easier to deliver business services to King County customers.

The story of progress is told as we look at each of the objectives and review where we came from (the 2003-2005 and 2006-2008 plans), where we are now (the 2009-2013 plan), where we are going (this plan), and the expected benefits from going there. Details that support this journey have been included as appendices to this document.

King County was able to complete 80 percent of the over 300 outcomes identified in the prior Strategic Technology Plan 2009-2012. Ten percent of the remaining outcomes were cancelled, leaving **90 percent of the outcomes resolved**. The remaining 10 percent are either in-progress (seven percent), on hold (one percent), or not yet started (two percent). This significant strategic progress has contributed to major service delivery improvements to date and positions information technology (IT) well to embark on the Strategic Technology Plan 2013-2015 intended to solidify King County's information technology services as industry leaders focused on providing world class service.

Objectives with the highest completion percentage on the last Strategic Technology Plan 2009-2012 include:

- **Transform** common business practices (95%)
- Extend and enhance **mobility** solutions (94%)
- Elevate **customer service** as an operational priority (94%)
- Improve IT **operational maturity** (98%)
- **Green IT** (100%)

Technology Objective	Resulting Benefits
eGovernment -Improve service delivery to and interaction with King County customers by leveraging web and related social media technologies.	- Improved citizen value and satisfaction when transacting business with King County - Improved access to King County services - Increased citizen participation in government - Greater transparency of government operations
Mobility -Free employees and citizens to interact and transact business when and where most appropriate and convenient.	- Increased business and IT productivity - Re-designed business processes geared towards customer service and overall efficiency - Reduced costs related to staff moves - More collaborative, open, dynamic office space and working environments
Technology Modernization Applications —Enable business solutions that are flexible, timely, and dependable by pro-actively evolving modern application technologies and processes. Infrastructure - Empower flexible system solutions by providing current technology platforms, components and frameworks on which applications can operate and continuously improve.	- Speed to implement business process changes is faster - Total Cost of Ownership (TCO) for computing is reduced through efficiencies, standardization, re-use and the ability to meter and rapidly scale resources up or down as needed - Increased service quality due to increased standardization and reduced downtime - Reduced risk due to increased redundancy, geographic diversity, and commoditized, on-demand scaling of needed assets
IT Service Improvements (Maturity) - Increase the value to customers from IT services by maturing our service delivery processes and improving our services to better anticipate and match customer needs and expectations.	- Increased IT customer choice and greater knowledge/ transparency of IT services through improved provisioning, performance dialogues, satisfaction surveys and other practices improving customer satisfaction and engagement - Strategic alignment of IT services with future customer needs - Reduced cost of existing services through low cost options in comparison to industry standard offerings, continual service improvements, increased re-use and sharing of solutions, and improved integration across solutions - Faster delivery of service fixes, changes, improvements and new service introduction through Continual Improvements (CI)

Table 1 – Summary of Strategic Technology Objectives and Resulting Benefits

Contents

Executive Summary.....	2
Contents.....	4
Business Goals.....	5
Technology Alignment with Business Goals	6
Benefit Realization	9
Strategic Technology Objectives.....	10
eGovernment.....	14
Mobility.....	17
Technology Modernization	20
Service Maturity.....	24
Supporting Documents	28
Appendix A – King County Strategic Technology Enterprise Plan	29
Appendix B - Background.....	30
Directing Code.....	30
Recap of Strategic Progress	31
Current Strategic Context: Strengths, Constraints, Opportunities & Challenges	31
Outcomes Shifting to Indicators	32
Appendix C – IT Strategies and Indicators	33
Appendix D – IT Service Strategies.....	50
Appendix E – IT Service Line of Business Plans and Roadmaps	51
Appendix F - Technology Roadmaps.....	53
Appendix G - Significant Business Changes / Strategies Summary.....	55
Appendix H - Directing Code.....	58
Appendix I - Summary of Information Assurance Strategies and Indicators.....	59
Appendix J – Summary of Strategic Technology Indicators.....	60
Appendix K – Table of Acronyms	62
Appendix L – Objective Benefits and Strategic Success Indicators.....	64

Business Goals

The Strategic Technology Plan 2013-2015 is primarily driven by our customers, which are King County departments and agencies that deliver county services directly to the public. King County's strategic goals, objectives, and strategies are contained in the King County Strategic Plan 2010-2014 (KCSP). This plan contains eight countywide goals. Four of these goals describe 'what' services the County delivers to the public. The other four goals describe 'how' those services should be delivered.

Each of the eight goals, in turn, is supported by objectives, strategies, and performance indicators intended to inform needed business direction that in-turn inform the Strategic Technology Plan 2013-2015, which provides a framework and guidance for technology investments in support of business changes. <http://www.kingcounty.gov/exec/PSB/CountyStratPlan.aspx>

In addition to the KCSP, IT governance was utilized to provide input on critical business change drivers that also impact our technology strategy. A governance sub-team focused on strategy and composed of Business Management Council (BMC) and Technology Management Board (TMB) members was created to brainstorm and document these business drivers. Themes that were identified from this effort include:

- Rising expectations of the public and our employees for the technology supporting government services.
 - More services, available more often, and easier to transact, from where the customer is located.
 - Expectations of new service delivery mechanisms (e.g. on-line, real-time).
 - Increased employee mobility and flexibility in order to meet these heightened expectations.
- Reduced public willingness to fund government services, resulting in
 - The need for continuous process improvement / Lean efforts, automation, employee empowerment, standardization and re-use, benefit realization.
- Need to address the challenges in standardizing processes and systems across the many diverse lines of business operated by the County.
- Significant internal constraints in service provisioning capacity.
 - Aging workforce / knowledge departure, technology adoption challenges, change fatigue, generational separation of employees requiring different change management approaches, insufficient training focus.

KING COUNTY STRATEGIC PLAN Working Together for One King County	
Vision Statement	Mission Statement
King County: a diverse and dynamic community with a healthy economy and environment where all people and businesses have the opportunity to thrive.	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	
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	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
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	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
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	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
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	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

- Difficulty in avoiding business process and technology obsolescence.

Further supporting the direction by the KCSP and our IT governance strategy sub-team are industry predictions on business and technology directions. A recent March 2013 presentation at the Microsoft CIO summit captured much of this direction in the following future trends, that were presented as impacting Microsoft's strategic planning efforts:

- **Dynamic workplace** – increased speed of innovation, flatter organizations, and more virtual interaction.
- **Merging of home and work**– More flexibility and balance between the two enabled by an employee's ability to work anytime from anywhere.
- **Natural expression** – Consumers want to use touch, gestures, voice recognition, and systems that better predict and offer solutions.
- **Making sense of it all** - Consuming and digesting all the information that is coming at you; this involves both 'big' and 'little' data and interfaces that enable easier analytics.
- **Responsible organizations** – Ensuring privacy, compliance, and security of information.

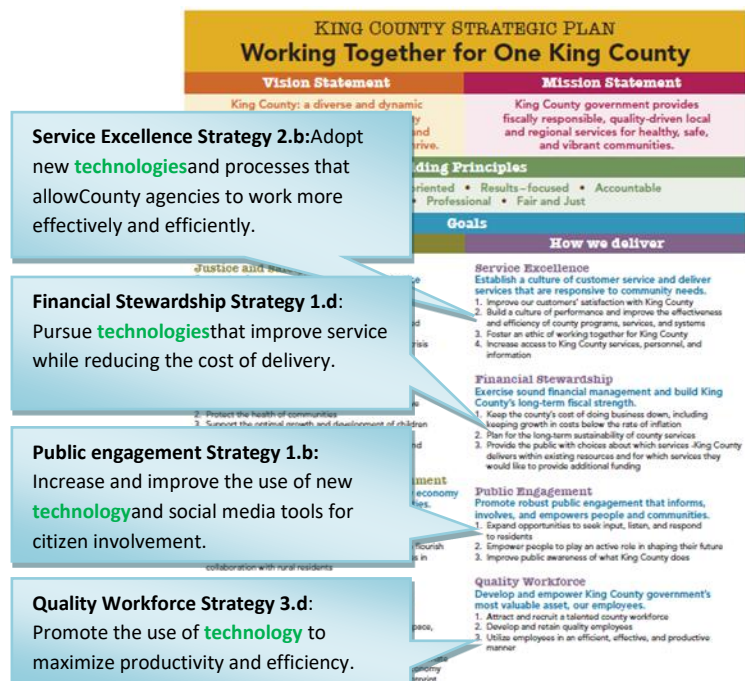
Technology Alignment with Business Goals

The last Strategic Technology Plan 2009-2012 was created prior to the initial KCSP. Without a strategic business plan to align with, business goals were created and maintained within prior Strategic Technology Plans (STPs). Though they were called technology goals for the purpose of the plan, they represented the business goals that technology strove to align with. These goals remained relatively unchanged from the initial STP through the most recent STP and included:

- Efficiency
- Customer Service & Public Access
- Transparency and Accountability
- Risk Management

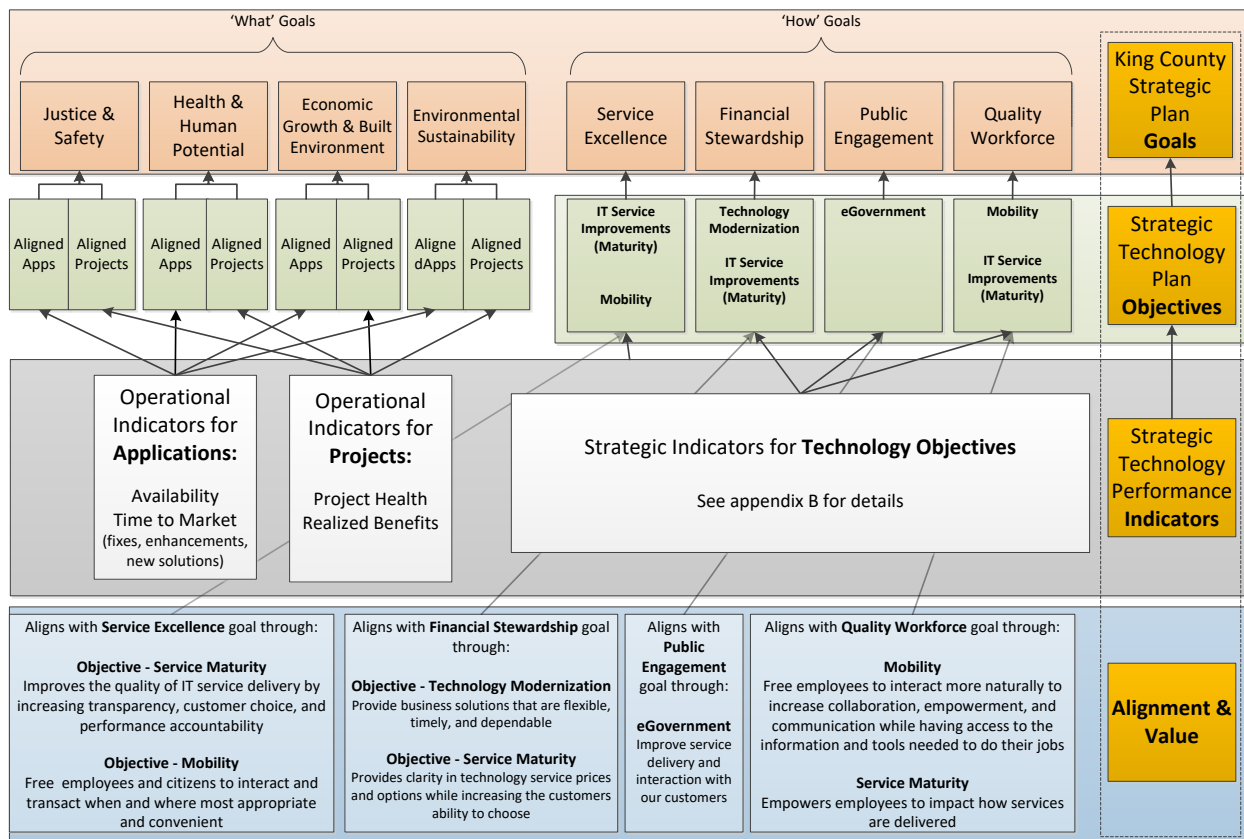
Now that eight business goals have been formally created in the KCSP, these technology 'goals' are no longer needed. Instead, technology objectives and strategies can be more directly aligned with business goals. In fact, each of the four 'how' goals in the KCSP have a strategy that is specifically focused on leveraging technology to improve the business results related to the goal.

