
City of Austin
INFORMATION TECHNOLOGY STRATEGY
2014 – 2019

*Lower costs and leverage scale through collaboration,
use the savings to innovate*

Version 2


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Date

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Executive Summary

The Information Technology Strategy is a tool to enable the City of Austin to achieve its mission to be the best-managed city in the country. This means making the right information available to the right people at the right time, so they can make strategic decisions about the deployment of technology in the delivery of City services.

The IT Strategy is built on IT principles and IT governance. Principles provide a policy framework for informed and effective decision making. Governance provides a transparent decision-making process to apply those principles to technology decisions.

The financial management of IT will seek to eliminate the backlog of critical replacements funded by a technology Capital Improvements Program and shift to a life-cycle asset management approach. Total cost of ownership will be part of the decision-making process for selecting technology investments.

Essential IT Capabilities are the most important Citywide IT services that span the business functions. Capability governing boards direct capability service managers provide the people, business processes and technologies to serve business needs.

Shared IT functions will provide a strategy, architecture, standards, common infrastructure and key enterprise application services across City government. This approach represents a significant shift in the City's IT culture and will require sustained support of City leadership and the participation by a widely dispersed IT organization.

The IT Strategy makes business services available to more people, more quickly, and at a lower cost per transaction.

IT allows the City to innovate by increasing the range and access to City services. This IT Strategy will manage the size and complexity of the City's technology resources. It will also lower costs using collaboration to leverage the City's size and using the savings to innovate.

Methodology

An IT Governance Working Group, led by Chief Information Officer Stephen Elkins, developed this IT Strategy. The group, facilitated by Paul Cook from the Communications and Technology Department, included:

- Department Directors' Advisory Council members Diana Thomas, Controller's Office; and Rosie Truelove, Contract Management Department
- CIO Council members Michelle Moheet, Aviation Department; Monica Hammond, and Debbie Gossett, Austin Convention Center Department

Using an IT Strategy template from Gartner Research, and with the guidance of Gartner Research Executive Partner Stephen High, the group received input from members of IT Governance and the staff of Communications and Technology Management particularly John Adams, Rob Byrd, Ross Clark, Matt Esquibel, Bruce Hermes, Paul Hopingardner, Leeanne Pacatte and Teri Pennington. IT Strategy refresh work was completed in the fall of 2013.

An annual review of this strategy will keep pace with changing needs. The IT Strategy forms the basis for an IT Strategic Plan which details the means to implement this strategy.

Demand

Business Context

Austin is the 11th largest city in the United States and given growth trends will soon be among the 10 largest. The city is a diverse community embracing many cultures and points of view seeking to grow and prosper together.

The residents of Austin demand a high quality of life as defined in the Imagine Austin Comprehensive Plan. The plan calls for access to education, support for cultural and social activities, and economic diversity led by a transparent and accountable government that provides ready access to information.

The City of Austin is recognized for environmental leadership and sustainability efforts in energy and water conservation. Austin was the first municipality in Texas to adopt a Zero Waste plan. Technology is the key to providing the information required to establish this leadership now and into the future.

In its quest to become the “best-managed city in the country” the organization must provide an efficient technical infrastructure that promotes involvement and supports a diverse mix of both large and small businesses.

The residents of Austin place a high value on public safety. Austin must maintain an environment where the public can safely enjoy its neighborhoods, walkable streets and the vast array of City services such as libraries and parks.

All of these initiatives and expectations are constrained by economic realities that require careful stewardship of limited City resources.

Information Technology is able to deliver the right information to the right people at the right time, and increasingly in a form expected by the City's customers. IT is uniquely positioned to lower the costs of its resources as the city grows. City government will use the savings to offer new innovations to local business partners and residents.

Business Success: IT Contribution

Austin is a large growing City with many diverse departments providing a wide range of services to its residents. Operational excellence and leading-edge products and services is the focus for each department.

