

2014-2016 ENTERPRISE TECHNOLOGY STRATEGIC PLAN



CITY OF BELLEVUE



MAY 2015 UPDATE



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I. INTRODUCTION AND OVERVIEW

The City of Bellevue last updated its Enterprise Technology Strategic Plan in 2009. Every few years the City looks at the emerging technology needs and major trends that will face the organization in the next few years. This strategic planning effort is undertaken with the purpose of positioning the City to effectively meet these strategic technology challenges.

Bellevue is the fifth largest city in Washington, with a population of more than 130,000. It is the high-tech, retail and services center of the Eastside, with more than 130,000 jobs and a gleaming downtown skyline of high-rises.

Bellevue's demographic shift, with over a third of its population being foreign-born, has contributed to its culturally rich environment. Top rated schools, vibrant neighborhoods, a vast network of green spaces keep the citizens of this 'city in a park' expecting high quality government services.

A. City of Bellevue Mission, Vision and Values

The broader organizational mission, vision and values set the foundation for the organization's culture. All technology operations, projects and initiatives must fit within this context. Technology can be a powerful tool to further the City's goals in all these areas.

Mission	Provide exceptional customer service, uphold the public interest, and advance the Community Vision .
Vision	Be a <i>collaborative and innovative</i> organization that is <i>future focused</i> and committed to excellence.
Core Values	• Exceptional public services • Stewardship • Commitment to employees • Integrity • Innovation

The City Council adopted a 20-year vision called [Bellevue 2035](#) that includes seven strategic target areas and two-year priorities. While technology will be used to make progress in all target areas, the following specific statements and two-year priorities directly address technology.

Economic Development	<i>"Infrastructure is ample and in excellent condition, including roads, rails, high-speed data, reliable electricity, and clean water."</i> Priority: Create an incubator environment; develop affordable and flexible workspace for entrepreneurial business.
Transportation and Mobility	<i>"A state-of-the-art intelligent transportation system moves people through the City with a minimum of wait times and frustration."</i>
High Quality Built and Natural Environment	<i>"Bellevue is a "Smart City" with a clean, high-quality environment and excellent and reliable infrastructure that supports our vibrant and growing city, including high-tech connectivity."</i> Priority: Develop the Smart City strategy to include high speed data options to support business and residents and determine implementation steps.
Bellevue: Great Places Where You Want to Be	<i>"Bellevue University, the new Research Center of Excellence, and our other institutes of higher learning are connected physically and digitally from Eastgate to Bel-Red, Downtown, and the University of Washington in Seattle."</i>
High Performance Government	<i>"We make public investments wisely, assuring taxpayers that we are living within our means, but also ensuring that we have superb infrastructure to support growing businesses and desirable residential opportunities."</i> Priority: Identify and implement technologies that improve customer service.

In alignment with our mission, vision and values, the City is purposeful about using technology to further organizational goals. The following framework guides the implementation of the technology strategy:

- Focus to improve the quality of the services we provide to customers and the community.
- Work collaboratively to produce the best solutions, maximize the benefits of investments and lower risks.
- Strive to provide convenient and intuitive public access to City information and services.
- Maintain agility to respond quickly to changing public preference for technologies and how they use them to communicate and access information
- Provide the tools staff need to do their work, expanding options for where and how.
- Consider long term costs, including maintenance and replacement, when making technology investments.

B. Use of Technology in City Services and Operations

To meet the diverse and complex needs of citizens and businesses in Bellevue, the City provides services directly through larger operating departments which are underpinned by support departments. All departments have access to enterprise systems for productivity, communication and collaboration.

Each department's technology use is profiled below. This reflects significant investments in technology systems over the years to achieve operational efficiencies and enhance service delivery. A comprehensive list of systems used by departments is provided in Appendix D.

Table 1: Departments and Technology Use

Department	Technology Used For
City Attorney's Office	• Case management
City Clerk's Office	• Enterprise content management and records management • Customer relationship management to track public disclosure requests
City Manager's Office	• Web content management for City website
Civic Services	• Maintenance management, asset inventory and work order tracking • Building systems for facilities • Fleet technologies for diagnostics and maintenance • Customer-serving applications, such as customer relationship management, point of sale, kiosk, electronic signs, license and permits • Employee-serving applications, such as vehicle license, motorpool, bus passes
Development Services	• Permit application, review and inspection management • Online permit application submittal and issuance, inspection scheduling and status information (regional application through eCityGov Alliance)
Finance	• Enterprise resource planning (financial system) • Budget development and monitoring • Business and occupancy taxPerformance management • Point of sale
Fire	• Fire dispatch and mobile access (provided as a service from NORCOM, a regional 911 center) • Fire records management • Permit tracking for fire inspection • GIS for emergency management
Human Resources	• Enterprise resource planning (HR system) • Online recruitment (provided as a service from eCityGov Alliance)
Information Technnology	• Call ticket system • Systems monitoring and alerting • Online maps
Parks and Community Services	• Online class registration, facility scheduling, membership, league scheduling • Point of sale • Parks, trails and streetscape inventory and management • Probation tracking • Maintenance management, asset inventory and work order tracking
Planning and Community Development	• GIS for planning and land use

Police	• Police dispatch and mobile access (provided as a service from NORCOM) • Police records management system (provided as a service from NORCOM)
Transportation	• Permit tracking for construction and right-of-way permits • Intelligent transportation system to manage signal system • Transportation modelling • Online traffic map
Utilities	• Utility billing • Maintenance management, asset inventory and work order tracking • Telemetry management • Permit tracking for utilities inspections

C. Major Needs Facing Bellevue

Technology is used in all City departments in the normal conduct of operations and services. It allows for enormous individual productivity gains for all employees, with readily available collaboration, communications and connectivity tools as well as optimizing City services, such as with dispatching for public safety, utility billing for residents and businesses, or social media for outreach. The following two tables show the technology focus areas for the coming years.

The first table lists the upcoming technology needs for each department. It includes a general time frame for when projects are expected to be done, whether funding currently exists, and relative priority compared to other projects on the list. A Status column has been added to reflect updates as of May 2015. Technology efforts that are directly tied to a Council vision target area are annotated with 'Council Vision' under Status.

Table 2: Department Needs

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
City Attorney's Office	• Burgeoning volume of digital information involved in litigation discovery	eDiscovery tool for search, hold and disclosure	2014	Yes	High	Done
		Litigation tool for trial presentations	2015	No	Medium	Not funded
	• Privacy and records policies that have not kept up with technology advances • New courthouse facility and needs for video hearings	Replace case management system to include e-discovery	2015-16	No	Medium	Not funded
		Video arraignment and hearing capabilities	2015	No	High	Not funded

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
City Clerk's Office	- Growing volume of electronic content that must be managed - Records policies that were written for paper records still evolving to address digital records - Growing complexity and volume of public disclosure requests	Enterprise content management (ECM) for records management	2014	Yes	High	Under way
		e-discovery for public disclosure	2014	Yes	High	Done
		Agenda packet replacement	2014	Yes	High	Done
		Improved access by citizens to public records	2015-16	Yes	Medium	Under way <i>Council Vision</i>
		Open data portal to alleviate public disclosure requests	2015	Yes	Medium	Under way <i>Council Vision</i>
City Manager's Office	Social media and mobility tools that drive how citizens expect to interact with the City	Mobile reporting system for citizens	2014	Yes	High	Done
		Social media engagement as part of Communication Strategic Plan	2014	Partial	Medium	Under way <i>Council Vision</i>
		City website redesign to streamline content, enable mobile access and support more languages	2015-16	Yes	High	Under way <i>Council Vision</i>

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Civic Services	- Energy efficiency for facilities - Keeping up with demands from customers for better and readily available information	Mobile field workers – giving them access to info, maps and apps in the field	2015	No	Low	Partially Under way
		CRM replacement with mobile reporting system	2014	Yes	High	Done
		Imaging of Fleet documents	2014	No	High	Under way
		Smart Building systems and information that can drive efficient energy use and preventive maintenance	2015	No	High	Not funded
		Fleet dashboard to show status of vehicles	2014	Yes	Medium	Pending
		Asset management for easements	2015-16	No	Medium	Not funded
Development Services	- Keeping up with demand from a building boom from a recovering economy - Leveraging investments in Paperless Permitting and electronic plans submittal - Workload impacts from other integrated systems – CRM replacement, Point of Sale replacement, ECM integration	Managing user change and adoption as permitting system changes to web-based	2014	Yes	High	Done
		Mobile inspections (last phase of Paperless Permitting Initiative) that involves devices, apps and process changes	2014	Yes	High	Done
		Better integration between AMANDA and Mapshot	2015	Yes	Medium	Pending
		Digital signatures for electronic plan submittals	2014	Yes	High	Pending