Overall, the collection of technology objectives and strategies contained in this plan are similar to the 'how' goals in the

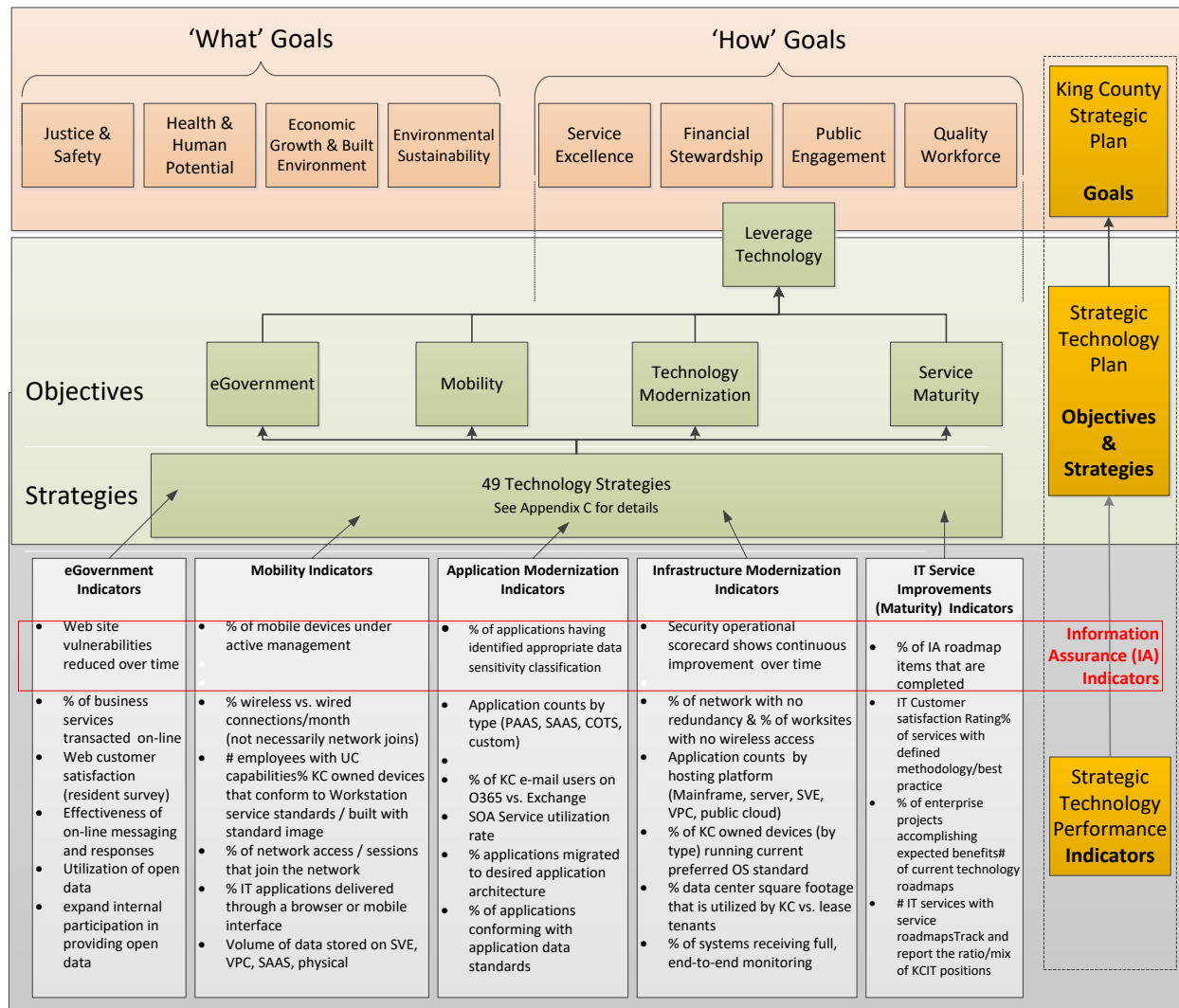


KCSP as they enable 'how' the work gets done, not 'what' end products are produced.

In addition to improvement efforts reflected by strategic technology objectives and strategies, significant technology solutions are already actively supporting our KCSP 'what' goals. Over 1200 applications are available to support existing business processes every day in each agency and department throughout King County. For this reason, it is also appropriate to utilize technology operational measures as indicators supporting each of the 'what' goals. See the following diagram for a graphical representation of this alignment between business goals and technology indicators. As can be seen, technology objectives often support multiple 'how' goals.



An alternative alignment approach is to think about leveraging technology as a fifth 'how' goal that contributes in many ways to everything the County does. By leveraging technology, King County service providers can improve the value, convenience, and ease of use of each of the services they provide directly to the public. See the following diagram for an example for how this alignment looks graphically.



Benefit Realization

King County's benefit realization methodology has been evolving over the past several years since it was originally introduced. Recent changes are also in the works and are expected in response to a 2013 budget proviso. Regardless of the final mechanics, King County's Department of Information Technology, also known as KCIT, is committed to supporting King County's benefit realization process in order to better understand and improve the benefits achieved as a result of technology investments. This aligns with our belief that there are no 'technology' projects, only 'business' projects that leverage technology to improve business results. For those projects where KCIT is the primary business sponsor, KCIT is committed to following the benefits realization process. This is especially important for these types of projects because benefits tend to be the harder to define and communicate due to their often indirect yet broad connection with the end results they are supporting. For this reason, these types of projects may require a different lens to effectively understand and evaluate benefits effectively.

Business needs drive how we leverage technology

As technology becomes more pervasive in the daily work that we all do, it can sometimes feel like 'technology' is determining how we perform our work. Because technology is often involved in significant change initiatives, this can compound the stress and related feelings. It also becomes even more noticeable as we move to standardize and modernize our technology platforms in order to achieve overall efficiencies.

The reality is, without the business services provided to citizens, there would be no need for technology at King County. Our goal as a county is to appropriately leverage technology to provide the best service possible to our customers – the public. To do so requires effective collaboration across both the business and technology expertise of our employees and often leads to the inclusion of modern technology solutions into our continuously improving business processes.

It becomes increasingly more important to do this in ways that are effective, understandable, and useable by all of our staff in order to maximize the benefits achievable through business.

Strategic Technology Objectives

When looking at how to best support our customers' expected future business needs within the context of past technology progress and anticipated technology innovations, the following five themes readily presented themselves:

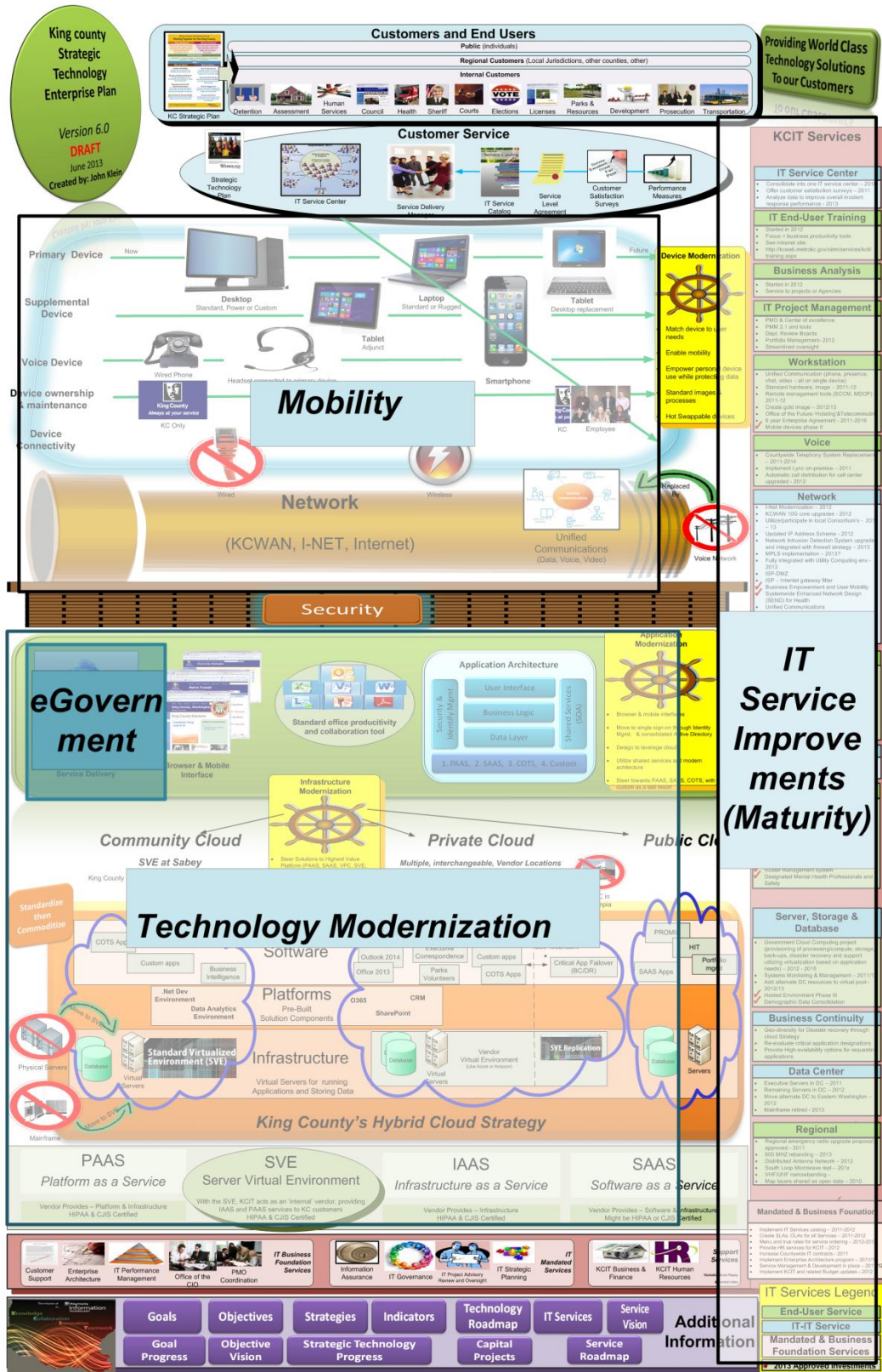
- eGovernment
- Mobility
- Technology Modernization
- IT Service Improvements (often referred to in the technology industry as Maturity)
- Information Assurance

Because of its significance and pervasiveness throughout the other four themes, the fifth theme area of information assurance is not called out separately but included as an integral part of each of the other four areas. For this reason, the first four themes will be utilized as our technology objectives going forward. Within each of these objectives, the first strategy and aligned strategic indicator focuses on our information assurance environment.

Pro-actively leveraging Information Technology enables higher-value, convenient, and easier to deliver business services to King County customers.

For a better understanding of how each of these themes impact our technology environment, they have been placed against the backdrop of our one-page Strategic Technology Enterprise Plan, as shown in the following diagram.

Objectives Placed on the Strategic Technology Enterprise Plan



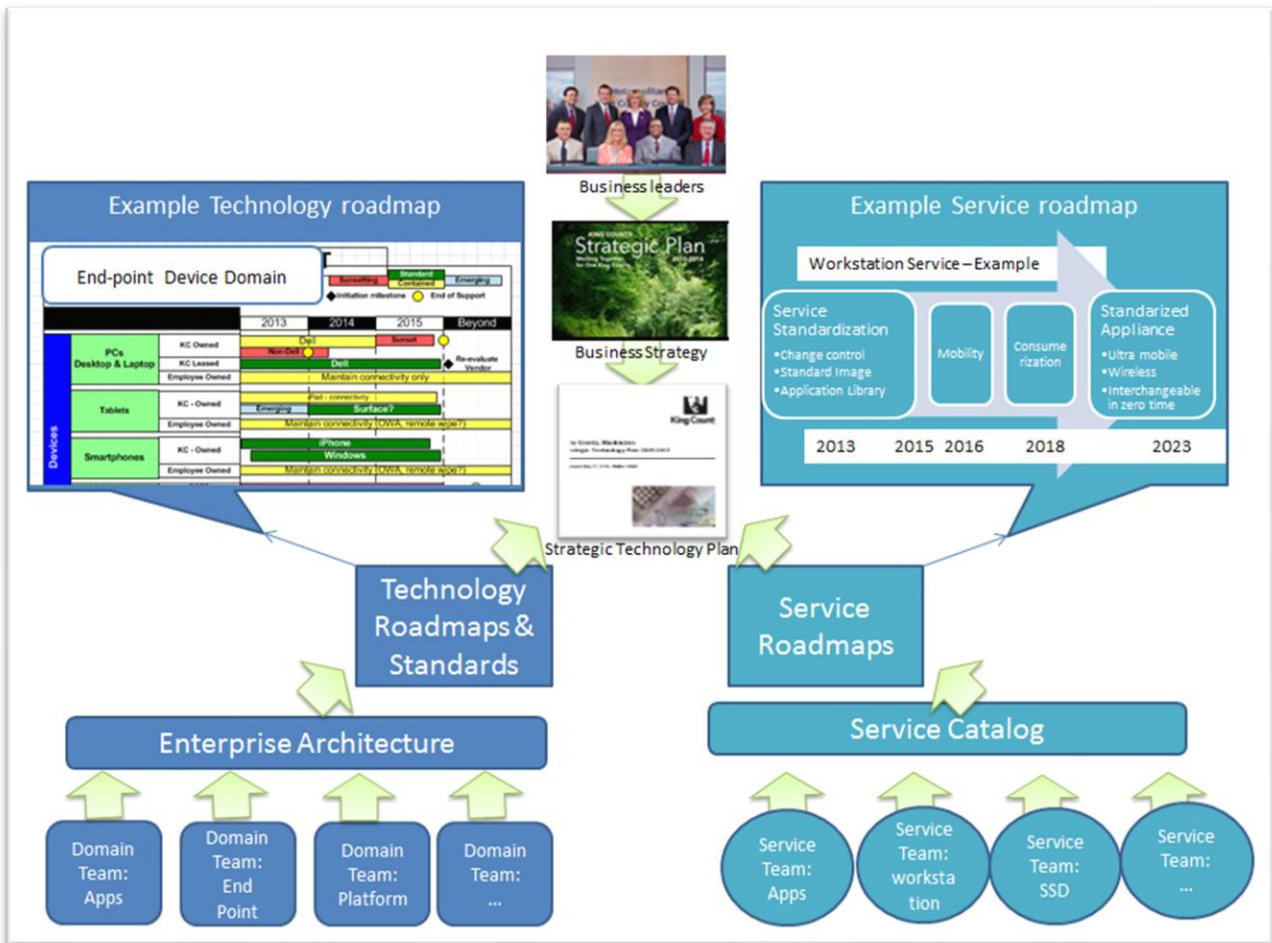
This one-page picture encapsulates the intent of our technology objectives that are further defined in this document. To do so, it identifies each service in our KCIT catalog, the customers that drive how our services need to evolve, the strategies and investments that each service is pursuing, indicators that are (or will be) tracked to indicate strategic progress, and a graphic display of how the services interact with each other.