IMAGINEAUSTON

Imagine Austin's vision is to create vibrant, livable, connected communities across Austin. The comprehensive plan calls for an Austin that will:

1. Invest in a compact and connected Austin
2. Sustainably manage our water resources
3. Continue to grow Austin's economy by investing in our workforce, education systems, entrepreneurs, and local businesses
4. Use green infrastructure to protect environmentally sensitive areas and integrate nature into the city
5. Grow and invest in Austin's creative economy
6. Develop and maintain household affordability throughout Austin
7. Create a Healthy Austin Program
8. Revise Austin's development regulations and processes to promote a compact and connected city

City departments provide services to customers using several strategies. Some departments place great value on achieving with high levels of personal intimacy, as in health care clinics and youth programs. Others, like water treatment and public safety require widespread efficient service delivery. Yet others seek to innovate new services such as green energy and downtown revitalization.

To realize these accomplishments and to sustain these service strategies, Information Technology must be able to deliver services at an affordable cost and leverage existing resources and information to support collaboration and provide new innovative solutions.

The cost of a modern technology infrastructure continues to decline per unit of service. As this trend continues, the implementation and maintenance of powerful enterprise wide solutions costs less than numerous niche solutions scattered around various departments.

IT at the City of Austin can create savings and efficiency by using new technologies and by implementing a more integrated delivery system.

To realize this strategy, the different IT business units must increasingly coordinate and collaborate by using common governance, architecture, policies and standards. Savings will come from sharing assets, services and staff. The cost savings will allow the City of Austin to invest in technology innovations to further increase efficiency and improve business services.

Sharing of data and information with residents and other governmental agencies is critical. As the population of Austin and the region grows, IT will continue to deliver systems that provide outstanding service, encourage community input, and build positive relationships while meeting the informational needs of a growing community. IT will contribute to the City's leadership success in sustainability, conservation, resource usage and innovation by providing:

- Tools for residents to engage each other and their government
- Information that encourages visitors to experience the best of Austin
- Technology for City staff to perform its work anywhere in the city
- Solutions that support enterprise management and delivery of services
- Technology support for conservation efforts to reduce the per capita use of resources
- Collaboration tools for governmental agencies and area industry partners as they share resources and take advantage of best practices

IT makes a business more agile and effective. IT has the responsibility to create an environment where efficient and collaborative business processes thrive.

The adoption and use of industry standards and best-managed practices creates a business environment that is reliable and has the flexibility to innovate. Innovation succeeds best where staff is working with a manageable set of standard tools and processes.

Control

IT Principles¹

IT Principles are fundamental policy statements about the role of IT and establish direction and core themes to aid in decision-making and lead to better business and IT alignment. They encourage consistency in the IT decision making process.

I. **Coordinate Strategic Planning**

Integrate IT Strategic Plans Citywide to identify common and shared service opportunities.

II. **Employ Enterprise Architecture**

Link business needs to technology capabilities.

III. **Maximize use of Common Information Systems**

Emphasize the use of common enterprise wide systems and sharing available information systems.

IV. **Share Common IT Human Resources**

Leverage limited resources and specialized IT skills with integrated management systems across the City.

V. **Manage Technology Assets**

Analyze lifecycle to manage technology assets utilizing cost/benefit analysis.

VI. **Safeguard Security and Continuity**

Build systems and policies in a secure environment providing for continuity among business units.

¹See Appendix for more information.

VII. Deliver value to customers and their customers

Serving as a business partner to increase the City's business capabilities.

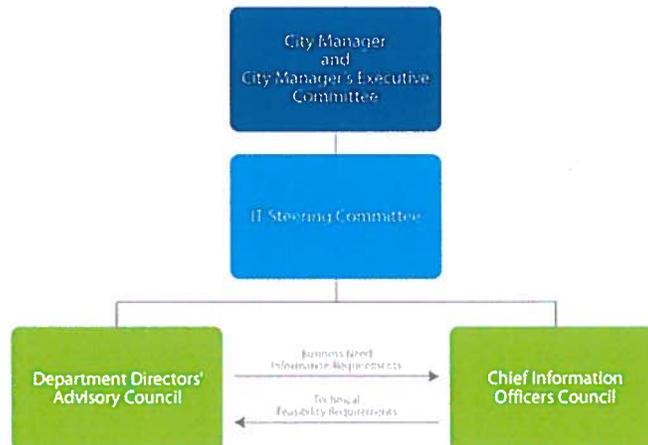
IT Governance

IT Governance establishes a decision-making framework for managing both the demand and the supply of IT services.

