

The background of the cover is an abstract composition of numerous thin, curved lines in shades of blue, purple, pink, and yellow. These lines originate from a bright, glowing point on the left side and fan out towards the right, creating a sense of motion and energy. The overall color palette is dominated by various tones of blue, with vibrant accents of magenta, pink, and yellow.

**City of
San Luis Obispo
Information Technology
Strategic Plan**

September 2017



Small informational plaques are located at the base of the monument, providing historical context and details about the site.

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Executive Summary

In today's digital world, information is expected to be available anytime, anywhere, via any type of device.

In setting the foundation for this IT Strategic Plan, the City of San Luis Obispo, working in concert with NexLevel IT, developed a number of key building blocks.

Building Blocks

VISION

To empower the City to provide excellent service to the community

To connect people to information and technology solutions

MISSION

VALUES

1) Innovation, 2) Integration, 3) Information

Current IT Environment

With the building blocks set, NexLevel worked with the City to document the current IT environment via an IT Assessment. The Assessment indicated that the City has a robust, stable, and complex technology environment that supports the City's Strategic Business Plan and that is essential to city service delivery. However, due to the complexity of the environment, it must be governed and managed from a citywide perspective as a weakness in any element can potential adversely impact other elements.

The City of San Luis Obispo's current IT environment is summarized in Figure 1.

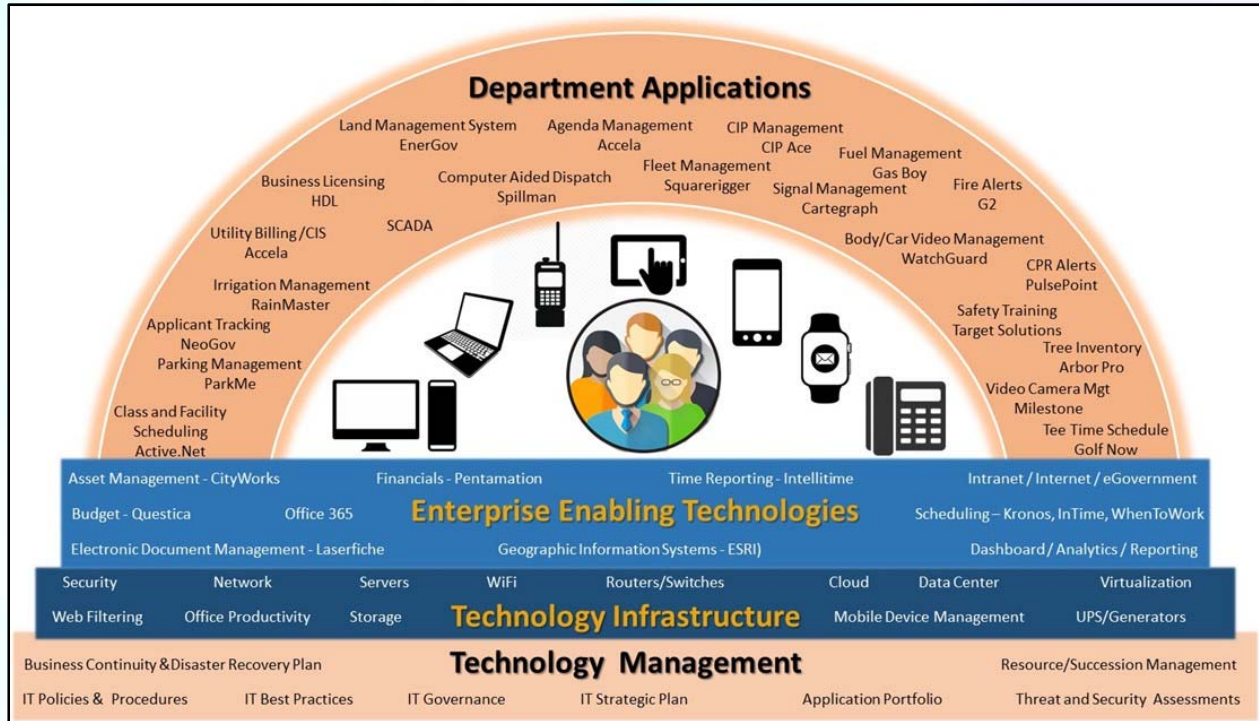


Figure 1 – Current IT Environment

The completion of the IT Assessment resulted in six specific recommendations:

- 1. Take steps to ensure the security and sustainability of its IT environment**
- 2. Adopt additional IT Best Practices**
- 3. Expand ITD to improve its ability to support current and emerging user requirements**
- 4. Develop a Business Application Portfolio**
- 5. Take steps to improve its collaboration/communication with City departments**
- 6. Develop an Enterprise Data Architecture**

Upon completion of the IT Assessment, an IT Strategic Plan (this document) was developed that identifies relevant industry trends and projects to be completed.