The IT services approach of enabling customer choice through transparency, ordering processes, catalog options, rate maturity and, most importantly, customer services is a pillar of our overall strategy. It is called out directly in our fourth technology objective and organizes the one-page Strategic Technology Enterprise Plan.

Each of the four objectives is discussed in more detail in the following sections. Multiple strategies have been identified for each of the four objectives as was the case in previous plans. The strategies indicate areas of focus for our IT services that will contribute towards achievement of the stated objectives. There are 49 strategies that have been identified across the four objectives.

Also identified for each objective are strategic indicators. These indicators will be utilized to assess strategic progress against our technology objectives over time. Target levels have not been set for these indicators because baselines have not been established. In addition, the level of investment required to make appropriate progress is not included as part of this strategic plan. Instead, investment opportunities need to be identified and proposed based on the benefits to be realized from those investments, as is described in the benefits realization section of this document. These investments also need to align with the service strategies and roadmaps that contribute to this plan and the on-going strategic framework.

The following diagram illustrates how roadmaps are created and how they help to connect our technology strategies with our tactical efforts.



Roadmaps will continue to evolve and develop as a way to continually inform our strategic and tactical plans.

eGovernment

Objective		
1	eGovernment	Improve service delivery to and interaction with King County customers by leveraging web and related social media technologies.

Strategic Vision



Where we started

King County government has a long tradition of utilizing technology to better serve our customers. To some degree, this is a natural by-product of the technology savvy citizen base that we serve. Only a few short years ago, the following conditions still existed:

- All services were provided face to face, primarily in the office.
- Public records requests were the primary means of transparency.
- Social media tools did not exist.
- MetroKC.gov saw significant activity as King County's home page despite being hard to find.

Due to rapidly changing Internet technologies and capabilities which in turn have fueled rapidly changing customer expectations, 'Facilitate on-line interaction / access to government – Social Media' was included as an objective in the Strategic Technology Plan 2009-2012.

Recent Progress

Seventy-nine percent of the outcomes related to eGovernment that were included in the prior technology plan have been completed. Because of the rapidly changing nature of this area, many efforts that werenot initially considered as outcomes were also completed. A summary of progress includes:

- Kingcounty.gov has seen significant traffic increases every year as King County's home page; of particular significance is the recent drastic increase in volume attributable to mobile visitors:
 - 2012 total visitsincreased by 21 percent to 32.6 Million (2011 visits -26 Million).
 - 2012 unique visitors up 27percent to 1.1 Million users (2011 visitors -834,000).
 - Mobile access visits up 285 percent over 2011.
 - Top day in 2012 (November 6th – Elections Day) saw 950,000 page views.
- Significant social media use by King County:
 - Over 40 active channels across all King County departments, including 19 pages on Facebook and 11 pages on Twitter.
 - Social media has accounted for over 95,000 visits to kingcounty.gov over approximately four months crossing 2012 and 2013.
 - Facebook drives 72 percent of all social media-related traffic, with top landing pages for Facebook users including Metro Trip Planner, Elections, Food Safety Inspections and Licenses.
- Significant open data presence has been established and continues to expand.
- Top 5 eGovernment projects were identified, funded and are underway – this includes projects to improve our Internet (making it customer focused and more useable) and intranet sites.
- King County services available to the public on the web continue to increase annually.
- Web translation policy was introduced, making services more accessible to underserved communities.

Where we are going

The demand for quicker, more available services tailored to each customer's needs continues to grow rapidly. KCIT will focus significant energy over the coming years to accomplish the following ideals:

- On-line service increases significantly for many King County services due to customer expectations.
- Many/most services are available when and where a customer wants to access them.
- Customers easily find and transact the business they are interested in on-line through customer focused website design.
- Increased citizen engagement, involvement and transparency through expanding social media usage. This includes increased internal resource being focused on supporting on-going dialogues. It also includes growing relationships with target audiences and constituencies.

- Smart Government – where jurisdictional boundaries blur and regional cooperation increases. In addition, employees increasingly utilize the same data and tools that citizens have access to, with the volume of information available continuing to increase.
- Customized and tailored information available based on geography, personal needs and interests, and previous/ current relationships as well as collaboration across jurisdictional boundaries.
- On-line services become ‘mobile-friendly’ making them easier to access from smartphones and tablets.

Business/Customer Value and Benefits

Accomplishing this objective is expected to provide the following benefits:

- Improved citizen value and satisfaction when transacting business with King County.
- Improved access to King County services.
- Increased citizen participation in government.
- Greater transparency of government operations.

Mobility

Objective		
2	Mobility	Free employees and citizens to interact and transact business when and where most appropriate and convenient.

Strategic Vision



Where we started

Our current mobile capabilities are tied to past investments that pre-dated significant technology innovation:

- Workstations tied to physical desktop/location.
- Limited or no wireless access at worksite – depending on location and age of buildings.
- Business processes engineered to minimize time away from office (batching, logging-in, etc.) as opposed to improving customer service.

As technological advancements – primarily in the areas of end-point devices (shrinking size and increasing computing power) and wireless services (broader geographical access and increasing capacity/bandwidth) were evolving – the related business value from increased worker mobility was also being identified. This resulted in the inclusion of an objective in the Strategic Technology Plan 2009-2012 to ‘extend and enhance mobility solutions in the workplace’.

Recent Progress

Ninety-four percent of the strategies supporting the mobility objective have been accomplished. In general, progress has included:

- Significant wireless access now available in many work-sites. Network improvements are continuing related to mobility bandwidth and access needs including approval of 2012 business empowerment project for network enhancements of \$4.8 Million.
- Mobile workstations increasing as percentage of overall workstations.
- Mobile consumer devices (employee owned) rapidly entering the workplace.
- Unified communications (UC) (i.e. voice, data, and video) for many of our internal customers. We are in the second year of a multi-year roll-out to all King County locations.
- Collaboration tools available to all staff that reduce impact of location (presence, email, cloud file storage/sharing, on-line meetings/video conferencing) – enabled by the County’s Microsoft enterprise agreement covering all employees.
- KCIT developed a ‘workstation service’ to increase the focus on customers’ needs.

Where we are going

Despite the significant progress already made, it is clear that Mobility is an even more critical strategy moving forward than it has been in the past, especially as society’s expectations continue to evolve and expand in this area. This was confirmed in the business driver sessions that were held with KCIT’s business partners as part of our IT governance work in 2012 (see *Appendix F – Significant Business Changes / Strategies Summary*). Our current vision of what mobility should look like in the future includes:

- Staff with the ability to work from anywhere at any time, and to take their work with them as they move around.
- All King County business applications will be browser based and mobility compatible.
- Business solutions involving technology will increasingly employ cloud-based delivery enabling access from any Internet attached location.
- Wireless access will be available at all work sites with sufficient bandwidth to utilize business solutions effectively –no IT cabling will be required to the desk.
- Consumerization will be fully enabled for those who want it, with adequate data / records protection. Consumerization means that employees will be able to use their own ‘consumer’ devices at work.
- All user devices (except for in special situations) will be transportable, standardized and easy to replace (i.e. take almost no time to swap out).

- Software tools empowering trained employees to communicate and collaborate even more effectively than when they were co-located (even if they are still co-located!).
- UC brings disparate types of information (data, voice, and video) into a single platform. Applications can then act upon these multiple types of information at the same time, drastically improving an employee's ability to communicate. Furthermore, employees can seamlessly move between tools in order to best match the type of communication that is needed and most effective. For example
 - checking presence to see if an employee is available.
 - sending an IM to request time to discuss an issue.
 - calling them if response is positive.
 - sharing their desktop during the voice conversation to discuss a section of a document.
 - adding a third participant who might also be an author of the document and can enter agreed upon changes to the document.
- UC tools to be made available to all appropriate employees include:
 - Presence
 - Instant messages (IM)
 - Email
 - Voice calls
 - Voice messages
 - Video calls
 - Desktop, application, and file sharing

Business/Customer Value and Benefits

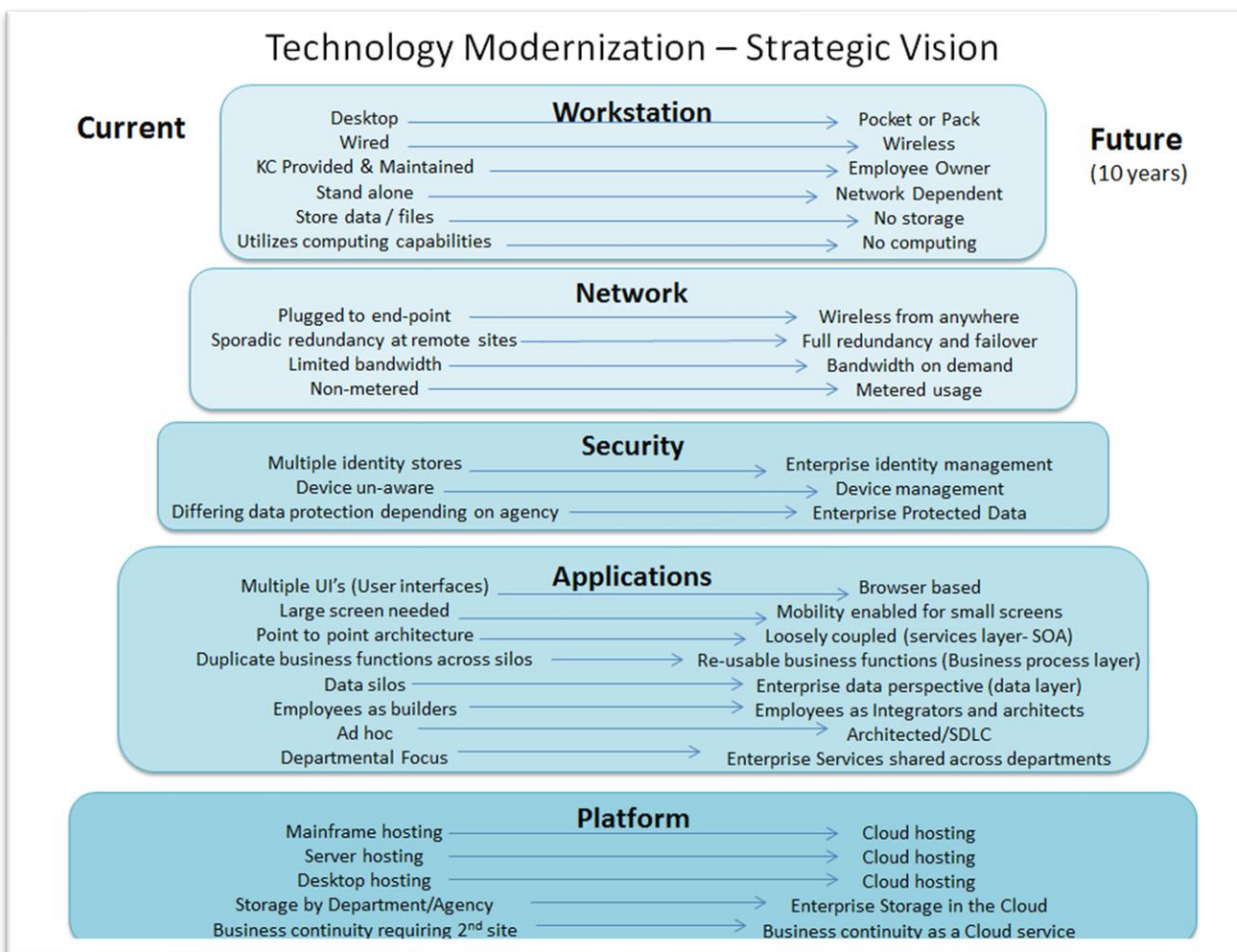
Accomplishing this objective is expected to provide the following benefits:

- Increased business and IT productivity
- Re-designed business processes geared towards customer service and overall efficiency
- Reduced costs related to staff moves
- More collaborative, open, dynamic office space and working environments

Technology Modernization

Objective		
3	Technology Modernization	Applications –Enable business solutions that are flexible, timely, and dependable by pro-actively evolving modern application technologies and processes. Infrastructure – Empower flexible system solutions by providing current technology platforms, components, and frameworks on which applications can operate and continuously improve.