Governance answers this question about IT: "Who decides what?" The goal is to create transparency and sustained long-term Citywide commitment toward the best-managed practice of technology supporting business needs.

The philosophy behind the City's IT Governance is "just enough process" to achieve a balance between the extremes of subjective or politicized portfolio decision making. The City should make decisions that provide clear returns, use processes that are transparent, and encourage engagement by stakeholder groups.

IT Governance structure:



The IT Steering Committee (ITSC) leads IT Governance on behalf of the City Manager. The members include two Assistant City Managers, the Chief Financial Officer and the Budget Director. The chairs of the Department Directors' Advisory Council (DDAC) and the CIO Council (CIOC) participate as advisers.

The DDAC manages the demand for IT services by documenting and prioritizing business needs for IT investment. The Department Directors' Advisory Council recommends the implementation

of IT services based on high-value business needs to the ITSC for inclusion in the City's annual budget. Members are Department Directors chosen by the City Manager's Office to represent each of the major City Service areas: Administrative Services, Austin Energy, Community Services, Financial Services, Development Services, Infrastructure Services, Management Services, Public Safety, and Support Services. The ITSC appoints the chair.

As part of the annual business planning and budgeting process departments identify business needs. The DDAC establishes criteria to evaluate business needs.

The CIOC provides IT expertise and manages the supply of IT services. The CIOC prioritizes IT infrastructure needs and coordinates the collaboration of IT business units. It evaluates infrastructure initiatives and makes priority recommendations to the IT Steering Committee for the annual budget.

The City's Chief Information Officer chairs the CIO Council and its members include department CIOs and department IT managers from Aviation, Austin Energy, Austin Convention Center, Austin Public Library, Austin Water Utility, Communications and Technology Management, Financial and Administrative Services, Health and Human Services, Municipal Court, Public Works and a rotating position representing General Fund IT business units without an IT manager.

One of the tasks of the CIOC is to identify critical replacements for hardware and software at the end of their usable life. This is a special priority budget item to address immediate needs during the implementation of the current policy of life-cycle (routine replacement and upgrade) management. Business departments and IT leaders identify and justify critical replacement needs. The CIOC evaluates and prioritizes replacement needs and makes recommendations to the IT Steering Committee for inclusion in the City's annual budget.

The Essential IT Capabilities (see page 11) are governed by boards chartered by the DDAC to develop strategic and business plans, prioritizes investments for the annual budgeting process and makes recommendations on architecture, policies and standards to DDAC and CIOC.

IT Financial Management

The financing of IT services at the City of Austin is a mix of centralized and decentralized activities. All IT services are cost centers in support of business services.

Communications and Technology Management manages central IT infrastructure services and most IT services for General Fund departments. CTM develops a business plan, an annual budget for IT operational expenses and a financing plan for IT services. These form the basis for a department by department Cost Allocation Plan. The cause or cost drivers, such as the number of PCs in a department, determine the allocation base. Departments make funding transfers to CTM based on the approved Cost Allocation Plan.

Department IT units are funded through their department's internal annual budget process.

IT Governance will annually review all IT Business Needs, Infrastructure Initiatives and Critical Replacement before making budget recommendations to the City Manager. This review will emphasize the establishment of a clear line of sight to the delivery of City services in support of the City's Comprehensive Plan, recognizing that technology is a means to solve business problems, not an end itself. Performance metrics that are meaningful to business leaders will support this as will public reporting to IT Governance.

The Essential IT Capabilities are an effort to focus on key citywide business needs and will be organized as programs with centralized funding, rather on a department by department basis, to make them the preferred alternative and provide stability of funding from one budget to the next. These will include large system implementations like the Human Capital Management system that will require capital funding as well as operational funding.

Evaluation of Infrastructure Initiatives will be against their ability to support the Essential IT Capabilities and other business needs. The implementation of Application Portfolio Management brings the same discipline to evaluating existing legacy applications against their business value and technological viability. This will reduce duplication and focus resources where they can best meet business needs.