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Finance	- Architectural direction with current ERP diverging from the City's standards - Continuing to increase internal efficiencies with more automation and system integration efforts	Finalize the ERP roadmap to define strategic direction	2014	Yes	High	Done
		Complete the Business and Occupancy Tax system	2014	Yes	High	Under way <i>Council Vision</i>
		Performance management system integration	2014-15	Partial	High	Pending
		Point of sale system replacement	2015-16	Yes	High	Under way
		Tax Portal (regional)	2014	Yes	High	Under way
		Open data effort to make finance data available to public and to easily access other city data for budget analysis	2015		Medium	Under way <i>Council Vision</i>
		Web procurement	2015-16	Yes	High	Under way
		Automation projects for increased efficiencies, such as timekeeping integration, accounts payable, reports, etc.	2014	Yes	High	Under way

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Fire	- Change in direction with current Fire Dispatch/ Mobile/ Records system - Not yet achieving the full benefits of a consolidated dispatch/ mobile/ records system	Fire dispatch/mobile/ records system replacement	2014	Yes	High	Done
		Mobile apps, devices and connectivity	2014	Yes	Medium	Done
		Building drawings (pre-fires) on mobile devices to aid in response	2014	Looking for grant funding	Medium	Under way <i>Council Vision</i>
		Electronic Patient Care Records	2014-15	Yes	Low	Pending
		Replacement of mobile computer in fire vehicles as opportunity to outfit staff with right mobile tools	2015	Yes	Medium	Under way
		Mobile reporting system for citizens to communicate with office of emergency management during emergency events	2015	Yes	Medium	Pending <i>Council Vision</i>
		Transitioning away from paper-based work processes using more electronic forms	2015	Yes	Medium	Under way
Human Resources	Keeping up with changes in health care laws	More reporting from existing systems	2014	Yes	High	Partially Under way
		Implement JDE HR modules or purchase new HR Information System	2015-16	Partial	High	Pending
		Recruitment system	2014	Yes	High	Done
		Performance evaluation system	2015-16	No	Medium	Pending
		Replace Learning Management System	2015-16	No	Medium	Not funded

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Information Technology	- Effectively integrating major technology trends into IT portfolio - Adapting to fast changing technology and keeping up with customer expectations - Ensuring greater user adoption and productivity with existing tools - Continuing to keep data, infrastructure and applications secure	User adoption - increase staff productivity with existing technology tools	2014	Yes	High	Partially Under way
		Enterprise mobility - coordinate all workforce mobility efforts and provide appropriate tools	2014	Yes	High	Under way
		Deploy open data portal to make City data (GIS, financial, transportation, etc.) easily available to the public	2015	No	Medium	Under way <i>Council Vision</i>
		Increasing device choices and access to systems	2015-16	No	Low	Done
		Deploy mobile GIS solutions	2014-16	Yes	High	Under way
		Deploy map gallery to centralize maps and GIS apps for public and staff	2015	Yes	High	Under way <i>Council Vision</i>
		Integration between systems – performance management, GIS, ERP, permitting, etc.	2014	Yes	Medium	Partially Under way
		Address connectivity needs of the community	2014-16	Partial	High	Pending <i>Council Vision</i>

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Parks and Community Services	- Class Activity Registration system will be phased out and replaced with a transaction based system in the 'cloud' - Point of sale system for the enterprise is impacted by Class replacement - Probation system is old and getting more difficult to support - League system to better deal clubs and teams needs - Healthy Living initiative to provide a comprehensive and holistic resource listing healthy food, events, recreation, and programs	Class replacement or upgrade to 'cloud'	2015 - 16	Yes	High	Under way
		Mobile field workers for Parks facilities and resource management	2014	Partial	High	Pending
		Probation system replacement	2014	Yes	High	Under way
		Point of sale system replacement	2015-16	Yes	High	Under way
		League System	2014	Yes	High	Under way
		Expand wireless connectivity at community centers and other City facilities	2015-16	Partial	Low	Partially Under way <i>Council Vision</i>
		Location awareness and wayfinding within parks and on trails	2015-16	No	Medium	Not funded
		Healthy Living initiative to combine food, events, recreation events, programs in a holistic site for citizens	2016-17	No	Low	Not funded

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Planning and Community Development	- Enhancing neighborhood engagement - Desires for high-speed connectivity from citizens and businesses	Addressing connectivity needs of the community as part of the Economic Development Plan	2014	Partial	High	Under way <i>Council Vision</i>
		Social media tools for engagement on neighborhood outreach and input on planning efforts, including online meetings, video streaming and collaboration	2015-16	Partial	Medium	Under way <i>Council Vision</i>
		Communications tools to enhance reach to diverse audiences	2015	No	Medium	Not funded
		3D modeling of City for planning	2015	Yes	Medium	Pending
		Open data portal and data analytic tools	2015	Yes	Medium	Under way <i>Council Vision</i>

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Police	- Growing needs for digital evidence (photos, videos, recordings, etc.) that can quickly escalate with a major incident - Keeping up with new law enforcement technology that can prevent crime (predictive analytics) or protect officers (body cameras) - Increasing demands for use of social media in engaging the public - Not yet achieving the full benefits of a consolidated dispatch/mobile/records system - Leveraging systems to drive operational efficiencies - Increasing transparency of data for internal and public use	Evidence and property tracking module optimization (provided as a service from NORCOM)	2014	Yes	High	Under way
		Field Reporting (provided as a service from NORCOM)	2014	Yes	High	Done
		Digital evidence and forensics	2015	No	Medium	Under way
		Crime analytics tools for crime prevention	2015-16	No	Medium	Pending
		Social media engagement	2015-16	No	Medium	Pending
		Body cameras and wearables for officer safety	2015	No	Medium	Not funded
		Data conversion of records management data	2014	Yes	High	Under way
		Replacement of mobile computer in vehicles as opportunity to outfit officers with right mobile tools	2015	Yes	High	Under way

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Transportation	- Using IT mobility to enhance transportation mobility - Providing more real-time info to citizens and operations - Leveraging investments in Intelligence Transportation System	Mobile field workers for street crews and inspectors	2014	Partial	High	Partially Under way
		Street light management system	2015-16	Yes	Medium	Under way <i>Council Vision</i>
		ITS modules for variable message signs and weather stations providing real-time info on road closures and road conditions	2015	Yes	Medium	Pending <i>Council Vision</i>
		Open data effort to make transportation info available to public	2015	No	Low	Under way <i>Council Vision</i>
		Vehicle tracking	2015-16	No	Medium	Not funded
		Social media engagement for outreach programs and for input on transportation planning efforts	2014	Partial	High	Under way <i>Council Vision</i>

Department	Major Challenges	Technology Focus	Year	Funded	Priority	Status
Utilities	• Needing to gain greater operational efficiencies • Transitioning away from traditional paper-based work processes • Responsiveness when events happen	Mobile workforce – giving crews access to info, maps and apps in the field	2014-15	Partial	High	Under way
		AutoCAD migration to GIS for engineering information	2014-15	Yes	High	Under way
		Utilities vehicle dispatch and tracking	2015	No	Medium	Not funded
		Expansion of video inspection data	2015-16	No	High	Pending
		Mobile Customer Information System	2014-15	Yes	High	Pending <i>Council Vision</i>
		Automated Meter Infrastructure and Meter Data Management	2016-17	No	High	Pending <i>Council Vision</i>

The second table highlights the major efforts that are cross-departmental in nature and will require significant coordination across the enterprise to execute. These lists are not inclusive of all projects each department could do, but covers the larger, more resource-intensive efforts. Some of these are new investments that will require either budget proposals in the upcoming budget cycles or a reallocation of existing resources. The cross departmental efforts in the following table emerged from the discussions to identify each departments strategic technology objectives in the next few years.

Table 3: Cross Departmental Efforts

		CAO	CCO	CMO	CS	DS	Fin	Fire	HR	IT	Parks	PCD	Police	Trans	Util
IT MOBILITY	Workforce				✓	✓		✓			✓		✓	✓	✓
	Vehicle				✓	✓					✓			✓	✓
	Citizen			✓	✓	✓	✓				✓			✓	✓
SOCIAL	Citizen Engagement			✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓
DATA	Big Data (Producing)				✓	✓	✓				✓		✓	✓	✓
	Open Data (Sharing)		✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓
OTHER	Timekeeping				✓	✓	✓				✓			✓	✓
	Point of Sale				✓	✓	✓				✓		✓		✓
	User adoption	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Community Connectivity	✓		✓		✓				✓		✓		✓	✓

IT Mobility

- **Workforce Mobility** – Giving field crews, inspectors, and other staff the devices, apps and information they need to do work where they need.
- **Vehicle Mobility** – Ability to track location of vehicles during weather events and other emergencies and deploy them on the fly.
- **IT Mobility** (citizen-facing) – Allowing citizens to access City data and apps via mobile devices. Making our website and web apps mobile-friendly.