Technology Roadmap

To create a workable technology roadmap, projects were identified based on industry trends, Assessment recommendations, and City IT values.

Due to a City resource shortage and budget short-fall, the original technology roadmap projects have been placed on hold, with the now narrowed focus on the projects approved as part of the annual CIP budget development.

The CIP technology projects are summarized in Table 1.

Table 1 – CIP Technology Projects

Project Name	Relevant Trends	Associated Recommendations	Aligned Values
South Hills Radio Site Upgrade	Mobility	1	
SQL Server Cluster		1	
Motion Enterprise Resource Planning (ERP)	Organizational Change Management	1,2	1,2
PD Storage Area Network (SAN) Controllers		1	
VoIP Telephone System		1	
Radio Handhelds and Mobiles	Mobility	1	
Storage Capacity Replacement		1	
UPS Battery Backup System		1	
Emergency Communication Center (ECC) Blade Computers		1	
ECC Equipment Replacement		1	
Tait Radio System Backend Upgrade		1	
Irrigation (Rainmaster/Rainbird)		1	2
Microsoft Office		1,2	
Firewall Replacement	Cybersecurity	1	
Network Security Upgrade	Cybersecurity	1	
Virtual Private Network (VPN) Replacement	Mobility	1	
Dispatch Radio Consoles		1	
Audio Recording System Replacement		1	
Server Operating System Software		1	
Wireless System Citywide	Mobility	1	
UPS Battery Backup System		1	
Public Surveillance Cameras	Smart City	1	



1.0 Introduction

This IT Strategic Plan (ITSP) was prepared for the City of San Luis Obispo (City) by NexLevel IT, Inc. (NexLevel) as the culmination of an extensive process of information gathering, analysis, and collaboration with key members of the City's management team to identify and prioritize strategic technology projects.

The goal of the ITSP is to enable the City to better allocate its technology resources and to obtain greater benefits for its investments in technology. The ITSP does not attempt to predict the future; but rather, enable the City to more effectively respond to new and/or changing requirements by proactively adapting processes, organization, people, and infrastructure to meet ever-changing technology needs and priorities.

To avoid confusion, concepts and observations in this document regarding the use of IT in general are abbreviated as "IT", while "ITD" is used to reference to the City's IT Department.

The remainder of this document consists of the following sections:

- ◆ **2.0 - Salient Points of City IT Assessment** – summarizes the key findings and recommendations contained within the IT Assessment
- ◆ **3.0 - Relevant IT Trends** – identifies and describes the most relevant technology trends that could impact the City
- ◆ **4.0 - Strategic IT Plan Detail** – describes the open and collaborative process used to develop the ITSP and resulting project roadmap
- ◆ **5.0 - Conclusion** – provides general thoughts and observations for the City's consideration



2.0 Salient Points of the City's IT Assessment

As the first step in the development of the City's ITSP, NexLevel completed an IT Assessment.

The following are two of the main components of the IT Assessments, the results of which are summarized in the following sections:

- ◆ Voice of the User Survey
- ◆ Measure of Best Practice Conformance

2.1 "Voice of the User" Survey

Of the approximately 540 City employees invited to take the survey, 191 participated (35%), which, based on NexLevel's experience, is above average participation.

For Network Services:

- ◆ Regarding the time it takes to solve/correct their problem, 145 (97%) indicated they were satisfied to some degree (either very satisfied, satisfied, or somewhat satisfied)
- ◆ Regarding satisfaction with the communications on issue resolution, 154 (94%) indicated they were satisfied to some degree
- ◆ Regarding the timeliness and completeness of follow-up/check back on the service provided, 155 (93%) indicated they were satisfied to some degree
- ◆ Regarding training provided for the business applications used in a department, 111 (78%) indicated they were satisfied to some degree

- ◆ Regarding the reasons City staff contacted them for assistance included:
 - Software Applications – 73%
 - Hardware – 68%
 - Enterprise Applications – 30%

For Information Services:

- ◆ Regarding satisfaction with understanding or their needs, 37 (88%) indicated they were satisfied to some degree
- ◆ Regarding satisfaction with the time to respond to their request for service, 36 (86%) indicated they were satisfied to some degree
- ◆ Regarding satisfaction with their ability to communicate clearly, 36 (86%) indicated they were satisfied to some degree

NexLevel tends to be cautious in drawing conclusions from the user survey alone. The survey results are often driven by current perceptions of the users and these tend to be isolated rather than holistic and reflect recent experiences rather than looking at service levels over time.