Use of common practices like the use of common total cost of ownership evaluation will consider initial costs of hardware, software, IT personnel both internal and external and the ongoing support and maintenance costs for the expected life of the technology. Centralizing application user license information to ensure compliance with the many users and allows the possibility of transferring existing "open" licenses instead of purchasing new licenses. A successful example has been the centralized purchase of the Microsoft Enterprise licenses. Currently, many technology purchases for all departments, except Austin Energy, are centralized. This approach allows many opportunities to leverage volume pricing for IT purchases. The development of in-house technology service experts supports and guides this effective purchasing strategy. This will

require IT business units to collaborate on setting standards, requirements and managing purchasing contracts.

To mitigate the risks of technology failure and for budget planning, the City has initiated a 10-year forecast and plan for General Fund Critical Technology Replacements. Development of the Essential IT Capabilities and technology infrastructure will be included in this forecast. This will allow the City to consider long term funding strategies and bring predictability to financing technology.

Supply

Essential IT Capabilities

Essential IT Capabilities (EITCs) are the most important end-to-end IT services delivered to our business partners to support the delivery of City services. They span the City's business functions and provide support for common business activities.

First identified by the Department Directors' Advisors Council, as the essential technologies needed to support the City's business operations the EITCs have been an evolving strategy.

"Capabilities" are business outcomes produced by people using common business processes and technologies, an Enterprise Architecture concept. EITCs typically include systems of record providing a single source of truth for the information they manage.

For each EITC, a governing board made up of business executives, will make strategic and policy decisions and provide direction to a service manager. EITC governing boards will be accountable to the Department Directors' Advisory Council and City executive business leadership.

Service managers are responsible for the implementation and functionality of the service plan. The manager and the board will produce the service plan and a roadmap for enhancements. The plan will include financial needs, staffing requirements, IT assets used, architecture, policies, standards and vendor sourcing needed to deliver the capability. These plans will become part of the Citywide plans.

Initially, as EITCs are developed, the service manager may be a part-time role. As EITCs develop and become more involved in scope and complexity the service manager's role will become a full-time dedicated position.

Sustained centralized funding for the EITCs will provide support for their long term planning and development. Cost allocations should be competitive with non-City solution alternatives and coupled with the range of services along with an understanding of City business. EITCs should be the preferred solution.

Departments choosing to use a competing non-City solution alternative will need to justify their decision and will cover the costs of their choice.

With the focus of EITCs on common enterprise-wide business needs there will be other needs that are not as extensive or uniquely specialized to a single department or functional workgroup. A program to meet these differentiated needs will be developed. Business and IT leadership will develop “guard rails” to protect and guide the City and its business partners in determining a successful solution. These guidelines will include standards, tools, and resources to assist with topics like:

- Definition of the business needs
- Development of solution requirements
- Procurement, implementation, ongoing support and operations
- Standards for security and integration with existing City technologies
- Architecture and long-term strategy

The focus will be on ensuring the success of its business partners by reducing risks and leveraging successful best practices.

IT Services and Processes

Current IT services and processes present enormous opportunities to lower costs by consolidating duplicative and inefficient systems.

Improved collaboration, coordination, and establishment of common standards and repeatable processes will achieve cost savings. Leveraging existing experiences and resources will also reduce costs while increasing effectiveness for City business.

The City will manage IT service capabilities as “retail” services (Essential IT Capabilities) with care taken to business partner needs while avoiding needless technical complexity.

“Wholesale” IT capabilities will primarily support other IT services or retail EITCs. The focus will be on technical excellence often defined in Operating Level Agreements.

Management of IT capabilities will be through a technical manager from a functional specialty. When necessary, staff will collaborate with an operating board made up of other technologists and/or technology super-users. Operating boards will be accountable to the CIO Council.

The IT capability manager similar to the EITC service manager will produce a service plan which includes long- and short-term plans, staffing and financial resource needs, architecture, policies, standards and vendor sourcing across the scope of the IT capability.

IT services will benchmark against industry standards like the IT Infrastructure Library. ITIL provides a library of best practices centered on defining IT Services to meet business needs. This provides the means to put into practice a more customer-centered practice of IT.

The City has many regulated compliance standards (e.g., NERC, CJIS, HIPAA, SOX) for technology. IT will establish a comprehensive compliance strategy to save costs of redundancy and confusion, leverage resources and reduce the risks of non-compliance with regulations.