Social

- **Citizen Engagement** – Using social media for overall communications and for two-way dialog with citizens on planning and outreach efforts.

Data

- **Big Data** (Producing) – Systems that are capable of producing large volume of data that we will have to be monitored, stored and analyzed.
- **Open Data** (Sharing) – Ability to share City data with the public through an online portal for their own use and also for city staff's internal use.

Other

- **Timekeeping** – Simplify the timekeeping process throughout the City by minimizing staff having to do multiple time entries in various systems.
- **Point of Sale** – The Class system is up for replacement, which impacts Parks and all departments who use the enterprise point-of-sale system for payment and billing.
- **User Adoption** – Increasing our staff's productivity with our existing technology portfolio, including training and sharing expertise.
- **Community Connectivity** – Increasing broadband connectivity speeds and choices within the community.

D. Information Technology Mission

The Information Technology Department's (ITD) mission statement is:

INSPIRE, INNOVATE AND DELIVER

The stated mission focuses ITD on those qualities necessary to meet the technology and business challenges in upcoming years: inspired leadership in technology and operations; a commitment to innovation within the organization, and the delivery of systems, products, and services that will enable the City of Bellevue to effectively achieve its broader mission.

ITD's role related to the Enterprise Technology Strategic Plan is finding ways to inspire customers with emerging technology trends and finding opportunities to apply the new capabilities into innovative use in the organization to deliver better services. ITD coordinates future needs across the organization, manages collaboration on these larger enterprise efforts, and provides consulting and initial planning needed for approval. Eventually, ITD will be heavily involved in most of the approved technology projects.



II. TECHNOLOGY ASSESSMENT AND POSITIONING FOR THE FUTURE

A. Technology SWOT Analysis

The aim of any SWOT analysis is to identify the key internal and external factors that are important to achieving objectives. SWOT is defined as:

- **Strengths:** attributes of the organization that are helpful to achieving the objective.
- **Weaknesses:** attributes of the organization that are harmful to achieving the objective.
- **Opportunities:** external conditions that are helpful to achieving the objective.
- **Threats:** external conditions which could do damage to the business's performance.

Strengths

The City's upcoming IT efforts will build on a strong foundation. Past strategic decisions on governance, fiscal management and investment decisions are paying off. Bellevue established an IT governance process over a decade ago that has allowed technology efforts to align with business needs and adapt as appropriate to major shifts in the environment, such as economic pressures or technology trends. Coupled with that governance process is a prudent fiscal management approach that budgets for both on-going operations as well as replacements. This fiscal approach adapted well to the City-wide effort for budgeting for outcomes, called Budget One. Bellevue also has a fairly up to date technology portfolio that is not hampered by legacy systems that must be remediated and maintained as the old systems have been replaced over the previous years. The IT Department also commits to continuous improvement and adopted solid management practices such as performance management and various industry best practices for IT operations, security and organizational development. These strengths are further enhanced with the City's commitment to regional partnerships in a variety of areas including sharing public safety services, developing common online government applications and expanding the fiber network throughout the region.

Weaknesses

The City's IT program is still hampered with many challenges and known gaps. One of the realities of running an IT shop is the reliance on third-party service providers, such as phone, internet and, increasingly, cloud services. These are critical services and are often integrated transparently with many systems. Service interrup-

tions can have serious impacts on City services because of the prevalence of technology in all City operations. Technology is shifting so fast with the convergence of trends for mobility, social media, cloud and big data that it is forcing ITD to quickly adjust its traditional role of maintainer, manager and provider of technology systems to helping find appropriate solutions amidst a wealth of available technology tools. Staff will also have to adapt to readily available and voluminous data sets and to learn to use them for operational needs and decision making. This shift is exacerbated by skill gaps and user adoption issues in the organization with some staff struggling to keep up with the latest tools and newest capabilities while others are pushing adoption of the latest technologies. The demographic changes with the citizens of Bellevue and with staff also highlight the lack of tools to address cultural barriers, such as different languages.

Table 4: SWOT

STRENGTHS	WEAKNESSES
• Mature and adaptable governance processes • Investment portfolio approach to drive smart decisions • Modern technology portfolio • High performing IT operations • Solid fiscal practices • Mature IT performance management program • Commitment to data driven decision making • Established processes driven by best practices • Proven partnerships within City and throughout region • Commitment to organizational development • Stronger, coherent leadership in organization	• Reliance on third-party service providers for critical services • Ability to move fast enough to respond to accelerating technology changes • Complexity and interconnectedness of systems • Shifting role of IT with increasing focus on consulting and coaching versus managing technology • Embryonic capabilities with big data analytics, tools and storage • Knowledge gaps throughout organization • Insufficient tools to address cultural barriers
OPPORTUNITIES	THREATS
• City initiatives that can be leveraged to enhance IT services • High level of performance expectations from citizens and businesses • Technology trends in mobility, big data, cloud and social engagement bring new tools and methods to enhance service • Learning organization • Knowledgeable, tech-savvy staff	• Accelerating increase in digital information • Increased recruitment competition from a recovering economy • Knowledge loss from turnovers • Increasing inequity related to technology and connectivity • Security threats expanding beyond cybercrime into hacktivism and critical infrastructure • Fragile economy impacting long-range planning • Reliance on regional partnerships for mission-critical services

Opportunities

Bellevue is in the middle of a high-tech region and this translates to tech-savvy citizens and businesses with high expectations of what the City can do with technology. This helps to push the IT bar upward. There are technology trends with mobility, big data, cloud and social media that enable higher productivity and new

ways to operate and engage with citizens. Ease of use and ubiquity of technology will transform many City operations in the coming years. The City also has organization-wide efforts on performance management, high-performing organization, and budgeting for outcomes that can be used to complement and enhance IT initiatives. The City's innate culture of learning and continuous improvement can be leveraged to take advantage of new technology.

Threats

The IT security threat landscape is evolving to include hacktivism from groups who may disagree with policy and cyber-warfare with threats on critical infrastructure that is increasingly targeting 911 centers, city facilities, transportation systems, etc. There are digital equity issues with the 'haves' and the 'have nots' that apply to staff, City departments, government agencies and citizens. Larger City departments often have the means to think through and outfit their different roles with the appropriate technology tools while smaller departments may not. This dynamic plays out with the government agencies we partner with on regional efforts. The digital divide as it applies to citizens and business increasingly includes high speed connectivity and choice of providers. Knowledge loss from more senior staff retiring in the coming years will also impact many efforts. While the economy is recovering, it is still fragile, and a recovering economy makes recruiting for skilled staff more difficult.

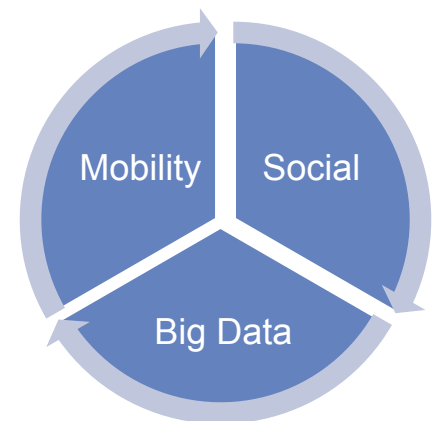
B. Technology Portfolio

ITD maintains a slate of projects that includes: existing projects that are funded and resourced and that are already on the work plan; new projects, not yet initiated, that are approved and for which funding and resources have been secured, and; identified future projects for which there is an articulated need, but without secured funding or dedicated resources. (see Appendix D)

The ITD project slate and technology portfolio is dynamic. New projects are routinely added as part of the bi-annual budget process. Off budget cycle projects are added and adjustments made as new urgent priorities assert themselves (as described in Appendices B).

C. Technology Trends

The City of Bellevue's strategic initiatives and the technology direction in the coming years will be shaped by global forces and technology trends impacting everyone. These technology trends bring enormous benefits if done right and great risks if not planned for. There are three macro technology trends – mobility, social, big data – that will influence the City's technology efforts in the coming years.