Strategic Vision



Where we started

Traditionally, King County has utilized years of budget surplus to fund technology refresh efforts, preferring to leave even equipment replacement planning outside of the budget process. The hope was that replacements during surplus years would be able to carry through deficit years, evening out in the end. Compounding this issue was the approach that each department and agency was responsible for their own equipment and applications, causing a wide variety of solutions to be employed and a variety of processes and approaches to be utilized. This led to a situation where the “have’s” were able to better maintain currency better than the “have-not’s”. All this led to an environment with the following characteristics:

- Over 1200 applications.
 - Fifty-five different programming languages.
 - Twenty-two different database platforms.
- Mainframe, server and desktop based computing platforms that are costly and inflexible.
- Multi-vendor hardware environment for similar components.
- Multiple, office-grade data centers with limited redundancy and higher risk of failure.
- A single internal network but with an access layer managed differently by each department/agency.
- Multiple identity stores (domains/forests).
- No common Solution Development Life Cycle (SDLC) – each department/agency following own practices, if any.
- Land-locked applications that are not accessible from multiple locations.

We found that an inconsistent refresh rate coupled with aging equipment and differing processes has high costs related to the speed of deployment for new business solutions, the cost to maintain existing business solutions, and the ability to take advantage of technology innovation. Because of these findings, we included an objective of ‘Strategic Technology Modernization’ in the Strategic Technology Plan 2009-2012.

Recent Progress

King County had accomplished 68 percent of the strategies identified in the Strategic Technology Plan 2009-2012 related to technology modernization. Significant progress on areas not included on the original plan has also occurred since then. A summary of the more significant accomplishments includes:

- Data Center: acquired state-of-the-art facility and migrated most computing out of local data centers and into this less risky and very green facility.
- Initial cloud efforts: built Standard Virtual Environment (SVE) as a lower cost alternative to current dedicated server farms and are actively migrating applications there over the next three years. This standardization should lead to additional future benefits through commoditization. Received funding to continue building a community/public/private cloud environment that will lead to applications being located in the best value location given the business solutions requirements. This will also be a critical enabler of our mobility strategy.

- Mainframe project to migrate all applications off of mainframe and into SVE by 2014 due to high cost and inflexibility of mainframe platform.
- Standard desktop purchasing tools/contracts as well as recently signed leasing options.
- Refreshed or new applications are increasingly Software-as-a-Service (SAAS) or Commercial-Off-the-Shelf (COTS) shifting our staff away from building solutions and towards integrating them.
- Enterprise Architecture program established leading to better re-use of modern processes, patterns and standards.
- Multiple hardware standardization and modernization efforts through contracting and replacement efforts, include our networks (our internal King County Wide Area Network – KCWAN – and our I-Net for local government and non-profit organizations), data center, servers, and end-point devices.
- Defined an initial, high-level, enterprise SDLC.
- Regional radio consortium convened to address the refresh of current emergency radio systems and the potential to expand inter-operability across multiple counties and jurisdictions.

Though we have made significant progress, it has really opened our eyes to both the opportunities and the remaining need to get to a more modern operating environment.

Where we are going

The theme of technology modernization, both for our applications and for our infrastructure, is a key enabler for our other three strategic themes of mobility, service maturity, and eGovernment. Having and maintaining a modern technology base is critical to providing our customers with the services that they so desperately need from technology. As we look forward, there is much to accomplish.

- Full hybrid (community/private/public) cloud computing infrastructure, freeing customers from having to worry about ‘where and on what’ their systems are located while steering their solutions toward platforms that reduce risk and cost while becoming increasing accessibility from any location.
- Business continuity/disaster recovery will leverage our cloud infrastructure to improve the geo-redundancy of our platforms and increase our ability to easily and rapidly deploy a back-up infrastructure and working business solutions at the time of a disaster.
- Minimized data center footprint by moving applications to appropriate cloud architecture while sub-leasing unused space to external customers as an expansion of the data center service and as an opportunity for expanded regional partnering.
- All business applications browser and mobility enabled.
- KCIT acting as an IT integrator, aggregator, broker and storefront, not as the primary builder of business applications.
- Applications steered to the lowest cost platform that still supports all business requirements; the order of strategic preference for these platforms follows:
 1. Platform-As-A-Service (PAAS) such as CRM - minimizes infrastructure, maximizes re-use and enterprise data sharing, focuses staff on required future skillset around integration

2. SAAS- minimizes infrastructure, focuses staff on required future skillset around integration
 3. COTS - Focuses staff on required future skillset around integration
 4. Custom developed
- Faster time to market and lower costs by integrating pre-built solutions and components such as PAAS and shared services through a Service Oriented Architecture(SOA) into customized business solutions.
 - Effective utilization of cloud platforms will lead to:
 - Minimized cost – by effectively shaping behavior to lowest cost platform
 - Security compliance – offering specific options for various ecosystems such as Health Insurance Portability and Accountability Act (HIPAA) and Criminal Justice Information Systems (CJIS)
 - Enabled mobility – by providing the ‘operating system’ that enables multiple end-point devices access from any location to one version of information
 - Rapid scaling – both up and down – to align costs with actual usage and speed business process changes
 - Refresh cycles maintained for all equipment and applications that optimizes TCO.
 - A standard desktop environment, where the desktop is no longer tied to the desk, but becomes fully portable and easily replaced. Employee owned equipment is enabled if and as desired by employees, requiring no maintenance from KCIT staff other than connectivity. Leasing as opposed to purchasing of end-points becomes the norm, leading to a consistent operating spend, standardized devices, and better on-demand refresh cycles to take advantage of business opportunities.
 - Data is a protected asset that is utilized across our enterprise through business analytics and business intelligence efforts, and is no longer location dependent.
 - Advanced user identity management and security techniques enable seamless access to required business services, regardless of the location of the user or device that they are using.
 - Architecture and business process analysis are key components of the overall IT service delivery process.

Business/Customer Value and Benefits

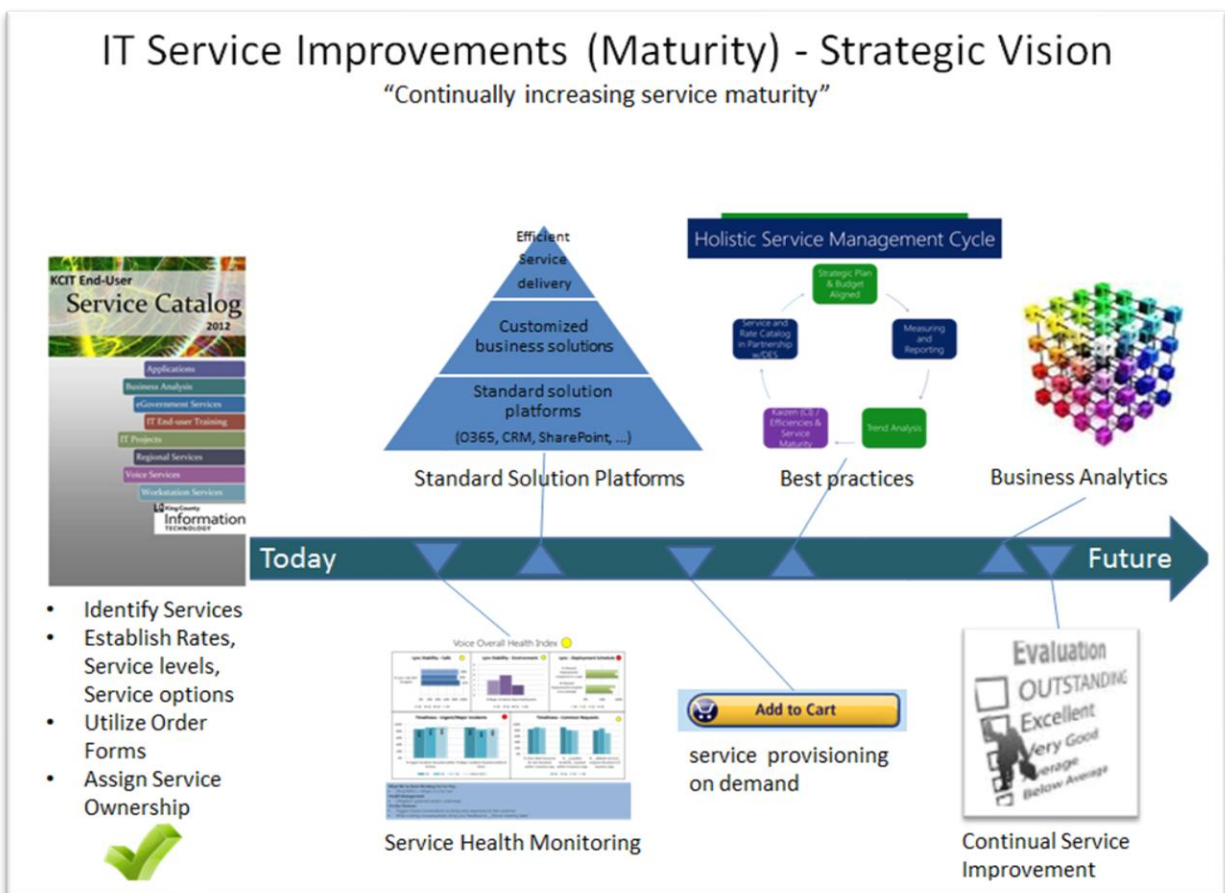
Accomplishing this objective is expected to provide the following benefits:

- Faster speed to implement business process changes.
- Reduced TCO for computing through efficiencies, standardization, re-use and the ability to meter and rapidly scale resources up or down as needed.
- Increased service quality due to increased standardization and reduced downtime.
- Reduced risk due to increased redundancy, geographic diversity, and commoditized, on-demand scaling of needed assets.

Service Maturity

Objective		
4	IT Service Improvements (Maturity)	Increase the value to customers of IT services by maturing our service delivery processes and improving our services to better anticipate and match customer needs and expectations.

Strategic Vision



Where We Started

Prior to 2011, IT services delivery in King County was performed and managed by each department and agency. This caused IT to operate as many small organizations in separate silos without the ability to take advantage of some of the benefits that come from larger organizations. Even with well-formed governance bodies, we were unable to create enterprise-wide policies, processes, or standards in either a timely or an effective way. This led to an environment where skills, learning, hardware, contracts, best practices, and customer service levels varied drastically across the enterprise, despite advice from

external consultant studies recommending increased collaboration and sharing. In addition, the culture around our customers' ownership of technology and the perception for how it best met their needs was strongly engrained.

Because of this situation, we included several related objectives in the Strategic Technology Plan 2009-2012:

- Elevate Customer Service as an IT operational priority.
- Reorganize IT people, processes and platforms.
- Improve IT operational maturity.

Recent Progress

King County had accomplished over 95 percent of the strategies identified in the Strategic Technology Plan 2009-2012 for these three objectives relating to IT service maturity. A summary of the more significant accomplishments includes:

- Executive branch IT operations were reorganized into a single, new department implemented by code in 2011 as the Department of Information Technology, also known as KCIT.
- King County's first service catalog was created for KCIT services in 2012, in alignment with the Executive's reform agenda. We worked with our customers as we set goals and objectives to develop clear definitions of the service offerings and products KCIT provides. Each service has clearly defined offerings, rates, target service levels, performance measures, and alignment with the King County Strategic Plan.
- IT service rates were developed in partnership with our agencies in 2012. We presented the final rates to customers in May 2012 during the first King County Information Technology Rate Day. KCIT partnered with county agencies to develop IT services demand forecasts. The agencies used the rates and forecasts as part of their budgeting process for 2013.
- Consolidated multiple help desks in the executive branch and established the KCIT Service Center, providing consistent and improved customer service.
- Data Center operations and most server hardware have been located into a single, state-of-the-art data center.
- Established an enterprise agreement with Microsoft, enabling all employees access to a common and consistent set of tools.
- Portfolio management tool procured, implemented, and populated. The tool enables IT service owners and leaders to better understand the services we are providing, analyze the impact of potential service changes, and monitor progress more effectively.
- Created an initial enterprise platform service, the SVE, to provide consistent and faster internal hosting services to all departments and agencies. This service will continue to expand as part of our cloud strategy.

- Performance program was established and now monitors many service attributes. This service will continue to mature and increase in importance as our service maturity continues to increase.
- Strategy introduced as a core element of each IT service:
 - Line of business planning piloted.
 - High-level strategy document created for each service.
 - Service roadmaps are under development and will be a standard component of our service plans going forward.
- Enterprise Architecture program implemented and maturing, enabling better enterprise decisions, increased re-use of existing solutions, and improved technical direction.
 - Technology roadmaps under development for key technology domains to inform service teams and their strategy planning.

Where We Are Going

Future state vision for IT service efficiency, as we mature the service further, is a service delivery model that is more closely aligned to our customers.

- Standardization of enterprise offerings (e.g. workstation / device management) in order to create a more consistent delivery and support model.
- Maturation of processes and practices by implementing best practices such as ITIL and adhering to defined policies and procedures.
- Refining our approach in management of the service model and developing a framework to manage all services in a more consolidated manner.
- Developing the framework for a rate methodology and rate structure per service. Transitioning primary responsibility from KCIT Business and Finance to KCIT Service Owners to increase their connectivity with customer needs.
- Collaboration with departments to develop county service catalog. Currently working with the Department of Executive Services (which provides internal service to the County) to share development of the 2014 King County Service Catalog. The Department of Transportation – Fleet Division is also joining this effort.
- Incorporating service rates into the 2014 King County Service Catalog.
- Refining performance management reporting to enhance metrics, implementing trend analysis and risk management.
 - Further defining aspects of accountability of service owners and their roles and responsibilities.
 - Listening to our customers by conducting customer satisfaction surveys bi-annually.
 - Leveraging a virtual team to help develop education and training for SharePoint users; to empower our SharePoint customers with appropriate use, purpose and benefits of SharePoint, and examples of effective county use (e.g. dashboards).
- Further evolving the strategic planning for each service and integrating those plans with currently piloted Line of Business (LOB) planning that will support future budget cycles and decisions.