IT Governance will identify and apply common performance measures throughout the different IT organizations to ensure consistency for IT systems across the City. Shared processes and services will be leveraged within the City of Austin and, where possible, with other agencies and industries.

In all cases, the City will follow a base security policy developed by the City's IT technical staff, approved through IT Governance, supported by City policy and enforced by IT organizations throughout the City. When higher standards are required it will be documented and communicated from a common central location such as the City's intranet.

Enterprise Architecture

Enterprise Architecture (EA) establishes the agency wide roadmap to achieve an agency's mission through optimal performance of its core business processes within an efficient information technology environment.

Enterprise Architectures are "blueprints" for systematically defining the City's current (baseline) or desired (target) environment. Enterprise Architectures are essential for evolving information systems and developing systems that optimize value.

This is accomplished in business and logical terms (e.g., mission, business functions, information flows, and system environments) and technical terms (e.g., software, hardware, communications), and includes a Sequencing Plan for transitioning from the baseline environment to the target environment.

These defined and effectively implemented institutional blueprints will assist in optimizing the interdependencies and interrelationships among the City's business operations.

Experience has shown that without a complete and enforced Enterprise Architecture, agencies run the risk of buying and building systems that are duplicative, incompatible and unnecessarily costly to maintain and integrate.

Enterprise Architecture is a very complex endeavor requiring support at all levels of the organization for success. Business and IT leadership will effectively manage Enterprise Architecture's development and implementation to provide value across the business enterprise.

The City's Enterprise Architecture group assists in defining, maintaining and implementing an EA program by providing a disciplined and rigorous approach to EA lifecycle management.

The EA group is responsible for major EA program management areas, organizational structure and management controls. The group will deliver a process for a baseline and target architecture, and development of a Sequencing Plan to migrate capabilities to their desired state.

People

More than 600 IT staff positions exist throughout the City. The creation of a Citywide IT talent management plan will ensure efficiencies and provide a more effective method to manage an IT strategic plan.

Stand-alone IT business units exist in Enterprise departments — Austin Energy, Austin Water, Austin Convention Center and Aviation — and in some General Fund departments — Austin Library, Fire, Health and Human Services, Human Resources, Municipal Court, Planning and

Development Review, Police and Public Works. Financial Services, another General Fund department, has three IT units for its Controller's, Purchasing and Budget offices.

These departments are funded and accountable for their own department business needs.

Communications and Technology Management is the central IT department and is accountable to the CIO. This federated and hybrid organization structure creates independent silos which works that makes the sharing of resources, and common staff development challenging and even engenders competition for staffing resources.

Currently, there is no Citywide IT talent management plan. Like much of the City of Austin approximately 40 percent of the IT staff is eligible to retire within five years.

The sourcing of City IT staff is, and will continue to be, a challenge. Identifying qualified candidates for some technical specialties takes longer than other city positions. Some pay scales are not competitive, and legacy job titles create a perception that government IT is not "cutting edge." Competition from area technology companies also makes recruiting difficult for City IT.

To achieve efficiencies there must be a single Citywide IT talent management plan with clear responsibilities and authority given to the CIO to provide a unified strategy and execution. This plan will identify essential IT staff roles required to support and manage mission critical enterprise systems and services, like the Essential IT Capabilities.

Establishing Centers of Excellence will allow the sharing of specialized expertise across the City.

A Citywide IT talent management plan will include job descriptions based on current industry and future competencies along with competitive industry salaries.

The City of Austin will design development plans and support the movement of its highly valued existing IT staff from current roles to new roles with competencies for success.

The hiring of new staff positions will be evaluated against the option of using locally procured staffing services for non-essential roles or for short-term contracting of highly specialized IT expertise when needed. This will support greater organizational agility to quickly ramp up services, provide unique services, and form a more transparent method of managing staffing costs.

Future hiring of IT staff will focus less on technical specialties and more on skills related to the ability to communicate with business partners about technology (e.g., business analysis, security and information architecture).

Essential IT Capabilities will require service managers with a wide scope of responsibilities and skills to manage Citywide IT service. This will require a technical understanding as well as the ability to engage executive leadership in strategy policy and planning. Project and portfolio management will be required competencies as will vendor management and the ability to manage staff support.