Mobility

Smart mobile devices, ubiquitous wireless connectivity and sophisticated apps enable work to be done anywhere. Increased personal productivity was mobility's initial benefit to organizations. The next round of gains will be embedding intuitive software built for smartphones and tablets into daily operations. This requires seeking solutions that focus on user experience in a mobile context (touch/swipe/talk) that address explicit problems. The challenges are many: devices with shorter lifespans, diversity of device choices, ongoing costs for wireless data plans, keeping up with growing demands for mobile apps from staff, citizens that increasingly interact via mobile devices, and more. However, the benefits to operational efficiencies means a mobility strategy will be needed.

Cloud services, where the IT system can reside anywhere on the internet, also enables mobility, since mobility works best when people can access data anywhere they have internet access. Cloud services are changing how information technology is delivered and consumed. In many ways, it is the commoditization of IT services that promise cost savings from large economies of scale, with services aggregated and made available from anywhere on the internet. Cloud is a general direction for IT, but decisions on whether to move to a cloud service is done on a case by case basis, with decision criteria that includes cost benefit analysis, maturity of service, integration with other city systems and other factors.

GIS will be critical in mobile solutions because of location-based information and increasing user expectations for map-centric interactions. GIS technology is shifting rapidly to make data easily available on the web via cloud services and providing tools to easily integrate GIS data (e.g., imagery, topography, streets, demographics, etc.) with city data and other data sources. More data sets are being made available from authoritative sources and commercial providers and data is improving continually from global user collaborations.

Mobility is not one major project, but many efforts that take advantage of mobile technologies. Here are the types of projects that are envisioned,

- **Citizen-facing** – a mobile reporting app used to report problems or request services.
- **Public safety** – Police and Fire both have in-vehicle mobile computers that are up for replacement, which gives both departments the opportunity to outfit staff with the right mobile solutions to do their jobs better. Fire will also be replacing their dispatch/mobile/records system, which will be a regional effort through NORCOM. There are various needs for mobile apps for electronic patient records, vehicle schematics, drug information, building drawing, field reporting, and more.
- **Maintenance** – Staff who maintain city facilities, centers, parks and trails to receive and update work orders as they perform their assignments.
- **Inspections** – Building, utilities, fire and transportation construction inspectors need access to assignments, permits and plans.
- **Field crews** – Street crews and utility field workers need access to maps, drawings and other data in the field. Crews also want to more quickly collaborate with other colleagues in real-time to assess situations and decide on course of action.
- **Vehicle tracking** – Utilities and street vehicles need to be located and dispatched much like Police and Fire vehicles can be tracked and rerouted in real-time today.

Social

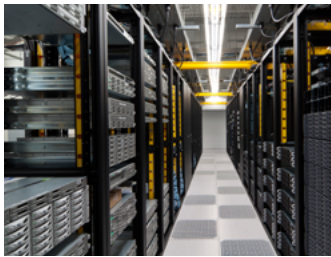


Social media engagement continues to be one of the most important trends in government. Many government organizations have Twitter, Facebook, YouTube and other social media accounts that have transformed government's communication function with the public. The shift facing the City now is using social media from primarily another communications vehicle for getting the message out to a forum for two-way interactive citizen engagement on a host of topics. Government agencies are increasingly leveraging social media to directly communicate with citizens, reach a wider audience, and get feedback from the community.

Social will be a factor in the following City efforts:

- **Communications** – The City currently communicates news, events and important information via many channels – web, print, television, and social media. Social media will continue to be an important channel for the communications function.
- **Citizen Input** – There are many efforts for which the City seeks citizen input, such as for land use decisions, major planning efforts (e.g., Comprehensive Plan, Shoreline Master Plan, Transit Plan, PedBike Plan), and projects (e.g., Eastlink light rail, Meydenbauer Park). The idea is to provide more options for citizens to engage on these input opportunities and create a two-way dialog with staff and with other citizens on a variety of issues facing the community.
- **Outreach** – There are many regular outreach efforts, such as Neighborhood Outreach that regularly interacts with neighbor associations and groups, Transportation Neighborhood Services that seeks to make streets safer and coordinate project impacts, and Conservation Outreach to improve water use, recycling and other conservation efforts. There are also operational needs, such as emergency communications, that can be further enhanced with more real-time social media use.

Big Data



Government organizations are dealing with enormous data sets produced by their IT systems, embedded sensors, communication networks, constituent transactions and other sources. Governments can use this big data to improve citizen services, make better decisions, improve operations, and realize cost efficiencies. While big data can transform organizations into data-driven enterprises making better decisions, the volume, complexity and proliferation of data can be challenging to make this asset useful. Big data tools are emerging to ease the storage and analysis of these huge volumes, but this requires analytical skills that understands what the right questions are, where to find needed data sets, and how to put them together to turn data into information. Data by itself is not valuable until it results in insight or action.

Big Data will be a factor in the following City efforts:

- **Citizen-facing** – There are many government organizations that have made their public data easily available on open data portals that are accessible to citizens and businesses. This can increase transparency and engagement in a variety of areas.
- **Smart devices and sensors** – There are many projects that either currently produce or will produce large volumes of data that will need to be stored and analyzed. The massive data sets in the smart building systems can be analyzed to optimize energy efficiency, performance, alerting and preventive maintenance. The weather monitoring module of the ITS can provide highly localized weather data for traffic management, street maintenance operations, and emergency planning. A street light management system for Transportation and an automated meter infrastructure for Utilities means sensors that can generate data streams continually for alerting, reading and analysis.
- **Analytics** – Once large data sets are available, analytical tools are needed to make sense of all that data. Police has seen a rapid increase in their digital evidence with all the easily available photos and videos available from witnesses or building security systems. Predictive analytics for crime prevention is gaining traction and requires massive data storage as well as mapping and analysis tools. There are many departments that would like to do more in-depth analysis of large data, such as Finance Planning and Community Development and Transportation, often needing to merge city data with readily available third-party data.



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III. PLAN ELEMENTS: STRATEGIC CATEGORIES AND ACTIONS

ITD has adopted a strategic planning structure based on Strategic Categories and Actions that will allow for easy periodic updates as these plan elements are accomplished or changed over time. These plan elements are:

A. Enterprise Technology Strategic Categories

The strategic technology categories that shape the Enterprise Technology plan are driven by the City of Bellevue's Core Values, its identified Strategic Initiatives and the by the strategic planning and visioning taking place on the department level. Each of the Strategic Categories below is intended to address and advance the organizations overall strategic direction and goals.

I. Workforce Mobility – Provide and support the technology solutions that harness the benefits, savings, and service improvement of a mobile workforce.



Increasingly, both the community and the City's workforce need and expect access to necessary information wherever and whenever it is needed. The City's Core Values of Innovation and Exceptional Public Service and the Environmental Stewardship Initiative support this Strategic Category.

The needs expressed include: the ability of workers in the field to access and update data, maps and documents; to collaborate effectively with co-workers and stakeholders; the ability of citizens to receive and submit information using smart devices, expanding the ability to work anywhere. This is succinctly summed up as meeting future mobility needs by creating and supporting an "Anywhere, Anytime, Any Device" environment.

II. Business Optimization – Continue to optimize cost, improve energy efficiency, increase staff productivity, enhance operational processes, and ensure the ability to continue operations after significant disruptions.



Leveraging the maximum benefit and utility out of existing systems, increasing interoperability between systems, improving efficiencies, and reducing costs and management overhead will require innovation, long range planning and a continued commitment to both financial and environmental stewardship. This also addresses the needs of the departments to continue to provide essential and necessary services to continue operations following a significant disruption.

The City’s investment in systems and technologies will be further maximized as we introduce tools to enable mobility, collaboration and open access to data.

III. Community Building – Provide the technology and support to fully engage and collaborate with employees and the community.



New opportunities with social media and collaboration tools will expand opportunities to engage citizens. The communication tool chest can expand to enhance input on plans, projects and major decisions. The overall goal is to reach a wider audience, increase options for involvement and make participation easier, while minimizing cultural barriers that may limit engagement.

IV. Regional Leadership – Advance regional partnership in areas that benefit from standardized service delivery and economies of scale.



Innovative leadership, both internally and externally, will require expanding and deepening our partnership relationships within the organization and across regional boundaries. Opportunities to share both infrastructure and services will be further pursued. Effective partnerships with private entities will be sought to further goals.

B. Actions by Strategic Categories

The Actions listed below are expected to turn into IT projects that will be prioritized, planned and resourced. The list draws from the Department needs in Section I.