- An Enterprise Architecture program and framework that are fully built-out and available to all services and projects, helping help improve their decisions and alignment with business and technology goals. Strategic technology roadmaps for each domain area will improve our ability to plan for a complex, inter-related future.
- Portfolio management tools that are fully utilized to empower better decisions based on facts around our current operating base.
- Employee training that is aligned with the technology modernization that is occurring (such as migrating off of the mainframe), which will keep our staff positioned to best deliver the technology services of the future.
- Plans are underway to develop, foster, and cultivate a customer community forum, to develop roadmaps in conjunction with our customers in alignment with their goals and objectives. Having professional business focused conversations about solution options that meet customer needs and align to the County and KCIT Strategic Plans.

Business/Customer Value and Benefits

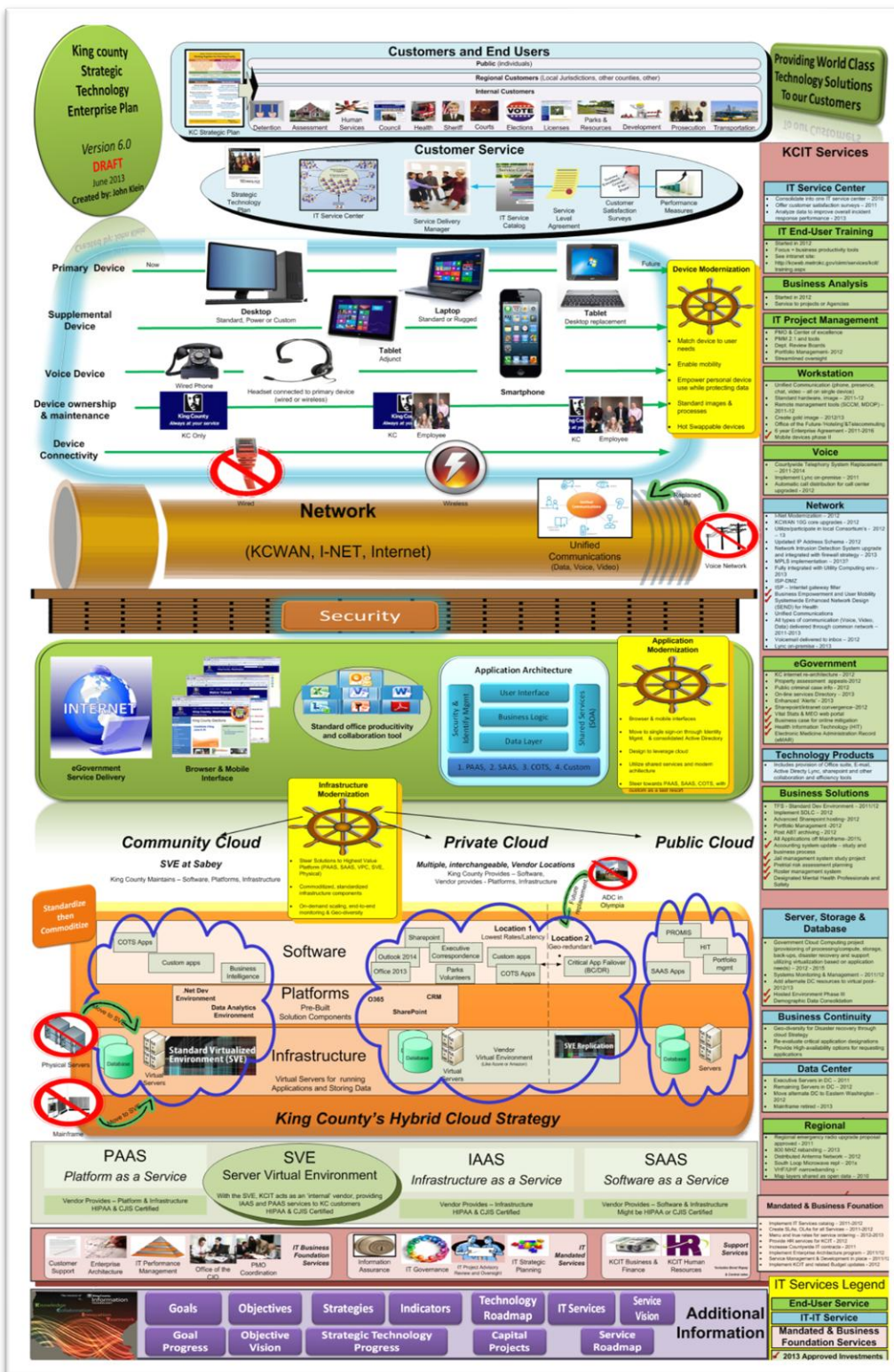
We are working to inspire a holistic management approach across KCIT in relation to service management and service efficiency by cultivating high performing teams. Team members will be afforded opportunities to have a deeper and broader understanding of the services, and how each service interrelates across the full suite of services provided by KCIT. KCIT aspires to be a solution partner with our customers and constituents to raise the bar in service efficiency.

Accomplishing this objective is expected to provide the following benefits:

- Increased IT customer choice and greater knowledge and transparency of IT services through improved provisioning, performance dialogues, satisfaction surveys, and other practices improving customer satisfaction and engagement.
- Strategic alignment of IT services with future customer needs.
- Reduced cost of existing services through low cost options in comparison to industry standard offerings, continual service improvements, increased re-use and sharing of solutions, and improved integration across solutions.
- Faster delivery of service fixes, changes, improvements, and new service introduction through Continual Improvements.

Supporting Documents

Appendix A – King County Strategic Technology Enterprise Plan Version 6.0



Appendix B - Background

Increased reliance on technology might create ideas of increased spending in information technology (IT); however, due to sound investment decisions and management practices implemented by the Department of Information Technology (KCIT), we have been able to expand and improve IT services while decreasing costs. Between 2007 and 2011, King County has decreased IT staff by 13 percent, while the County has seen overall staff reductions of one percent. Actual dollars spent on IT operations have decreased by three percent during that same time, while the County's overall budget has increased from \$3.63 billion to \$4.75 billion (excluding debt service costs), representing a 31 percent increase in total dollar spending.

An enterprise view towards investments and Total Cost of Ownership (TCO) is needed to maximize value to King 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.

This plan identifies a framework including technology objectives, strategies, and indicators that are intended to enable business improvements in line with the King County Strategic Plan (KCSP). The plan also offers an opportunity for a TCO approach for the current products and services that King County delivers to our taxpayers.

Both long term (ten year) and mid-term (two year) strategies have been identified for KCIT's current service offerings. These strategies will continually be revised and improved as part of our on-going annual and strategic planning processes.

Directing Code

In order to provide vision and coordination for IT management and investment across King County, a countywide Strategic Technology Plan (STP) has been in place since 2003. As identified in county code that was first introduced in 2000, the County's strategic planning office within KCIT is responsible for creating and providing updates to the strategic plan. *Appendix H– Directing Code* contains the most recent version of this directing code.

With the Strategic Technology Plan in place, annual updates are provided that communicate both the progress made towards accomplishing the objectives and strategies in the plan, as well as any significant adjustments to the plan.

At a more granular level, annual plans implement the strategic direction (provided by business and technology plans) utilizing operational and capital investments. Over the next three years, KCIT will be looking to improve our maturity around annual planning and estimating across both operational and capital investments by getting more granular in the way that we plan and track our resources.

Recap of Strategic Progress

Progress against the Strategic Technology Plan 2009-2012 can be seen in greater detail within the 2013 Strategic Technology Plan Update located at this link:

<http://www.kingcounty.gov/operations/it/about/strategy/strategicreports/2009-20012%20Strategic%20Technology%20Plan.aspx>

As is the case with any long-range plan, changes that occur over time will influence the value, priority, and feasibility of different components of the plan. Despite significant change in both our external and internal environments, King County was able to complete or resolve 90 percent of the over 300 outcomes identified in the plan. The remaining 10 percent are either in-progress (seven percent), on hold (one percent), or not yet started (two percent). This significant strategic progress has contributed to major service delivery improvements and positions us well to embark on our next Strategic Technology Plan.

Current status of all Strategic Outcomes included in the Strategic Technology Plan 2009-2012:

- 80% - Complete
- 10% - Cancelled
- 7% - In Progress
- 1% - On hold
- 2% - Not Yet Started

90% have been resolved
With only 10% remaining

Current Strategic Context: Strengths, Constraints, Opportunities & Challenges

Looking at our current technology strengths, constraints, opportunities, and challenges better prepares us to identify the objectives and strategies that can have the biggest impact over the next several years. Technology leaders brainstormed and refined the following chart which best represents our current strategic context. It was used as a reference point and input into determining the most appropriate objectives and strategies.

Objectives accomplishing over 90% of planned outcomes include:

- **Transform** common business practices (95%)
- Extend and enhance **mobility** solutions (94%)
- Elevate **customer service** as an operational priority
- Improve IT **operational maturity** (98%)
- **Green** IT (100%)



Emerging Strategic Context

Internal Constraints: 1. Overall lack of IT discipline 2. Move to more strategic leadership 3. Significant initiatives requiring added support 4. Staff investment required to stay current & dynamic 5. Value of IT: • Quality & efficiency • Cost center or enabler	External Challenges: 1. Emerging mobile/consumerized reality 2. Increased public expectations for mobile apps, web services 3. Diverse service delivery: executive branch & separately electeds 4. Separately elected's utilization of common county services 5. County investment level on IT and TOO (Total Cost of Ownership)
Internal Strengths: 1. Strategic technology plan aligned with KC strategic plan 2. KCIT consolidation 3. Product catalog 4. Rate setting & transparency	External Opportunities: 1. KC strategic plan 2. Executive priorities (product based budgeting; lean, Exec's support for IT) 3. Demand for technology 4. Increased market product offerings 5. Bring Your Own Device (BYOD) 6. Increased interest for KCIT jobs

Outcomes Shifting to Indicators

Outcomes were the most detailed component of the prior STP with over 300 outcomes identified. This approach, though more precise, proved problematic from the ability to predict, track, and report progress, taking significantly more effort than anticipated. The specific details of outcomes also tended to lock us into a set direction that was not as flexible or adaptive as a strategic document should be.

With the advent of the King County Strategic Plan, we have embraced a new and more valuable way to measure progress, through indicators, and this plan has adopted the same approach to measuring progress as the KCSP. For each

strategy, one or multiple performance indicators / outcomes have been identified as opposed to specific milestones to be completed.

This way, measurement over time

will let us know if we are heading in the right direction, regardless of the specific steps being taken. This provides flexibility to react more quickly to customer needs, environmental changes, and new opportunities. Also, by using a similar methodology to the KCSP, understanding of progress should be easier and more transparent for various interested audiences.

"The usual approach in government is to fund the same programs that were funded the year before. That approach funds effort. Our strategic plan says: focus on the results the public wants, then focus on the efforts that deliver those results"

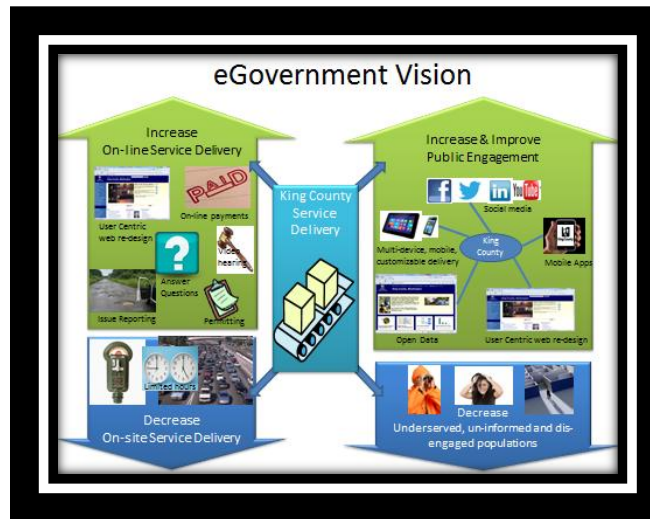
- King County Executive, Dow Constantine

Appendix C – IT Strategies and Indicators

The following strategies identify how IT intends to meet each of the four objectives outline in the Strategic Technology Plan 2013-2015. The top five indicators for each objective have also been identified and are located near the strategy that most impacts them. These indicators will be monitored at least annually in order to assess movement towards the objectives. While many of the indicators are not currently measured or available, they represent the preferred way to measure progress against our objectives based on the strategies we are undertaking and their connection to key performance areas.

Objectives can then be aligned with the areas of the business that are driving them as identified earlier in this plan. As we mature our processes, we will attempt to add more of the strategic indicators identified into our active performance program. Where this is not possible, we will look to identify new indicators to replace those that are impractical to measure.

This measurement process aligns with the indicators process introduced by the King County Strategic Plan.