Beyond the EITCs, a need for staff to serve as business relationship managers will be required. These managers will provide coaching and internal consultation to business partners in identifying business needs, and acquiring and implementing solutions for needs not met with the EITCs.

To orchestrate the range of services these account managers will serve to link business partners with EITC service managers, buyers' agents and IT governance.

Sourcing

One of the greatest opportunities to produce savings is the consolidation of City purchasing of technology.

Rather than the City having multiple sourcing agreements with vendors, the City will seek to establish single-enterprise purchasing agreements. This will allow the use of volume discounts and provide a negotiation advantage.

Federal and state laws and local ordinances, as well as evolving policies and expectations on the part of the City Council drive city purchasing. The City places a premium on open and fair sourcing of products and services which generally limit the range of partnership arrangements with vendors. All place requirements and restrictions on the purchasing process.

Engaging in collaborative purchasing with other government agencies is an attractive possibility but will require meeting strict requirements.

The EITC focus will bring forward highly specialized needs specific to a single department or functional workgroup. Software as a Service or more generally cloud services presents a highly attractive way to satisfy these needs, quickly.

This consolidated approach will require a planned and sustained partnership between Purchasing and IT. Clear baseline purchasing and technical requirements will need to be established and areas of negotiation and exploration defined. Establishing third-party buyers agents will enable purchasing and IT staff to advocate and support City business partners, aiding in a more efficient and viable solution.

IT Applications Portfolio

The City of Austin's software applications portfolio is large and varied which creates a high demand on resources.

The City has focused on preserving the unique business processes of different City departments. These processes have created a hybrid of IT systems including commercial off-the-shelf, custom-developed and outsourced cloud solutions.

The City's current large (500+) and varied IT applications portfolio presents an opportunity to reduce costs, leverage scale by collaborating and use the savings to improve innovation.

Each separate technology solution requires resources and skills to support its long-term viability. With numerous software tools and technologies in place instead of a few flexible ones, the City must maintain a large stable of skills which is a challenge in the current environment; maintaining this environment results in few or no economies of scale.

The IT applications portfolio strategy elements include:

- Consolidating retiring and outsourcing applications to promote efficiencies and to reduce support costs

- Supporting capability governance in managing enterprise-level applications

- Adopting a Service Oriented Architecture to support reusability, simplify development and maintenance

Requiring feasibility studies to identify existing City of Austin systems that are able to meet requirements, review commercial off-the-shelf and cloud solutions and limit custom development

Practicing agile application development to improve the speed and quality of deploying technical solutions

Exploring Software as a Service to minimize the cost and time it takes to develop an application

Establishing a software quality assurance systems development group to develop policies, standards and practices to improve software quality

Focusing on collaboration tools and strategies to better connect with residents

Provide increased transparency and access to City processes and information

Making data available to private developers and entrepreneurs for the development of applications for residents

Leveraging partnerships with private industry to get the best value for application development efforts

The Application Portfolio represents an important asset that the IT Governance bodies will manage to provide the greatest return on investment for the City of Austin.

IT Infrastructure

Ideally, computer and data communication infrastructure systems are set up to provide long-term stability, low total cost of ownership, and ease of maintenance.

Currently, infrastructure standards differ substantially across the City's IT business units.

This diversity works against economies of scale and instead supports the unique but costly ideal solutions for each department. The goal is to have a base standard supported by all the IT organizations and higher standards where business needs merit.

Standards include:

1. Keep hardware and software up to date to maintain vendor support and the ability to use management tools. This will require new budget funding but will result in reduced staff time for troubleshooting and support.
2. Manage infrastructure using tools that allow administrators to update hundreds/thousands of devices at once. Such “force multipliers” will reduce manual maintenance, improve consistency of support and reduce staff time.
3. Automated monitoring tools notify IT staff of problems before they become outages for customers. This will require the implementation of standards and the use of common maintenance tools shared across City IT organizations.
4. Security to protect the City from breaches of integrity to its data.
5. Set up “internal clouds” using storage technology and virtualization to ensure flexibility, speed in implementation, ease of redundancy and ease of disaster recovery resulting in cost reductions.
6. Reduce energy costs, a Citywide priority, as a major thrust in utilizing data centers.
7. Create enterprise mobility solutions that incorporate security and management to help the City reach its workforce goals.
8. Appropriate support documentation as a priority and complete before a system implementation. System diagrams, Disaster Recovery Plans, and established operating level agreements will be the normal practice.
9. All City IT organizations will agree to support common hardware and software standards. Standards make integration, training, and leveraging large contracts easier for the City. This will reduce staff time to support systems, reduce costs and make the systems more stable.