2.2 Measure of Best Practice Conformance

NexLevel uses a comprehensive list of best practices categorized into six separate dimensions to evaluate the organization's compliance with best practices. NexLevel assessed the degree to which the City conforms to these best practices based on numerous sources of input, including the interviews with the City's user stakeholders, interviews with ITD staff, and the results of the IT Best Practices self-assessment completed by ITD.

Table 2, City's Conformance to IT Best Practices by Dimension, provides the findings of the assessment for each dimension of IT best practices.

**Table 2 – City’s Conformance to
IT Best Practices by Dimension**

Dimension	Factors in Dimension	Max Score	City Score	City Pct.
IT Governance	31	93	69	74%
Service Delivery	36	108	78	72%
Business Tech. Applications	25	75	48	64%
Infrastructure	44	132	97	73%
Security/Info Protection	33	99	56	57%
IT Administration	25	75	47	63%
TOTAL	194			67%

The results were then plotted and points connected with a dotted line to provide a perspective of the City’s overall conformance as shown in Figure 2.

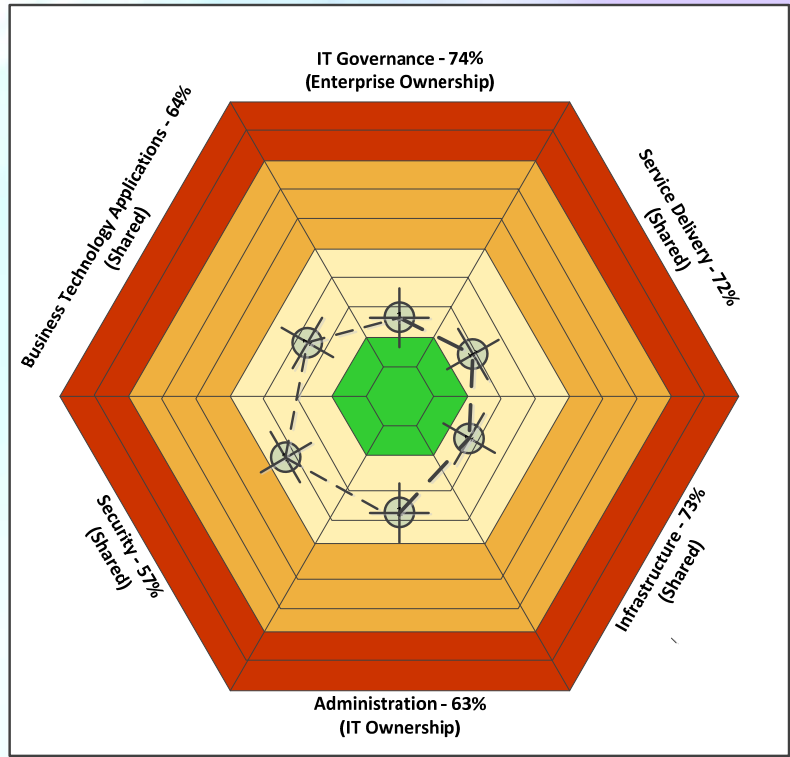


Figure 2 – City Conformance to IT Best Practices

Each of the rings represents a band of conformance to the IT best practices with the red band representing 0 to 20% conformance, the orange band representing 20 to 50% conformance, the tan band representing 50 to 80% conformance, and the two green bands at the center representing 80% to 100% conformance.

NexLevel views organizations that have less than 50% conformance to the IT best practices as being essentially reactive in their approach to the governance, management, and delivery of IT services, while organizations that are more than 50% conformant to IT best practices are regarded as being more proactive.

Organizations that are more proactive are better able to obtain greater benefits for their investments in IT than those that are not, and while reactive organizations often spend less on IT (and thus have a lower total cost of ownership for IT) they realize less in return and are generally unable to effectively respond to new requirements.