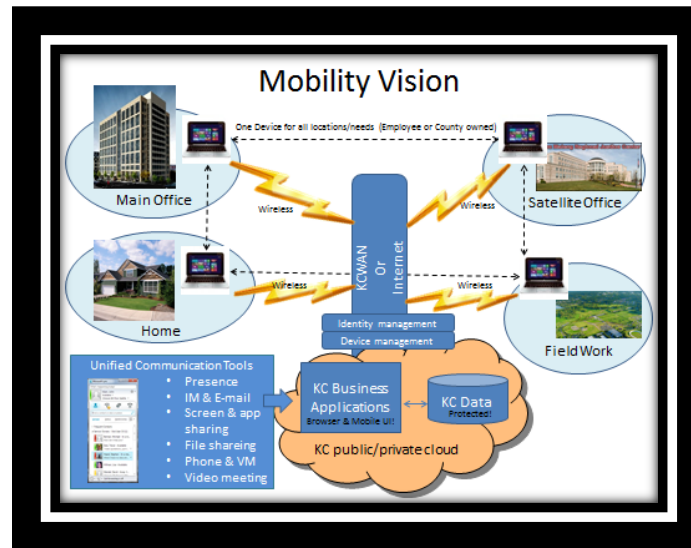
Objective

- | | | |
|---|--------------------|---|
| 1 | eGovernment | Improve service delivery to and interaction with King County customers by leveraging web and related social media technologies. |
|---|--------------------|---|

eGovernment Strategies and Performance Indicators:

Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
A Information Assurance – Ensure on-line transactions are safe and secure.	1. Website vulnerabilities reduced over time.	Information Assurance	- Business Solutions - Server, Storage & Database (SSD) - Network
B Increase on-line delivery of King County business services to the public.	2. Percent of business services transacted on-line.	Business Solutions	

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
C	Ease of Use - Improve the public's ability to easily find and transact the business services they are interested in.	3. Web customer satisfaction (resident survey).	eGovernment	• Business solutions
D	Increase and improve public engagement using social media.	4. Effectiveness of on-line messaging and responses.	eGovernment	
E	Increase openness of information by publishing county data (that is not private/protected) for public consumption.	5. Utilization of open data. 6. Expand internal participation in providing open data.	eGovernment	• Business Solutions



Objective

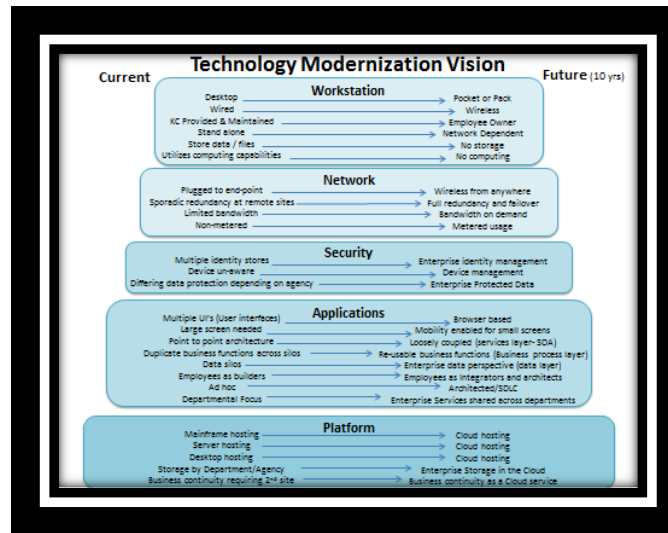
2 Mobility Free employees and citizens to interact and transact when and where most appropriate and convenient.

Mobility Strategies and Performance Indicators:

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
A	Information Assurance – Ensure that protected information is not at risk due to increased use of mobile end-point devices.	1. Percent of mobile devices under active management.	Information Assurance	- Workstation - Voice
B	Wireless – allow untethered movement within and between work-sites, improving productivity and collaboration while reducing office move costs.	2. Percent wireless versus wired connections per month (not necessarily network joins).	Network	

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
C	Unified Communications (UC) -Extend UC capabilities to all King County staff to increase and improve communication channels and tools available to them.	3. Number of employees with UC capabilities.	Network	• Voice • Tech products
D	End-point standardization: Primary device – Keep employees more productive by reducing end-point device failure and maintenance.	4. Percent county owned devices that conform to Workstation Service standards / built with standard image.	Workstation	
E	End-point standardization: Supporting devices – Enable employees to utilize a second device (county or employee owned) to improve their productivity and mobility.		Workstation	• Voice • Network
F	Personal use (BYOD) - provide standard connectivity services that employees can utilize on their own 'industry-standard' devices without the need for County support.	5. Percent of network access / sessions that join the network.	Workstation	• Network • Information Assurance • KCIT Human Resources • Tech Products
G	Browser/Mobile interface – Applications that run in a browser can be accessed by any device capable of running a browser, and typically are easily accessible via the Internet. Mobility interfaces (for smaller screen size) are also easily available through modern application technologies.	6. Percent IT applications delivered through a browser or mobile interface.	Business Solutions	

Strategy		Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
H	Cloud storage – Storing data on the cloud means that it can be accessible by any device at anytime from any location that can access the Internet.	7. Volume of data stored on SVE, VPC, SAAS, physical servers.	Server, Storage & Database	



Objective

- | | | |
|----------|---------------------------------|---|
| 3 | Technology Modernization | Applications - Enable business solutions that are flexible, timely, and dependable by pro-actively evolving modern application technologies and processes. |
|----------|---------------------------------|---|

Technology Modernization Strategies and Performance Indicators:

Objective: Technology Modernization - Applications

Strategy		Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
A	Information Assurance – Utilize a security scorecard to identify and track progress in improving our security posture for the most critical and vulnerable components of our systems platforms.	1. Percent of applications having identified appropriate data sensitivity classifications.	Information Assurance	Business Solutions

Objective: Technology Modernization - Applications

Strategy		Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
B	Platform steering – Encourage system solutions to use the lowest cost/highest functionality platform, reducing TCO while maintaining service standards and needed business functionality.	2. Application counts by type (PAAS, SAAS, COTS, custom).	Business Solutions	- Enterprise Architecture - Office of the CIO - Business Analyst - PMO
C	PAAS - Office 365 – Migrate to an office productivity platform and tools to improve the general office productivity business functions that surround communications and document creation. Utilizing this pre-built environment will: - Utilize the cloud making office productivity tools (email, documents, spreadsheets, and more) accessible from anywhere and enabling work to follow the user. - Work with different interface technologies (touch, pen, mouse, keyboard) and device types (smartphone, tablet, laptop, desktop) allowing productivity regardless of end-point device. - Empowers social connectivity tools for better collaboration and communication. - Work on new devices quickly given appropriate credentials and does not require pre-installation.	3. Percent of County email users on O365 versus Exchange.	Technology Products	Workstations

Objective: Technology Modernization - Applications

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
D	PAAS - SharePoint– Provide business solutions that utilize unstructured data, forms, workflow, and/or collaboration. Utilizing the SharePoint solutions platform delivered by internal experts should provide the lowest cost / highest functionality solution for aligned business needs.		eGovernment	• Business Solutions • Business Analyst
E	PAAS – CRM - Provide business solutions that interact with customer information or customer request tracking. By utilizing the CRM solutions platform delivered by internal experts should provide the lowest cost / highest functionality solution for aligned business needs.		Business Solutions	• Business Analyst • Enterprise Architecture
F	PAAS - Data Analytics / Business Intelligence environment - Create an enterprise information analytics environment over time that enables business to analyze and better understand/service our customers as well as our internal operations. Utilizing this pre-built environment, tools, solution patterns, and experts should provide the lowest cost / highest functionality solution for aligned business needs.		Business solutions	• Server, Storage & Database • Business Analyst

Objective: Technology Modernization - Applications

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
G	SOA (Service Oriented Architecture) – enables re-use of common business processes (such as address validation) to increase consistency, decrease costs, and speed the development of new applications. Evaluate and utilize a service bus architecture if warranted to reduce the number of direct connections between applications making applications easier to maintain, less costly, and loosely coupled.	4. SOA service utilization rate.	Business Solutions	- Enterprise Architecture - Customer Support
H	Application architecture - A common application architecture increases system supportability and flexibility while reducing time to implement and fix.	5. Percent applications migrated to desired application architecture.	Business Solutions	- Enterprise Architecture - PMO
I	Data architecture – Consistent usage and sharing of data improves quality, re-use, and protection while reducing cost and errors.	6. Percent of applications conforming with application data standards.	Business Solutions	- Enterprise Architecture - SSD - PMO
J	Mainframe applications – Migrate all applications off the mainframe platform and onto newer technology.		Business Solutions	PMO
K	SDLC (Solution Delivery Life Cycle) – Having a common methodology is a best practice that improves communication and effectiveness across technology organizations.		Business Solutions	- Governance - PMO

Objective		
3	Technology Modernization	Infrastructure - Empower flexible system solutions by providing current technology platforms, components, and frameworks on which applications can operate and continuously improve.

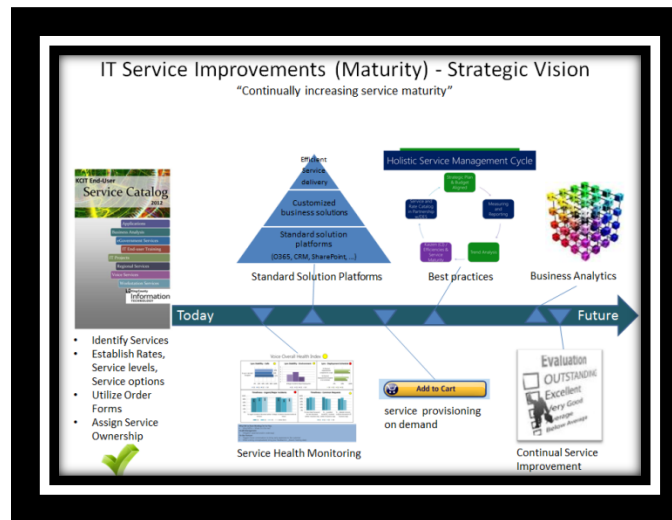
Objective: Technology Modernization - Infrastructure				
	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
L	Information Assurance – Utilize a security scorecard to identify and track progress in improving our security posture for the most critical and vulnerable components of our systems platforms.	1. Security operational scorecard shows continuous improvement over time.	Information Assurance	- Servers, Storage & Database - Business Solutions - Network
M	Network – Provide a robust, redundant, wireless network as a key foundational base to all future system solutions. <i>Ensure proactive upgrades maintain the network's currency as all other services will increasingly depend more heavily on network capabilities in the future.</i>	2. Percent of network with no redundancy and percent of worksites with no wireless access	Network	
N	Regional Emergency Radio –Ensure highly available and interoperability with neighboring emergency response systems.		Radio	
O	Cloud platforms – Utilize a suite of cloud platforms (hybrid community/public/private environments) to drive customer behavior to the most cost effective environment.	3. Application counts by hosting platform (Mainframe, server, SVE, VPC, public cloud)	Servers, Storage & Database	Business Solutions

Objective: Technology Modernization - Infrastructure

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
P	Server Virtual Environment (SVE) – Migrate existing physical server base to the SVE first, in order to achieve efficiencies through standardization. Then migrate to more commoditized areas of our hybrid cloud (SAAS or VPC) to further lower costs after standardization has occurred.		Servers, Storage & Database	• Business Solutions
Q	Identity management – Reduces the number of logons and improves security by implementing role based access to applications and data.		Information Assurance	• KCIT Human Resources
R	Mainframe platform – Move off of the mainframe platform to increase flexibility and speed to market while reducing overall cost.		Servers, Storage & Database	• Data Center
S	End-point devices –Standardize endpoint device to create a less complex, more easily updated, lower cost operating environment.		Workstations	• Networks
T	Standard Operating System – Standardize on Windows as the operating system (OS)for county owned devices, leading to improved systems integration and enabled functionality.	4. Percent of county owned devices (by type) running current preferred OS standard.	Workstations	• Business Solutions
U	Data architecture and services (ETL, replication/synchronization) – Separating transaction data from reporting data enables effective response time for transactions while making valuable information available for business analysis and intelligence.		Servers, Storage & Database	• Enterprise Architecture • Business Solutions

Objective: Technology Modernization - Infrastructure

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
V	Data Center – Minimize data center footprint through virtual/cloud hosting in order to reduce cost and enable increased regional partnerships through sub-leasing.	5. Percent data center square footage that is utilized by county verses lease tenants.	Data Center	
W	Business continuity – Reduce the risk of operational failure by providing redundant systems operations through cloud replication/failover services for critical applications.		Business Continuity	• Information Assurance • Data Center
X	Systems Management – The ability to monitor and perform preventative maintenance across entire systems (end-to-end) regardless of where they are located/operating improves the ability to maintain, repair, and improve business systems holistically.	6. Percent of systems receiving full, end-to-end monitoring.	Data Center	• Servers, Storage & Database Network • Business Solutions • Enterprise Architecture
Y	Technology Governance – Increase the involvement and impact of technical experts across our organization through enterprise architecture domain teams, technology roadmaps, and technical standards.		EA	• Governance



Objective

4	IT Service Improvement (Maturity)	Increase the value to customers of IT services by maturing our service delivery processes and improving our services to better anticipate and match customer needs and expectations.
----------	--	--

IT Service Improvement Strategies and performance indicators:

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
A	Information Assurance – Complete an information assurance service roadmap to improve overall understanding, prioritization, and results related to information assurance.	1. Percent of IA roadmap items that are completed.	Information Assurance	All

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
B	Service Catalog – A catalog ensures open and transparent communication with customers about the services that are provided as well as the options available to them in order to maximize value received.	2. IT customer satisfaction rating.	Customer Support	• Business & Finance
C	Rates – Rates that reflect the full cost of providing a service and that utilize a meaningful allocation criteria help to better shape usage towards higher value solutions.		Business & Finance	• Customer Support
D	Performance metrics – Metrics set baseline expectations for what customers receive for their payments and help to discuss and improve performance over time. They also help customers to select appropriately between differing service options as higher performance is typically more costly. Performance metrics are also critical to monitoring and adjusting internal key performance indicators and consequently managing a service effectively.		IT Performance Measurement	• Customer Support
E	Service level reporting – Providing performance reports and discussions help to reflect a service provider's capabilities relative to the service they are providing and eventually lead to the best performance/price ratio to meet customer needs.		IT Performance Measurement	• Customer Support
F	Industry best practices – Each service will adopt a methodology or industry best practice by which their service is operated in order to take advantage of the knowledge and learnings of others providing similar services.	3. Percent of services with defined methodology/best practice.	Customer Support	• Business & Finance

	Strategy	Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
G	Benefits realization – Each investment that we make in a service should identify expected and accomplished benefits in order to continually improve our planning skills, to improve the decisions made surrounding investments, and to better inform customers of the potential for beneficial impacts to their services.	4. Percent of IT investments where KCIT is the business sponsor that accomplish a majority of expected benefits.	Customer Support	All KCIT service teams
H	Enterprise Architecture – Utilizing enterprise architecture helps business leaders and technicians make better decisions by aligning to principles, standards, toolsets, and best practices identified within the County for multiple domain areas.	5. Number of current technology roadmaps.	Enterprise Architecture	- Strategic Planning - IT Governance - Customer Support - PMO
I	LOB (Line of Business) Planning – Pro-actively identifying and planning for future customer needs as well as for environmental changes enables improved service delivery over time and a better TCO approach.	6. Number of IT services with service roadmaps.	Strategic Planning	- Business & Finance - Customer Support
J	Portfolio Management – Looking across a portfolio often enables better knowledge, understanding, and consequently decision making related to how the portfolio is performing and potential improvements. It also helps to stage planned migrations as platforms are modernized to ensure highest value migrations are performed earlier.		IT Governance	- Business Solutions - PMO - Strategic Planning

Strategy		Strategic Indicators / Outcomes	Lead IT Service Team	Supporting IT Service Team(s)
K	Employee Skill Sets – Grow staff skills to implement, support, and maintain modern technology solutions.	7. Ratio/mix of KCIT positions.	KCIT Human Resources	
	Expected future needs will shift towards increased integration (as opposed to custom built solutions)leading to increased need for architecture, analysis, business process, project management vendor management, and especially communication skill sets.			

Appendix D – IT Service Strategies

Service strategies have been created by all service owners for their respective services. These are new documents that will be maintained and updated at least annually in order to keep them current. They constitute the first step in updating our KCIT service catalog each year. Each strategy document contains sections that address:

- End-State in 10 Years
- Major Steps to Reach End-State
- End-State in 2 years
- Transitions Needed from Now to Then
- Picture of the Strategy (optional)

They are intended to be brief (one to two pages). All strategy documents are located at the following internal SharePoint site:

<https://kc1.sharepoint.com/teams/itc/SrvCatRates/ITCatalog/Forms/2014%20Deliverables%202013%20Versions%20and%20Examples.aspx?View={6D7029FF-878A-4396-B856-B79F688D2DB7}&FilterField1=Task&FilterValue1=Service%20Strategy>

Appendix E–IT Service Line of Business Plans and Roadmaps

Service line of business (LOB) plans and roadmaps are also new this year. They map out key milestones needed to accomplish a service’s strategic vision in both the short term (two-years) and the long term (10-years). The roadmaps are based off of the new Line of Business Planning concepts that align with Lean practices and the Executive’s planned direction for our overall integrated management planning efforts. Service Line of Business Plans and roadmaps will be added to the following site as they are created:

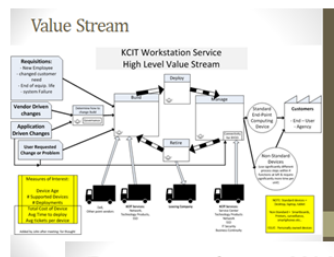
<https://kc1.sharepoint.com/teams/itc/SrvCatRates/ITCatalog/Forms/2014%20Deliverables%202013%20Versions%20and%20Examples.aspx?View={6D7029FF-878A-4396-B856-B79F688D2DB7}&FilterField1=Task&FilterValue1=Line%20of%20Business%20Planning>

Initial roadmaps have been created for our Workstation, Business Solutions, Servers, Storage & Database, and Network services. These roadmaps will be reviewed and maintained annually as part of our planning process. Additional roadmaps will be added for additional services over time as we have the capacity and resources to develop them. An example of the full LOB plan, which includes both short- and long-term service roadmaps, is shown below.

Workstation Service - Line of Business Summary

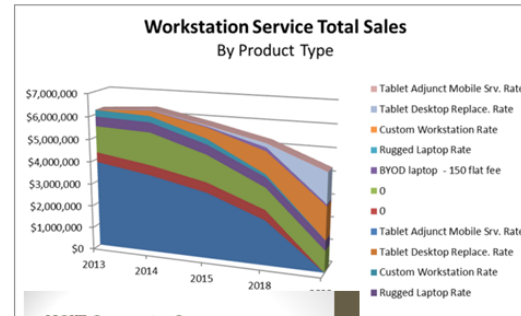
DRAFT

- Current State
 - Value Stream
 - Production Forecast
 - Environmental Scan
- Problem Statement
- Alternatives Analysis
- Roadmaps
 - 2 year service Improvements
 - 10-year Service Strategies
 - 3-5 year Technology Platform(s)



Environmental scan - SCOC

Strengths	Weaknesses
- Strong relationships with customers and partners - High level of customer satisfaction - Strong financial performance - High level of employee engagement	- Limited resources for innovation and research - High level of competition - High level of customer expectations - High level of employee turnover
Opportunities	Threats
- Emerging markets and technologies - Increased demand for services - Strong financial performance - High level of employee engagement	- Increased competition - High level of customer expectations - High level of employee turnover - High level of customer expectations



KCIT Strategic Context

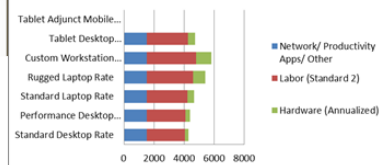
Internal Constraints:	External Challenges:
- Overall lack of IT discipline - Move to more strategic leadership - Significant initiatives requiring a solid support - Staff investment required to stay current & dynamic - Value of IT: Quality & efficiency	- Emerging mobile/consumer reality - Increased public expectations for mobile apps, web services - Diverse service delivery: executive branch & separately elected - Separately Elected's utilization of common county services - County investment level on IT and TDD
Internal Strengths:	External Opportunities:
- Strategic Technology Plan aligned with KC Strategic Plan - KCIT Consolidation - Product Catalog - Rate Setting & Transparency	- KC Strategic Plan - Executive Priorities (Product based budgeting, Lean, Exec's support for IT) - Demand for technology - Increased market product offerings - Bring Your Own Device (BYOD) - Increased interest for KCIT jobs

Problem Statement

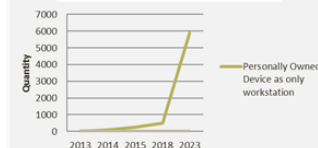
- How can KCIT increase the efficiency and effectiveness of our products (for our partners/customers) while remaining affordable (accomplishing 3% efficiencies for King County).

Discussion Point: To achieve IT efficiencies, need to drive towards standardized service. Given diversity of KC customers, this is difficult. Especially if customers want unique devices and customization.

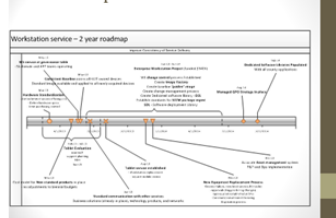
2014 Rate Components - KCIT Owned Workstations



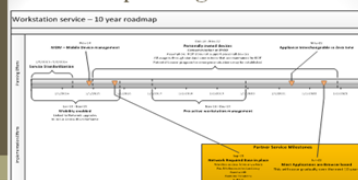
Quantity Forecast Employee Owned Device as Only Workstation



Roadmap - Mid-term



Roadmap - long term



Related Technology Roadmap

- Not yet available - to be created by EA architecture end-point domain team (Q3)



Appendix F- TechnologyRoadmaps

Technology roadmaps project changes in our current technology environment over the appropriate, foreseeable future. Technology roadmaps are new to King County, and are currently under construction for several technology domain areas as part of our EnterpriseArchitecture program. They will be added to the following location as they are completed:

<https://kc1.sharepoint.com/teams/IT/EA/SitePages/start.aspx>

Initial technology roadmaps have been drafted and are nearing completion for both the Network and Server Storage& Database domain areas. Updating of these roadmaps will occur on an annual basis by the domain teams responsible for maintaining them.

What is a Domain Technology Roadmap?

For Enterprise Architecture purposes we have defined a domain as a group of related technologies or disciplines. Examples of this include applications, network, server storage and database, and information assurance. A technology road map is a timeline representation of where the County plans to go with the major technology components that comprise that domain. Usually represented graphically, it illustrates what is planned to be brought in, retired, and evaluated.

What is the Timeframe Covered by a Roadmap?

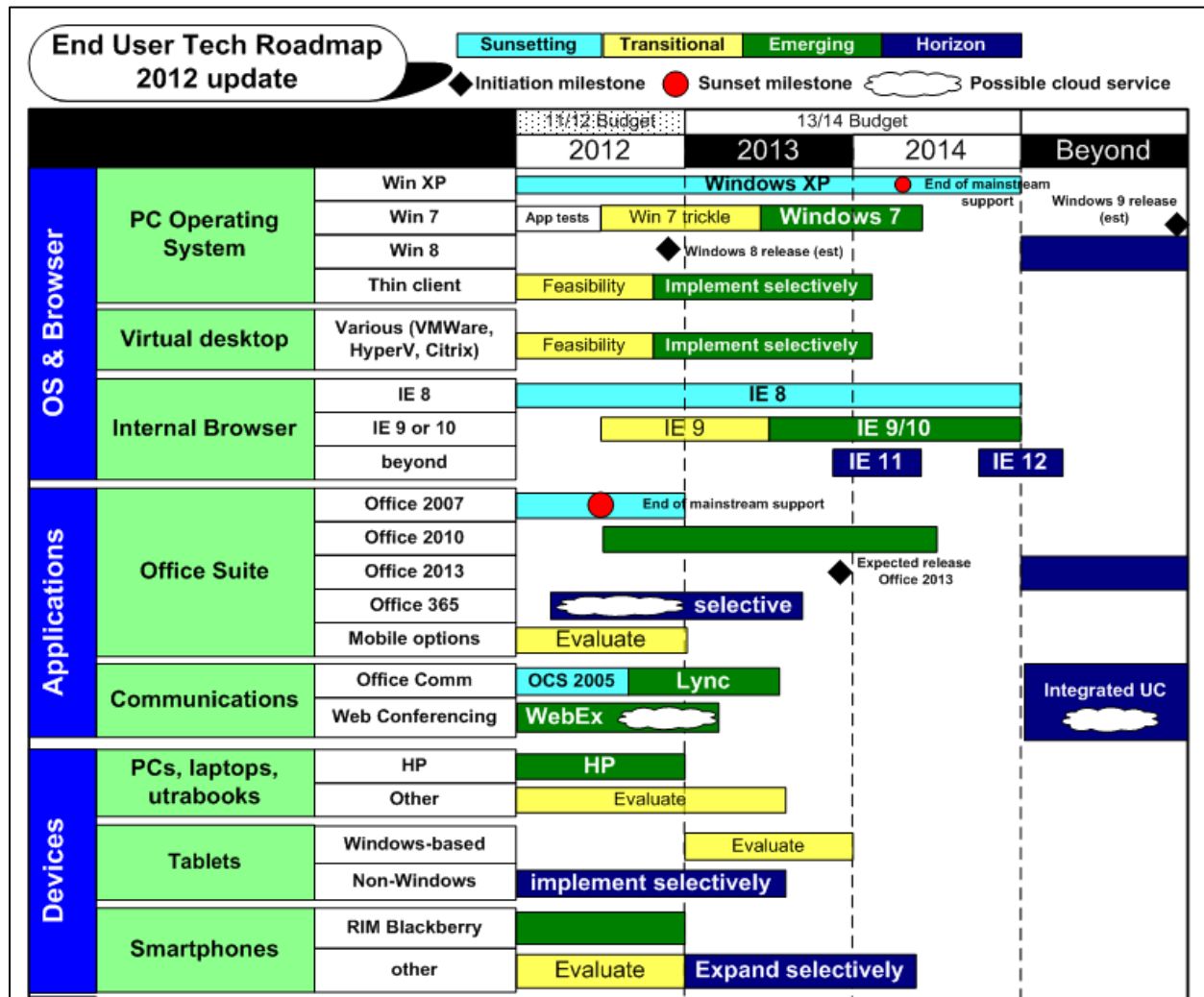
That varies by the domain and organization. Some technologies, such as tablet and smartphone applications, are evolving so rapidly that trying to predict five years out is problematic. Others, such as systems management, has more stable technologies and the ability to make major changes to internal processes need to be planned further in advance - thus the timelines tend to be longer. As a good rule of thumb, roadmaps should span at least several budget cycles. If they donot, the ability to act on the technology changes recommended in the roadmap becomes limited due to lack of budget.