IT Risk Management

IT Risk Management supports the mission of the City by helping management identify and understand the City's technology risk.

The direction of IT Risk Management is to benchmark current systems and processes against industry standards like Control Objectives for Information and Related Technology (COBIT).

COBIT provides management and business process owners with an Information Technology Governance model that helps in delivering value from IT and manages the risks associated with IT.

COBIT helps bridge the gaps among business requirements, control needs and technical issues. It is a control model to meet the needs of IT Governance and ensures the integrity of information systems.

At the City of Austin, Homeland Security and Emergency Management is responsible for Continuity of Operations Planning. Each department is required to identify IT resources that are essential to critical service. The CIO's Office and IT Governance will manage and catalog this information.

Risks and Issues

Inherent to this IT Strategy are a number of risks and issues that will affect the ability to successfully execute this IT Strategy. The Information Technology Strategy will address the following issues to reduce the costs of IT services, improve collaboration and invest in innovation:

Risk/Issue	Mitigation
<p>IT Funding Model The current funding of IT services is dependent on economic cycles providing inconsistent funding in support of long-term assets.</p>	<p>Continue to fund the current Critical Replacement 10-year forecast. Centrally fund the EITCs.</p> <p>Use Application Portfolio Management to evaluate legacy systems with recommendations for retirement or replacement.</p>
<p>Diversity of Business Needs There is a perception that the City is too complex a business, requiring unique solutions to meet widely divergent stakeholders and business needs.</p>	<p>Through Enterprise Architecture and consistent application of this IT Strategy, develop the understanding on the part of leadership that “information” is the consistent medium for delivering services and greater common systems increases the City’s abilities to deliver more and better information to customers.</p>
<p>Information Management The haphazard and inconsistent management, access, control and security of information leads to poor quality, creation of shadow repositories, abuse and loss or damage.</p>	<p>Establish policies and practices to standardize technology data, storage, security and infrastructure. Work through IT governance, to establish consistent IT management at the City of Austin.</p>
<p>Common Auditable standards Currently there are islands of standards, processes and practices with great inconsistency and no means to map or coordinate them across the City.</p>	<p>Establish clear expectations of Citywide goals, develop tools and mechanisms to support implementation, and establish clear responsibility and authority.</p>

Appendix

Appendix A – IT Principles

I. Coordinate Strategic Planning

Integrate IT Strategic Plans Citywide to identify common shared service opportunities.

A. Rationale:

Integrate IT Strategic Plans Citywide to identify shared service opportunities

B. Implications:

1. Standardize business planning and budgeting processes.
2. Integrated planning takes longer than individual planning; therefore, longer lead times will be required.
3. Prioritization of initiatives will require department and cross-department inputs.
4. Create cross-department roadmaps.
5. Represent department business executives' priorities and opinions.

II. Employ Enterprise Architecture

Link business needs to technology solutions

A. Rational:

Enterprise Architecture provides a repeatable practice to ensure business needs drive IT solutions.

B. Implications:

1. EA provides a roadmap and training plan to guide the City.
2. Department Directors' Advisory Council considers priorities based on EA analysis and recommendations.
3. Architecture analysis provides a business decision-making framework aligned with Department Directors' Advisory Council Essential Capabilities.
4. When practical, business systems analysis aligns with the EA practice.
5. EA is the centerpiece for integrated IT strategic planning.
6. EA is the definitive source for business user requirements for IT solutions developed internally or externally (i.e. functional needs for statement of work).
7. EA is the architectural blueprint to test IT solutions.
8. As EA demonstrates value staffing is increased to meet business user demand.

III. Maximize use of Common Information Systems

Emphasize the use of common enterprise wide systems and sharing available information systems.