Table 5: Actions

Strategic Categories	Actions
Workforce Mobility	• Mobile field workers – Facilities crews ^M • Mobile inspections – Development Services field staff ^M • Mobility for street crews and Transportation inspectors ^M • Workforce mobility – Utilities field crews ^M • Replace mobile computers for Fire and Police ^M • Implement Fire dispatch and mobile solution (NORCOM) ^M • Deploy electronic patient care records for Fire ^M • Deploy mobile GIS solutions ^M • Deploy field reporting for Police ^M • Deploy Utilities vehicle dispatch and tracking ^M • Mobile field workers for Parks crews ^M

Business Optimization	• Optimize e-discovery tool for Legal and City Clerk's Office • Deploy litigation tool for City Attorney's Office • Enable video arraignments and hearings for City Attorney's • Complete enterprise content management for City Clerk's • Deploy agenda packet for City Clerk's • Use smart building assessment tools to gain greater efficiencies for Civic Services BD • Implement asset management for easements for Civic Services • Deploy digital signature for electronic plans for Development Services • Develop ERP roadmap for Finance • Replace enterprise point of sale system • Complete B&O system for Finance • Deploy regional tax portal for Finance • Improve timekeeping to reduce need for multiple entries • Continue to optimize the use of business finance systems to increase productivity • Implement HRIS modules in JDE or with new systems • Implement Fire Dispatch and Mobile (NORCOM) • Deploy building plans (pre-fires) to Fire mobile devices • Integrate existing systems for data sharing and process automation (permitting, GIS, maintenance management, performance management, SharePoint, ERP, etc.) • Deploy GIS map gallery to centralize maps and GIS apps • Increase user adoption of technology systems • Replace or move Class activity registration system to 'cloud' for Parks • Replace probation system for Parks • Implement League system for Parks • Deploy healthy living initiative for Parks BD • 3D modelling of the City for Planning • Deploy body cameras and wearables for Police officer safety BD • Expand digital evidence storage and analysis for Police BD • Expand Police predictive analytics BD • Deploy Transportation's street light management system BD • Deploy more Transportation ITS capabilities for variable messaging, weather stations, etc. BD • Complete AutoCAD migration to GIS for Utilities • Implement automated meter infrastructure and meter data management BD
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Community Building	• Provide Mobile Reporting system to citizens ^M • Redesign City website that includes more mobile friendly access ^M • Improve public access to records • Open Data portal for sharing public records and City data for many departments ^{BD} • Promote more social media engagement for Police, Fire, Utilities and Transportation for emergencies, incidents and other events ^S • Shift towards two-way engagement for neighborhood outreach, programs and planning ^S
Regional Leadership	• Implement strategies through the Economic Development Plan that addresses broadband connectivity needs • Continue providing services to eCityGov Alliance to enhance existing applications, such as online permitting, maps and others, while also deploying new applications, such as for open data ^{BD} • Support NORCOM regional 911 center's technology efforts with Fire dispatch/mobile/ records and with Police field reporting. • Support a regional effort involving multiple cities to develop a city business license and tax portal • Continue partnership through the Community Connectivity Consortium with schools, universities, hospitals and other government agencies to increase fiber connectivity and broadband services throughout the region. • Improve broadband services available to the community by finding opportunities to increase speeds, access and choice.

Footnote: Connection to Macro Technology Trends ^M Mobility ^S Social ^{BD} Big Data

APPENDIX A – TECHNOLOGY GOVERNANCE AND DECISION MAKING

1. IT Guiding Principles

The following guiding principles are applied throughout the IT governance and decision making process. The IT guiding principles outline the organization's preferred direction. The purpose of the IT guiding principles is to ensure that strategies, policies and practices are aligned and support the overall business objectives of the City.

- a.** Information Technology solutions are driven by business needs.
 - Support the service delivery and strategic direction of the City
 - Partner with business units to select best technology options to address business needs
 - Pursue regional partnerships in areas that benefit from standardized service delivery and cost savings
- b.** We manage the enterprise portfolio with a view towards consolidation and reducing redundancy in data, processes, and systems.
 - Use off-the-shelf solutions when feasible and leverage existing applications, systems and infrastructure when investing in new solutions
 - Evaluate business processes for consolidation and alignment before automation is applied
- c.** We treat information as a strategic asset.
 - Provide timely access to information to support decisions
 - Establish effective policies and procedures to reduce data redundancy, increase data quality, and implement appropriate protection of data (security, privacy, archiving, backups, etc.)
- d.** Innovative, but proven, technologies are implemented.
 - Early-adopters of technologies, but not bleeding edge
 - Carefully consider risks and rewards when investing in technology
 - Seek long-term, entrepreneurial partnerships with vendors and other partners

- e. IT systems shall comply with the City’s standards, architecture, and methodologies.
 - Preference for systems that adhere to industry standards and open architectures
 - Protect systems and data through effective security
 - Regularly review standards to respond to changing technology climate

2. IT Governance Process

The City’s IT governance process sets the framework for the decisions on IT strategic direction, policies, and investments. The key body in the governance process is the Operations (Ops) Policy Team. The Ops Policy Team is made up primarily of assistant directors from departments and deals with policy and strategic topics impacting the enterprise, including IT, HR, finance, records, and more. The Ops Policy Team receives direction from the City’s Leadership Team (LT), which is composed of department directors and the City Manager. LT is guided by the City Council’s priorities and direction.

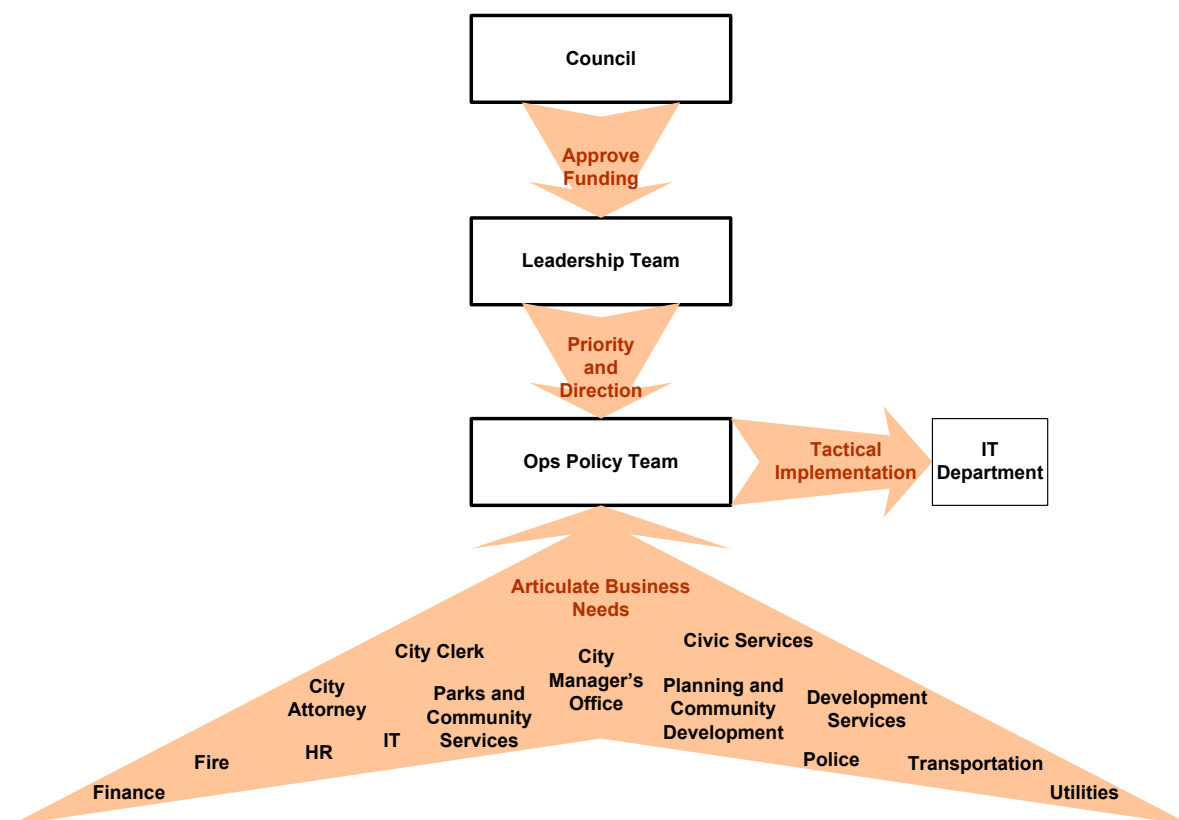


Diagram 1: IT Governance Process

The Change Advisory Board (CAB) includes members from all departments and was created to ensure the proper technical and operational coordination exists between stakeholders across the organization. Roles & Responsibilities for Operations Policy Team and CAB are as follows:

ROLES AND RESPONSIBILITIES	
Operations Policy Team	CAB
IT Policy Development	Policy Implementation • Development of operational procedures for implementation of IT policy decisions • Raise policy questions for consideration by Operations Policy Team
IT Strategic Planning	Work Plan Management • Alignment of resources and scheduling at an operational level • Alignment of business schedules with roll out of new projects.
Resource Coordination and Prioritization: Enterprise-wide	Change Management and Coordination • Improve communication with departments about IT-related changes • Minimize risk through improved risk assessment
• Information Sharing and Communication Coordination • Communicate to Departments • Coordinate with Departments, other stakeholders	Service Level Management Improved communication regarding IT service portfolio Identification of special departmental needs and those not adequately met



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APPENDIX B – TECHNOLOGY PROJECT APPROVAL AND GOVERNANCE

The project approval decision making process works as follows (see Diagram 2):

1. Ideas or requests for IT projects generally begin in departments to address a problem, opportunity or business need. ITD and department staff work in partnership to scope an IT project and define needed resources.
2. Projects that fit within existing budget and available IT resources proceed down the Project Overview Statement track. The IT Management Team review these requests and approve based on ITD's available resources and ability to execute successfully.
3. If a project is a large investment and requires additional resources, it follows the Budget One track. A budget proposal is developed, which must compete against other budget proposals in the City's bi-annual budget process, called Budget One. If large projects do come up outside of the budget process, these out-of-cycle projects are handled on a case-by-case basis to make sure they fit with the existing approved IT program.
4. Once approved, projects are programmed into the IT Work Plan.

At the start of a project, a project governance structure is established that is scaled to the size and complexity of a project. It receives oversight and governance by various entities (see Diagram 3).

- The IT Project Manager and the Business Unit Project Manager work in tandem to ensure the success of a project. They oversee all activities of the project team. This is accomplished using a detailed project plan, communications plan, and change management plan.
- The IT Project Manager reports project results to a Steering Committee established for the project. The Steering Committee typically includes the major stakeholders of a project.
- All medium to large projects have a Steering Committee. If needed, the Steering Committee can escalate issues to the Operations Policy Team.