How is a Roadmap Used?

Roadmaps have multiple uses – both inside and outside of KCIT. They are communication and planning tools that help with the following:

- Communicate to users and user management the direction we are going with our technologies so the business opportunities and impacts can be understood.
- Provide a way for the SMEs (Subject Matter Experts) in a domain to communicate with other IT staff and management so important changes can be planned and budgeted.
- Communicate to IT service owners what capabilities to support their services they can expect, and when.
- Provide a brainstorming forum to leverage the knowledge of the SMEs in King County.

Example Technology Roadmap



Appendix G - Significant Business Changes / Strategies Summary

Developed by IT Governance Strategy Sub-team

<i>“Do More”</i> Factors Impacting the Demand for our Services	<i>“With Less”</i> Factors Impacting our Ability to Provide Services
Public’s service expectations are rising. ▪ More services available ▪ Hours availability increasing ▪ Reaching across the digital divide ▪ <i>‘Mobile Public’</i> ○ Public disclosure (What is a record? Are records created that need to be retained?) ○ Social Media – risk, positioning, staffing, trends monitoring ○ Alerts ○ Pothole photos –(County ability to respond??) ○ GIS ○ Next Generation 911smartphone, video, pictures, administrative impacts ○ Increased access to resources ▪ Public engagement ▪ Increased access to services ○ Courts, etc. - Equity and Social Justice (ESJ)considerations ▪ Open data / increased transparency ▪ Increasing population	Obsolescence People ▪ Aging workforce (average age is 55) ○ Knowledge departure ○ Some need assistance to adopt new technology ▪ Utilization of systems not optimal – i.e.collaboration tools ○ Change fatigue – how much is digestible ▪ Aversion compounds fatigue especially when much of the change has a technology component ▪ Areas to address: making time, coordinating pace of changes, reducing complexity, involve those impacted up-front, increase comfort of staff ○ Current labor contracts can limit ability to retain new workforce when reductions in force are needed ▪ Varied workforce: Must retain old (paper) systems even when electronic systems available in order to address needs of field/plant staff with no access to computers and to address some employees’ lack of trust in new systems ▪ Newer workforce ○ Generally more tech savvy ○ Consumerization and ‘latest’ technology important attractors and for on-going productivity ▪ <i>How do we build a culture where adapting to changing technology and innovation becomes a norm across our workforce (old and new)?</i> ▪ Training ○ Importance elevated yet more difficult due to finances ○ Even more impactful on higher change skillsets like IT

Internal agencies' service expectations are rising <i>'Mobile workforce'</i> ▪ Consumerization ○ Infrastructure security – personal data protection, county protected data ○ Increased Wi-Fi/wireless ▪ Telecommuting ▪ Tech support for seamless mobile device use in field work to allow for ongoing efficiencies ▪ Assessor/iPad – eliminating tether points (i.e. no trip in to office to synchronize) ▪ Hoteling concepts / space savings ▪ Remote contractors ▪ On-line meetings	○ Two pronged – must address current and new workforce differently to be effective Technology ▪ Avoid tech obsolescence – i.e. inherent conservatism/risk management bias of government can sometimes impede adoption of new technology ▪ Facilities not keeping up with technology ▪ Standards for IT lifecycle ▪ Key suppliers / vendor driven changes to environment (i.e. fusion) ▪ Training investment in IT staff is critical to currency, retention Business Process • As we implement new technologies, need to ensure business processes are also modernized and vice versa ○ Culturally difficult for many reasons (history, uniqueness, etc.) ○ Proactive engagement of both current/new workforce (possibly two-pronged approach, more prototyping) ○ Up-front involvement of users in designing (business process and technology) solutions • Learning from private sector / utilizing private sector
Increased recordkeeping requirements and other overhead	Do more with less • LEAN / business process improvement • Automation • Difficulty prioritizing services (across the board cuts rather than specific service reductions – though this does happen)
Increased need for confidentiality and security measures - intra-department as well as public	Drive for standardization versus departments' unique needs and existing procedures – difficult with variety of over 16 LoB's and the diversity required ▪ Labor rules ▪ CIP contract management ▪ Maintenance management ▪ Work orders ▪ Asset management ▪ Project management ▪ Constituent relationship management ▪ Records management
	Economy - Decreasing revenues, decreasing grants
	Maximize Revenue Generation - Responsiveness to market changes
Regulatory Issues – driving service delivery, forcing process inefficiency	

Regional leadership / roles ▪ Partnerships with local / community organizations ▪ Radio ▪ Emergency management ▪ Disaster recovery and smaller events
Benefit Realization - Financial and non-financial • TCO approach • Savings at enterprise versus agency level
Performance monitoring / management
Data driven decision making (business intelligence, big data)

Appendix H- Directing Code

2.16.0757 Department of information technology – information technology strategic planning office. The department of information technology shall include an information technology strategic planning office. The information technology strategic planning office shall report directly to the chief information officer. The information technology strategic planning office shall:

A. Produce an information technology strategic plan with annual updates for council approval. The strategic technology plan shall be transmitted to council no later than June 30 of the reporting period, with annual updates provided by April 30. The plan should include:

1. A section that includes:

a. text describing, for individual planning issue areas, the current environment, strengths, weaknesses, opportunities and challenges;

b. a list of recommended objectives, with description; and

c. the approach to achieve the desired outcomes for each strategic objective;

2. The annual update should provide accomplishments towards meeting objectives from previous approved strategic plans, when objectives have not been met and a discussion of the obstacles towards meeting those objectives; and

3. Appendices supporting the recommendations with empirical data;

Appendix I - Summary of Information Assurance (IA) Strategies and Indicators

Objective	IA Strategy	IA indicator
eGovernment	Information Assurance – Ensure on-line transactions are safe and secure.	Website vulnerabilities reduced over time.
Mobility	Information Assurance – Ensure that protected information is not at risk due to increased use of mobile end-point devices.	Percent of mobile devices under active management.
Technology Modernization	Information Assurance – Utilize a security scorecard to identify and track progress in improving our security posture for the most critical and vulnerable components of our systems platforms.	- Percent of applications having identified appropriate data sensitivity classification. - Security operational scorecard shows continuous improvement over time.
IT Service Improvement (Maturity)	Information Assurance – Complete an information assurance service roadmap to improve overall understanding, prioritization, and results related to information assurance.	Percent of IA roadmap items that are completed.

Appendix J–Summary of Strategic Technology Indicators

How We Measure Strategic Success

	eGovernment	Mobility	Technology Modernization - Applications	Technology Modernization - Infrastructure	IT Service Improvement (Maturity)
Information Assurance	Website vulnerabilities reduced over time	Percent of mobile devices under active management	Percent of applications having identified appropriate data sensitivity classification	Security scorecard shows continuous improvement over time	Percent of IA roadmap items that are completed
1	Percent of business services transacted on-line	Percent wireless versus wired connections/month (not network joins)	Application counts by type (PAAS, SAAS, COTS, custom)	Percent of network with no redundancy and percent of worksites with no wireless access	IT Customer Satisfaction Rating
2	Web customer satisfaction (resident survey)	Number employees with UC capabilities	Percent of county email users on O365 versus Exchange	Application counts by hosting platform (mainframe, server, SVE, VPC, public cloud)	Percent of services with defined methodology/best practice
3	Effectiveness of on-line messaging and responses	Percent county owned devices that conform to Workstation Service standards / built with standard image	SOA Service utilization rate	Percent of county owned devices (by type) running current preferred OS standard	Percent of enterprise projects accomplishing expected benefits

4	Utilization of open data	Percent of network access / sessions that join the network	Percent applications migrated to desired application architecture	Percent data center square footage that is utilized by county verses lease tenants	Number of current technology roadmaps
5	Expand internal participation in providing open data	Percent IT applications delivered through a browser or mobile interface	Percent of applications conforming with application data standards	Percent of systems receiving full, end-to-end monitoring	Number IT services with service roadmaps
6		Volume of data stored on SVE, VPC, SAAS, physical			Track and report the ratio/mix of KCIT positions

Appendix K – Table of Acronyms

Acronym	Full Spelling
BMC	Business Management Council
BYOD	Bring Your Own Device
CFO	Chief Financial Officer
CI	Continuous Improvement
CIO	Chief Information Officer
CIP	Capital Improvement Project
CJIS	Criminal Justice Information System
COTS	Commercial-Off-the-Shelf
CRM	Constituent Relationship Management
EA	Enterprise Architecture
EHR	Electronic Health Record
ESJ	Equity and Social Justice
GIS	Geographical Information System
HIPAA	Health Insurance Portability and Accountability Act
HIT	Health Information Technology
HR	Human Resources
IA	Information Assurance
IAAS	Infrastructure-as-a-Service
IM	Instant Messaging
I-Net	Institutional Network
ITIL	Information Technology Infrastructure Library
IT	Information Technology

KCIT	Department of Information Technology, also known as King County Information Technology
KCSP	King County Strategic Plan
KCWAN	King County Wide Area Network
LOB	Line of Business
NG 911	Next Generation 911
OS	Operating System
PAAS	Platform-as-a-Service
PH	Public Health
PMO	Project Management Office
SAAS	Software-as-a-Service
SAC	Strategic Advisory Council
SCOC	Strengths, Constraints, Opportunities, and Challenges
SDLC	Solution Delivery LifeCycle
SME	Subject Matter Expert
SOA	Service Oriented Architecture
SVE	Standard Virtual Environment
SSD	Server, Storage and Database
STP	Strategic Technology Plan
TCO	Total Cost of Ownership
TMB	Technology Management Board
UC	Unified Communications
VM	Voice Mail
VPC	Virtual Private Cloud

Appendix L – Objective Benefits and Strategic Success Indicators

Objective	Benefits	Strategic Success Indicators
eGovernment - Improve service delivery to and interaction with King County customers by leveraging web and related social media technologies.	- Improved citizen value and satisfaction when transacting business with King County. - Improved access to King County services. - Increased citizen participation in government. - Greater transparency of government operations.	<i>Website vulnerabilities reduced over time</i> Percent of business services transacted on-line Web customer satisfaction (resident survey) Effectiveness of on-line messaging and responses Utilization of open data Expand internal participation in providing open data
Mobility - Free employees and citizens to interact and transact when and where most appropriate and convenient.	- Increased business and IT productivity. - Business processes re-designed towards customer service and overall efficiency. - Reduced costs related to staff moves. - More collaborative, open, dynamic office space and working environments.	<i>Percent of mobile devices under active management</i> Percent wireless versus wired connections/month Number of employees with UC capabilities Percent county owned devices that conform to Workstation Service standards / built with standard image Percent of network access / sessions that join the network

Objective	Benefits	Strategic Success Indicators
Technology Modernization: Applications – Enable business solutions that are flexible, timely, and dependable by pro-actively evolving modern application technologies and processes. Infrastructure - Empower flexible system solutions by providing current technology platforms, components, and frameworks on which applications can operate and continuously improve.	• Speed to implement business process changes is faster. • TCO for computing is reduced through efficiencies, standardization, re-use and the ability to meter and rapidly scale resources up or down as needed. • Increased service quality due to increased standardization and reduced downtime. • Risk is reduced due to increased redundancy, geographic diversity, and commoditized, on-demand scaling of needed assets.	<i>Percent of applications having identified appropriate data sensitivity classification</i> Application counts by type (PAAS, SAAS, COTS, custom) Percent of county email users on O365 verses Exchange SOA service utilization rate Percent applications migrated to desired application architecture Percent of applications conforming with application data standards <i>Security scorecard shows continuous improvement over time</i> Percent of network with no redundancy and percent of worksites with no wireless access Application counts by hosting platform (mainframe, server, SVE, VPC, public cloud) Percent of county owned devices (by type) running current preferred OS standard Percent data center square footage that is utilized by county verses lease tenants Percent of systems receiving full, end-to-end monitoring

Objective	Benefits	Strategic Success Indicators
IT Service Improvements (Maturity) - Increase the value to customers from IT services by maturing our service delivery processes and improving our services to better anticipate and match customer needs and expectations.	- Increased IT customer choice and greater knowledge and transparency of IT services through improved provisioning, performance dialogues, satisfaction surveys, and other practices improving customer satisfaction and engagement. - Strategic alignment of IT services with future customer needs. - Reduced cost of existing services through low cost options in comparison to industry standard offerings, continual service improvements, increased re-use and sharing of solutions, and improved integration across solutions. - Faster delivery of service fixes, changes, improvements, and new service introduction through Continual Improvements.	<i>Percent of IA roadmap items that are completed</i> IT Customer satisfaction rating Percent of IT services with defined methodology/best practice Percent of enterprise IT projects accomplishing expected benefits Number of current technology roadmaps Number IT services with service roadmaps Track and report the ratio/mix of KCIT positions