A. Rationale:

Common Information Systems provide opportunity to use IT assets and staff to, improved economies of scale and reduced costs. Sharing common systems and business processes provides consistency of process and information by the City.

B. Implications:

1. IT Governance, architectural design and technology planning, will identify common system opportunities and guide decisions toward shared solutions.
2. Shared systems have centrally managed governance, designs and budgets.
3. Centrally manage governance, enterprise designs, and budgets for common shared systems.
4. IT Governance and technology leadership identifies inventories and confirms, validates and communicates shared enterprise components.
5. Shared information systems will support consistent security practices across the City.
6. Business process standardization occurs as much as possible in conjunction with shared systems.
7. Create an IT Governance exception process for nonstandard solutions needed by businesses.

IV. Share Common IT Human Resources

Leverage limited resources and specialized IT skills with integrated management across the City

A. Rationale:

Leveraging shared staff results in improved efficiency and effectiveness. For high demand needs, Centers of Excellence improve overall service delivery by providing departments the ability to tap into highly skilled staff and IT resources to lower contractor and resource costs.

B. Implications:

1. City leadership must address resource ownership and organizational issues based on clear business rationale to best serve the needs of the whole City.
2. IT leadership will develop a Citywide IT Talent Management Plan to identify, acquire and retain human resources sufficient to meet the City's needs.
3. City and IT leadership will identify and/or establish Centers of Excellence to provide talent pools that can deliver high quality consulting, quickly and cost effectively.
4. The City has an opportunity to train and grow internal staff to meet future needs across departments.

v. Manage Technology Assets

Analyze lifecycle to manage technology assets and identify opportunities for reuse utilizing cost/benefit analysis.

A. Rationale:

Reducing and reusing technology assets simplifies the IT environment and reduces ongoing support and maintenance costs. Reduction and reuse helps achieve IT standardization and improves interoperability and the ability to leverage/share IT staff. By focusing on enterprise shared services opportunities, the City achieves a higher return on IT investments.

B. Implications:

1. The City will seek to use existing technology capabilities before it buys; buying before building; and only building if no other options are available.
2. Analyze technology assets and their lifecycle status (e.g. to be retired, invested in, migrate to/from).
3. Initiatives must include a business case analysis that includes the impact of technology assets, staff, shared service opportunities, and technology lifecycle including replacement.
4. IT leadership develops roadmaps that depict the retirement and replacement strategy for technology assets that lead to increased value to the City.

VI. Safeguard Security and Continuity

Build systems, policies and implementation to prevent unauthorized access and provide for business continuity.

A. Rationale:

The City must engender public trust by ensuring appropriate use and access to City-owned information. Information technology is vital to the operation of the City; highly critical systems must be available following catastrophic events.

B. Implications:

1. Security staff performs risk assessment to make informed decisions.
2. Managed appropriate information access by objective criteria.
3. Create standards that balance the public's right to know and an individual's right to privacy.
4. For common security element, create one City security policy that supports all of the City's business needs; departments may create more stringent policies to meet their business needs.
5. Establish Citywide systems of record for structured and unstructured data.
6. The City will create data classification standards that will clarify the priority and risk of systems.
7. Build and fund systems to allow for general maintenance and minimal down periods.
8. For high-priority systems, contingencies must be in place to ensure continuity (e.g. primary, secondary systems).

VII. Deliver value to customers and their customers

Deliver value to customers and their customers by serving as a business partner to increase the City's business capabilities.

A. Rationale:

Technology delivers value when it supports and builds cost-effective business capabilities. City IT must be a trusted and a preferred resource of technology expertise either as the solution provider or as an agent for City staff in engaging other solution providers.

B. Implications:

1. IT leadership will provide City leadership with business centric value measurement, evaluation information including Total Cost of Ownership and lifecycle planning analysis to make decisions.
2. City IT builds customer relationships that increase understanding of business needs and plans and identify opportunities to increase business capabilities and establish Service License Agreements when necessary.
3. City IT engages with the customer as a trusted adviser in solving business problems.
4. The City will explore the use of Software As A Service (SAAS), "cloud solutions", amongst other options, particularly when they meet business needs more quickly and effectively than other solutions



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