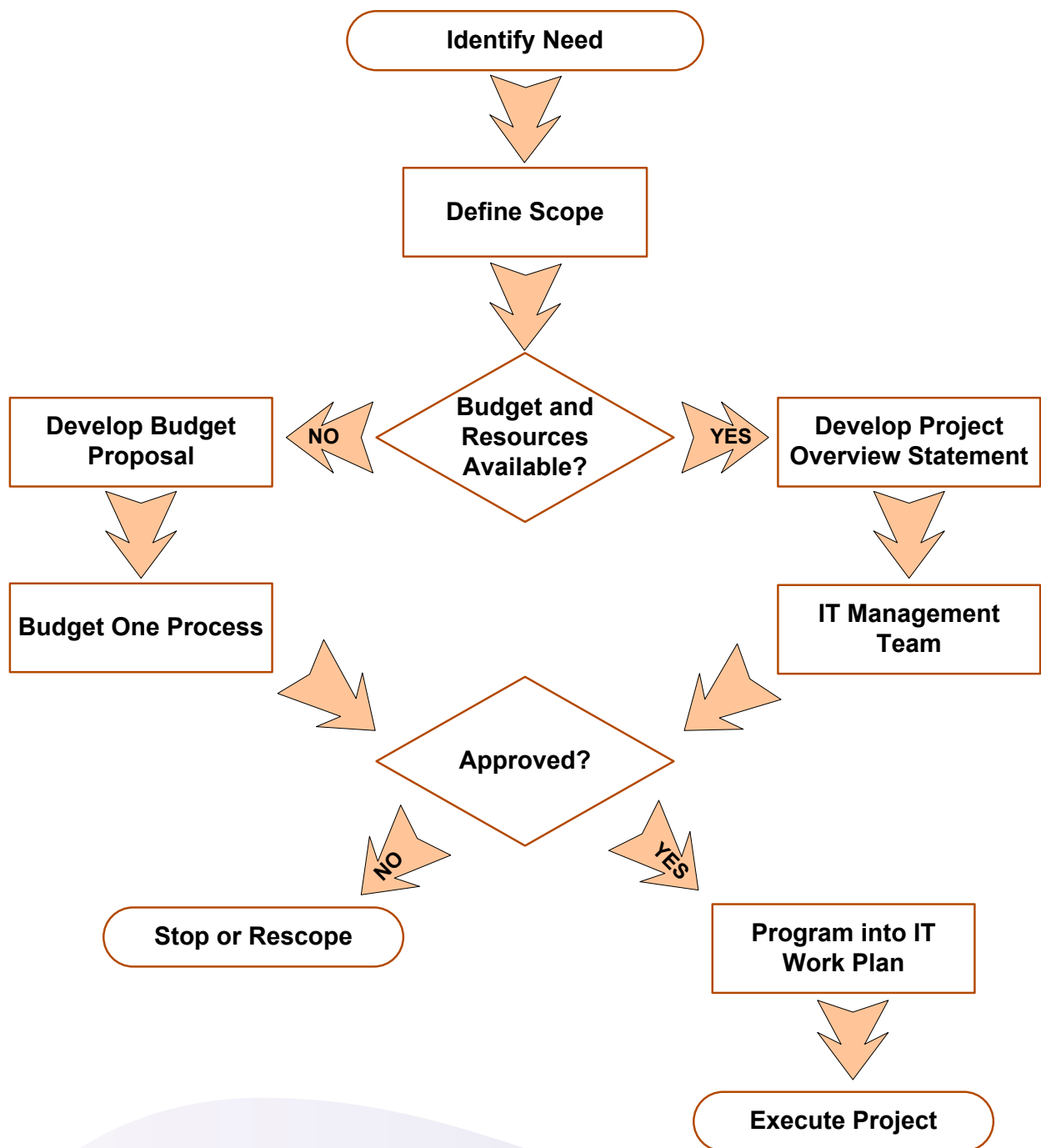


Diagram 2: Technology Project Approval

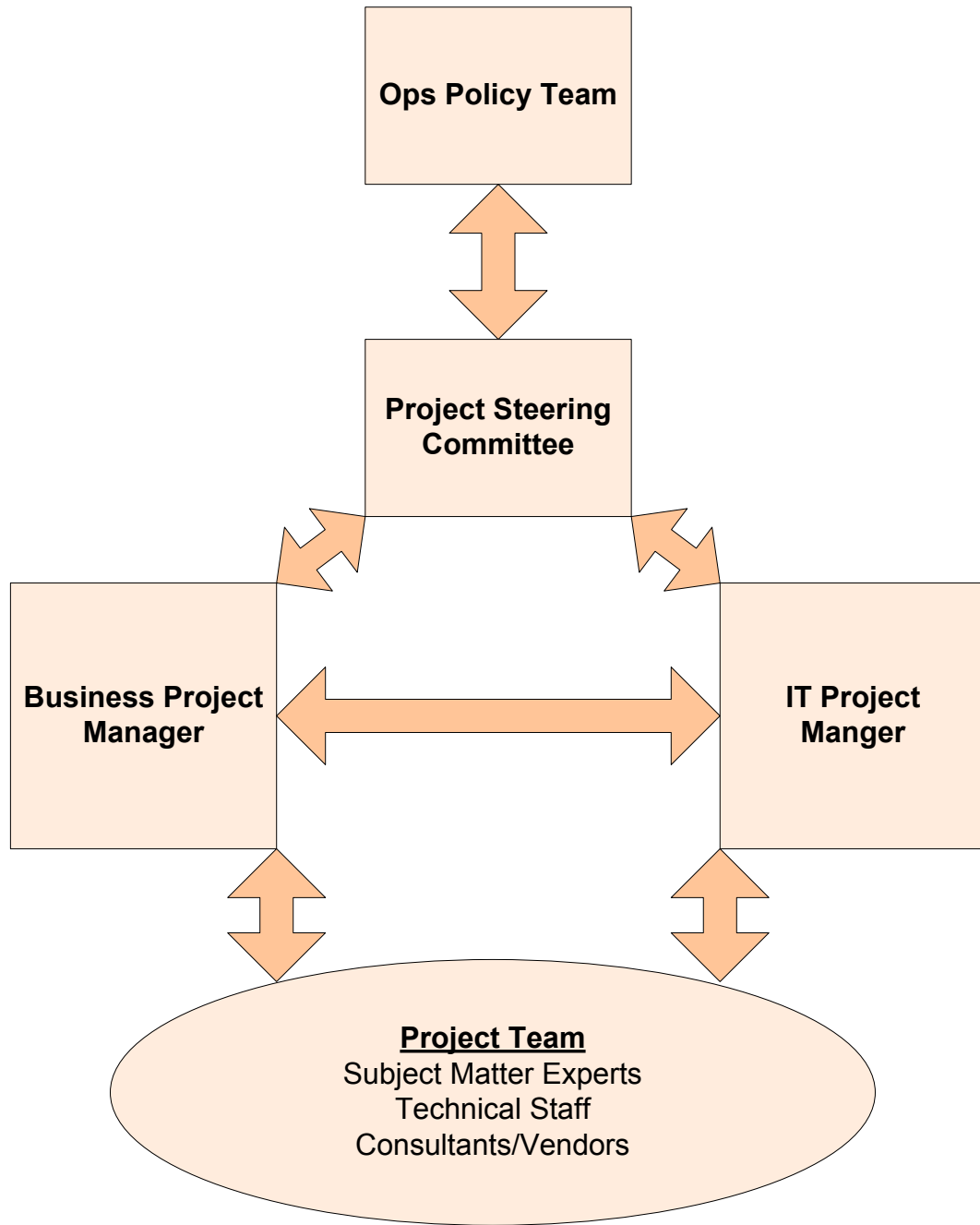


Diagram 3: Project Oversight and Governance.



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APPENDIX C – IT OPERATIONS

Services

IT services fall along the following areas.

Technology Business Systems:

- TBS provides technical services to support departments technology applications which they use in delivering service to the citizens and/or their customers.
- Services include: purchase, implementation, and ongoing technical support of applications.

Application Development:

- Build and maintain custom-developed applications for all City departments and eCityGov Alliance.
- Developed over 30 web applications since 2001 including several public-facing applications enabling citizens to obtain information, transact business and request City services.

Customer Technology Services:

- Help Desk Support
- Technology training
- Equipment and software purchasing
- Ongoing management, maintenance, troubleshooting and security
- Account maintenance
- Graphics Design and Visual Communications

Geospatial Technology Services:

- Acquisition and maintenance of geographic data
- Data analysis and mapping services
- Support for mapping applications (NWMaps, Mapshot, etc.)

Network System and Security:

- Manages the core technology infrastructure for the City including:
 - ♦ Wired and wireless networks to enable the City's systems to connect and communicate
 - ♦ Connectivity to external service providers for phone and internet
 - ♦ Phone system infrastructure within City facilities
 - ♦ Data center facilities that house the IT infrastructure equipment
 - ♦ Servers that run all major applications in the City
 - ♦ Databases that contain critical information for all departments
- Protects the confidentiality, integrity, and availability of the City's digital information by preventing data breaches, providing security awareness training, and blocking and cleaning viruses, trojans, and other malicious software. Ensures we comply with the many laws, regulations and standards requiring data protection, such as Criminal Justice Information System, Health Insurance Portability and Accountability Act, Payment Card Industry, and others.

Business Operations:

- Strategic technology leadership within organization and the region
- ITD business line planning and oversight
- ITD financial and administrative support (budgeting, forecasting, billings, rate modeling, accounts payable, contract routing to name a few)
- Weekly council video encoding and posting to web
- Franchise agreement administration

Best Practices

ITD incorporates industry best practices into various processes. Some of these best practices come from:

- **Government Finance Officers Association (GFOA)** – guides the departments budget, rates, reserves and replacement practices.
- **IT Information Library (ITIL)** – defines the IT service delivery processes, including incident management, service level management, change management and problem management.
- **National Incident Management System (NIMS)** – outlines ITD's emergency response and disaster recovery. Merged with ITIL incident management to ensure incident response is appropriate for smaller problems to larger regional disruptions.
- **SANS Institute** – guides the security program, policies and practices to protect the City's data, network and applications.
- **Project Management Institute** – guides IT project management.

ITD adapts best practices and tailors it to the City's scale and needs. There are also other best practices related to specific systems and assets that incorporated as appropriate.

APPENDIX D – ENTERPRISE ARCHITECTURE AND PORTFOLIO

The Enterprise Architecture serves as a roadmap, guiding future technology investments and identifying gaps in the IT infrastructure. The Enterprise Architecture can be used to target investments in improving technology commonality, data sharing, application development, and on-going operations. The Enterprise Architecture is composed of four major layers (see Diagram 5). The list of major systems used in the City are highlighted in Table 6.

- **The Physical IT Infrastructure**

This layer provides the foundation on which applications run. This includes the network (both wired and wireless), servers, PCs and other devices. It also includes enabling technologies, such as web, integration and database technologies.

- **Enterprise Applications**

These applications are in common use throughout the organization. These robust applications can meet the performance demands of the enterprise and fill many needs. These applications are rigorously selected to ensure that they are enterprise-grade. Included in this layer are the Finance and HR System, e-mail, GIS and Office suite. Additional applications are proposed to manage the following functions - document management, asset management/maintenance management, and customer relationships.

- **Department Applications**

This set of applications serves specific line of business functions. They are typically used by one or more departments. Many of these applications have been in use for many years and a few have recently been replaced. A potential addition to this layer is a court system if the City must take over the municipal court function from King County.

- **Small Applications**

These applications are developed or acquired to meet unique needs that cannot be met through enterprise or department applications. It could involve a new application or building web or wireless modules to enhance an existing application.

The Enterprise Architecture is guided by the strategies and policies set by ITGC and the standards and practices set by ITD. ITGC updates strategies every two years and adopts policies as needed. Strategies and policies are set as a response to external forces such as changes to the City's strategic direction and taking advantage of new technologies. Standards and practices are regularly reviewed to keep pace with industry trends.