Overall, the City’s Conformance to IT Best Practices is 67% which is well within the proactive band and is considered outstanding when compared to other municipal IT organizations in California.

Another method used to evaluate the City’s technology performance was a Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis as shown in Figure 3. This analysis is based on IT best practices assessment, but provides a slightly different perspective by summarizing ITD’s strengths and weaknesses and the opportunities and threats facing the City as a whole in its use of IT.

It should be noted that there is a close relationship between these items since the City’s ability to realize the potential opportunities and mitigate the potential threats is dependent on its ability to leverage its strengths (particularly the recent organizational and staff changes with ITD) while addressing the weaknesses (Assessment recommendations).

Strengths	Weaknesses
<ul style="list-style-type: none"> ➤ Knowledgeable, motivated ITD staff ➤ Effective, rapid ITD support ➤ Customer service focus ➤ Effective IT governance structure ➤ Addition of a help desk analyst has improved staff productivity ➤ Dedicated IT staff to support Utilities Department technology 	<ul style="list-style-type: none"> ➤ Data integrity ➤ Reporting capabilities and lack of analytics ➤ Aging business application portfolio ➤ Unwillingness to change business practices during application implementation
Opportunities	Threats
<ul style="list-style-type: none"> ➤ City-wide ERP implementation ➤ Application subject matter expertise (SME) for continued improvement after go-live ➤ Leverage and share with community 	<ul style="list-style-type: none"> ➤ Siloed databases with no City-wide architecture ➤ City Hall server room environment ➤ Future technology demand may exceed resources ➤ DBA services provided by single staff member ➤ Retention of talented ITD staff

Figure 3 – SWOT Analysis

2.3 Assessment Recommendations

NexLevel developed the Assessment recommendations based on our experience in working with local government agencies and with an emphasis on identification of activities that have high value. Some of these can be accomplished with existing

resources, while others will require augmentation of City resources.

NexLevel understands that it is much easier to prescribe change than to implement it, and that no public or private sector organization has sufficient resources to embrace all possible IT governance and delivery best practices. Consequently, these recommendations are pragmatic and conditioned by real-world considerations.

As shown in Table 3, these recommendations (which are actionable, achievable, and have measurable outcomes) will help the City realize improvements in how it governs, manages, and delivers IT services.

Table 3 – Recommendations and Objectives

Recommendation	Objectives
<p>1. Take steps to ensure the security and sustainability of its IT environment</p>	<p>Provide a secure framework for the on-going operation of the City’s technology infrastructure by developing formal plans and processes for:</p> <ul style="list-style-type: none"> ▪ Cybersecurity Planning ▪ Disaster Recovery ▪ Penetration Testing ▪ Application Impact Analysis ▪ Single points of failure ▪ Root Cause Analysis
<p>2. Adopt additional IT Best Practices</p>	<p>Create and adopt the following processes to improve core delivery of technology services to City departments:</p> <ul style="list-style-type: none"> ▪ Project Guidelines and Management ▪ Resource Management ▪ Succession Planning ▪ ITD Service Catalog and Service Level Agreements ▪ Service Support Management ▪ Policies and Procedures

Recommendation	Objectives
<p>3. Expand ITD to improve its ability to support current and emerging user requirements</p>	<p>Structure the City’s IT Department to be more customer focused and equipped to meet increased demand through adoption of:</p> <ul style="list-style-type: none"> ▪ Resource management plans ▪ Near-term ITD Organization ▪ Long-term ITD Organization
<p>4. Develop a Business Application Portfolio</p>	<p>Enable ITD to better track the business applications to ensure the City obtains the highest possible return on its investments through application re-use and the sharing of business processes and information across departments</p>
<p>5. Take steps to improve its collaboration/ communication with City departments</p>	<p>Improve internal and external communication between ITD and City departments, vendors, external agencies, and the public</p>
<p>6. Develop an Enterprise Data Architecture</p>	<p>Create a city-side blueprint, supporting standards, and resources to create uniformity in databases, information gathering, and reporting</p>



3.0 Enterprise IT Trends

Organizations seeking to develop effective IT strategic plans need to consider a number of different factors including internal user needs, public expectations, and trends in IT to better allocate funds and resources in support of their business objectives and priorities. In particular, the ways in which organizations use IT are changing as are the expectations of internal and external stakeholders for access to information and services.