City of Bellevue 2013-14 IT Enterprise Architecture

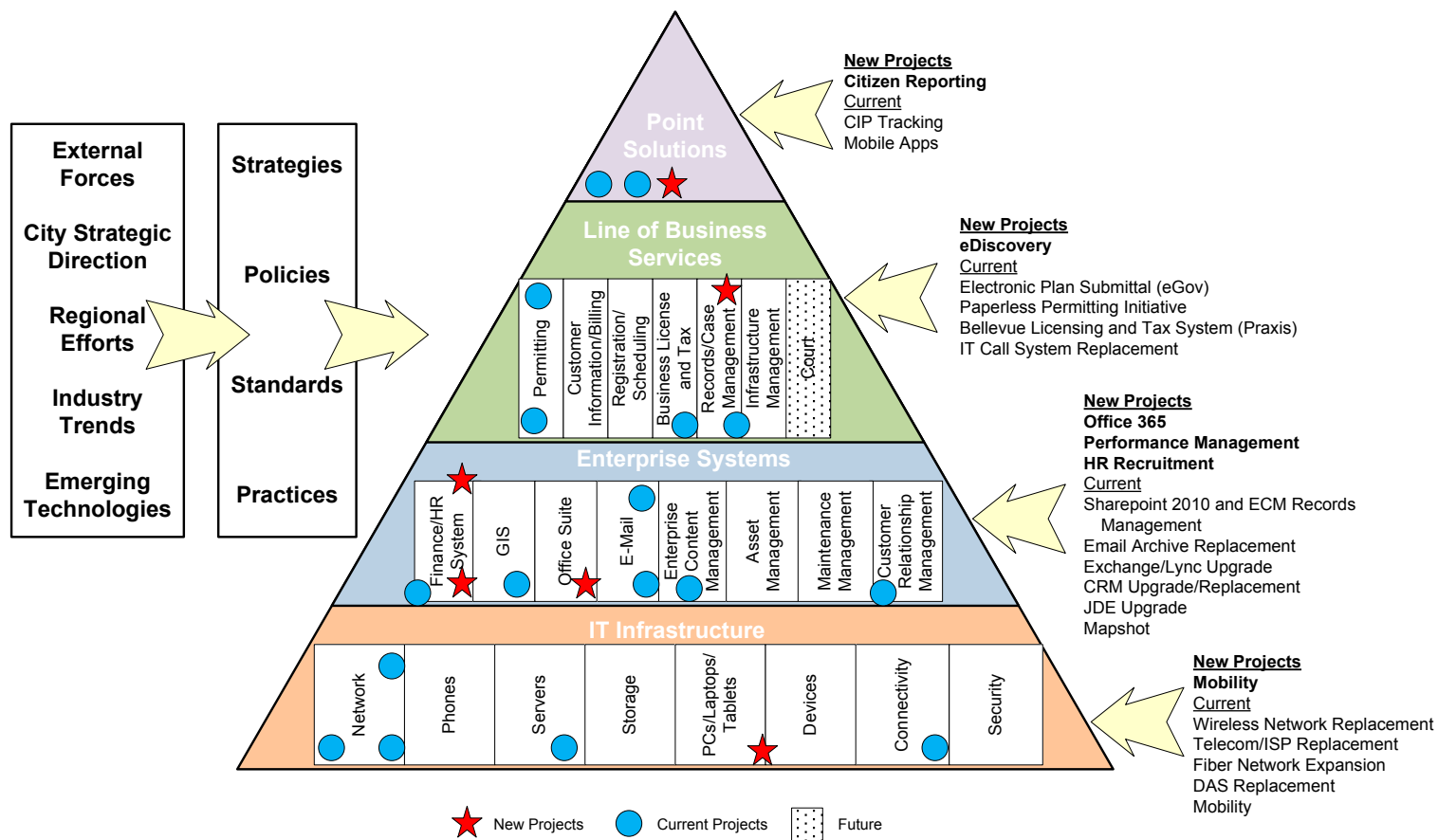


Table 6: List of Major Systems

Purpose	Vendor and Product	Notes
Public Facing		
City website	Custom Developed	
Realtime traffic map	Custom Developed	
Online utility bill payment	MyUtilityBill	
Crimemapping	Crimemapping.com	Subscription service
Traffic cameras		
Interactive voice response	Selectron IVR	Inspection scheduling and payment. Utility bill payment.
Video Streaming	Granicus	View Council meetings
Customer relationship management	PublicStuff to replace Microsoft Dynamics CRM	Records and tracks requests for service and information. PublicStuff includes citizen-facing mobile apps.
Customer Assistance	Customer Assistance Tracking	Custom developed. Used by Service First and Permit desks
Online recruitment	GovernmentJobToday.com	As a service of eCityGov.net, a regional agency. Job listings and applications for eGov member jobs
Online permitting	MyBuildingPermit.com	As a service of eCityGov.net. Includes OTC permits, reroof permits, and permit status checking.
Recreation classes and trails	MyParksandRecreation .com	As a service of eCityGov.net.
Maps	NWMaps.net	As a service of eCityGov.net
Property listing	NWProperty.net	As a service of eCityGov.net
Procurement portal and vendor roster	SharedProcurement Portal.com	As a service of eCityGov.net
Enterprise Systems (used by many departments)		
Remote access	Citrix XenApp	Supports remote access to several applications and some internal applications
City website content management	OpenText RedDot	
Reporting	Crystal Reports Enterprise SQL Reporting Services	Reporting tool for several applications
Productivity	Microsoft Office	Will include Office 365 service. Outlook used to manage conference rooms.
Collaboration	Microsoft SharePoint	Will include Office 365 service
Email	Microsoft Exchange	
Instant messaging and online meetings	Microsoft Lync	
Phone system	Microsoft Lync, AudioCodes gateway and Polycom phones	

Purpose	Vendor and Product	Notes
Enterprise Systems (used by many departments) / Continued		
Learning Management system	Sum Total Systems Maestro	Subscription service
Geographic Information System (GIS)	ESRI ArcGIS	Includes desktop, server and online
Address and parcel information	Land Information System	Custom developed
Intranet mapping application	Mapshot	Custom developed
Intranet	Microsoft SharePoint	Web sites for internal use
Financial and Human Resources systems	Oracle JDE	
Maintenance management	IBM Maximo	
Point of sale	Active Network Class	Payment front end for several systems
WiFi wireless network	Cisco Meraki	Bellevue_Connect at City facilities and Bellevue_Connect_Outdoor in downtown area
Email archive and e-discovery	CommVault Simpana	
Permit application and tracking system	CSDC Amanda	
Email message filtering	Symantec MessageLabs	Subscription service
Performance Management	Covalent	Subscription service
City Attorney		
Legal case management system	Thompson Reuters Elite Prolaw	

Purpose	Vendor and Product	Notes
City Clerk's Office		
Records Management	Zasio Versatile	Tracks paper records
Scanning and imaging	Kofax Capture	
Enterprise content management	Oracle ECM to be replaced with Microsoft SharePoint	Development, storage and archiving of electronic content and documents
Civic Services		
Parking System	Amano McGann Parking	Manages parking authorizations, gates, and overall program
Building security, access programming and badging	Guardian System System Open Options	
Land surveying	Survey	Includes Survey database and base station computer
Motorpool reservation	Motorpool Reservation	Custom developed
Electronic signs	Nexus On Demand	Subscription service
Development Services		
Amanda Timekeeping	Custom	Development services employee time tracking
Finance		
Business and Occupancy Tax system	Praxis	Custom developed
Budget	Sarasota County GovMax	Subscription service
Fire		
911 dispatch and mobile for Fire	TriTech	Provided from NORCOM, a 911 communications center
Scheduling and timekeeping	Kronos Telestaff and Webstaff	
IT		
Call tracking	Microsoft Service Manager	
Backup and recovery	CommVault Simpana	Also used for email archive and e-discovery
Remote access and software updates	Microsoft Configuration Manager	
System monitoring and alerting	Microsoft Operations Manager	
Antivirus	Microsoft Forefront Endpoint Protection, Symantec Endpoint Protection	
Virtual servers	VMWare	
Network equipment	Extreme	
Server equipment	HP	
Storage equipment	NetApp	
Load balancing equipment	F5 Big IP	

Purpose	Vendor and Product	Notes
HR		
Benefit Resource Center	HR Portal	Service from Gallagher Benefit Services
Benefit Enrollment	Bellevue Online Benefits	Service from Benefit Services Group
Parks		
Activity registration, scheduling and payment	Active Network Class	
Probation system	ICM	
Police		
911 dispatch and mobile for Police	New World System Aegis	Provided from NORCOM, a 911 communications center
Regional	RAIN	Custom developed
Scheduling and timekeeping	Kronos Telestaff and Webstaff	
Transportation		
Intelligent Transportation System	SCATS ITS	
Traffic Modeling	Inro Software EMME PTV Americas VSSIM	Traffic planning model and simulation
Utilities		
Utility billing	Advanced Utility System CIS Infiniti	
Pipeline asset management	Cues Granite XP	

APPENDIX E – ITD SECURITY POLICY FRAMEWORK

City of Bellevue Information Security Program

Security Vision and Philosophy

The information that is transmitted, processed and/or stored on City of Bellevue (City) information systems and networks is of great value to the City; it is a high priority for the City to appropriately protect the confidentiality, integrity and availability of such information. The foundation of an effective information security program is built on strong information security policies that balance information security requirements with the functionality needed for City operations.

The City's information security policies define high level requirements for using and managing City information systems, data and network resources and protecting them from service disruption, misuse or unauthorized access. The City's information security policies represent the combined efforts of the City's Information Technology Department (ITD), Human Resources Department (HR), City Attorney's Office, Operations Policy Team, and user communities.

Information Security Program

The City is committed to delivering high quality services to its citizens. Doing so, it may collect, process, transmit and/or store sensitive information in order to perform its mission. All information that is transmitted, processed and/or stored on City information systems and networks must be appropriately protected by City employees, contractors, vendors and service providers in accordance with well-defined information security policies, standards and procedures.

The City's management is committed to developing, implementing, and maintaining appropriate information security policies, standards and procedures in order to ensure integration of information security with the City's mission, overall strategy, risk posture and to comply with applicable regulatory requirements. Via active oversight by the City Manager's Office or its designated representative, there will be effective management and monitoring of information security risks, delineation of accountability for information security, and implementation of processes and infrastructures necessary to identify, monitor, and appropriately control information security risks on a continuous basis.

The City will maintain an information security program to appropriately control risks to the City's information systems, data and network resources. This program will document minimum standards of behavior for staff, contractors, vendors, and service providers and include clear guidance for City day-to-day operations.

City management and staff will follow the information security principle of "that which is not explicitly allowed is explicitly denied." The City will also follow the principle of "defense in depth." As justified by risk assessment, City information systems, data and network resources will be protected by multiple layers of security controls. The City will consistently monitor and enforce compliance with its information security policies.

All City management and staff share in the responsibility to our citizens to ensure that appropriate information security controls are implemented and that information security remains a constant priority.

Information Security Program Administration

The City's Chief Information Security Officer (CISO) will develop the City's information security policies. The policies will be reviewed and approved by the City's Operations Policy Team prior to implementation. All policies will be reviewed annually and updated or revised as necessary. All policies are subject to review by the Operations Policy Team, internal and external auditors, as well as regulators.

Sanctions for Policy Violation

Employee failure to comply with the City's information security policies may result in disciplinary action up to and including termination.