While public sector organizations must also become more customer-centric and innovative, they also must find ways to control their IT total cost of ownership (TCO) and demonstrate that they are obtaining the greatest possible value for their investments, commonly measured as return on investment (ROI).

Similarly, the technologies, methodologies, and tool sets used to develop and support automation, as well as the ways in which organizations use IT, have evolved considerably with the emergence of web-based (“cloud”) services, the consumerization of IT, and mobility.

The continued introduction and rapid evolution of IT products and services will impact public sector organizations in a number of ways including:

- ◆ The need to respond to increased public expectations for access to information and services is forcing a shift in the allocation of IT resources from internal uses to public-facing uses
- ◆ The growing adoption of mobile computing as the solution of choice for remote access to internal applications and repositories of information coupled with the desire of users to have the same “desktop environment” on a remote device as they have in the office will drive the creation of new policies, support models, and security models

- ◆ In the face of a highly diverse and evolving market of new IT products and services and the demand for their use, organizations will be increasingly challenged to effectively allocate limited local IT resources

Based on our knowledge and experience, NexLevel has identified seven enterprise IT trends, as identified in Figure 4, that are changing how local governments invest in IT.

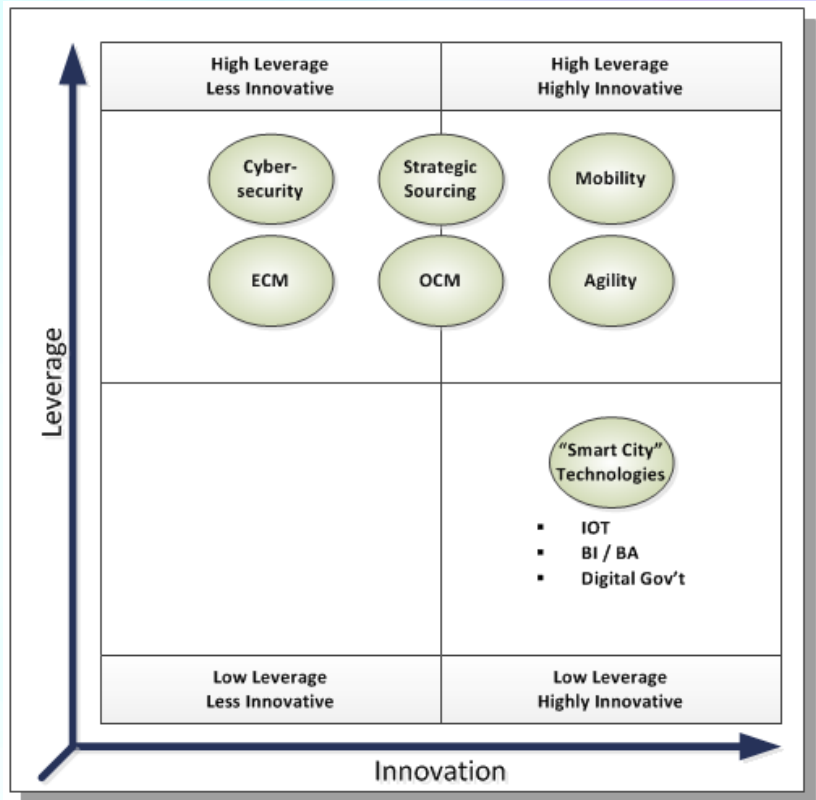


Figure 4 – Enterprise Information Technology Trends

Ultimately, organizations need to find a balance between investing their limited resources to better leverage existing information assets versus investing in innovative technologies that have the potential to radically transform how services and information are delivered to the public.

In the following sections, we briefly describe these technologies.

3.1 “Smart City” Technologies

“Smart City” is unusual in that this trend is not a single technology, per-se, but rather an integrated approach to the utilization of emerging information technologies and technology trends that enable local governments to more effectively identify trends (such as incidents, traffic, power demand, parking space availability, etc.), to re-allocate or reprogram City resources in response to these trends, and to support programs such as Smart Building, autonomous vehicles, Smart Payment, and Smart Street Lights.

Smart City capabilities also enable members of the community and visitors to obtain information through smartphone apps regarding employment services, public safety, healthcare, social services, transit and driving route information, parking and and event information.

Internet of Things (IoT)

The Internet of Things (IoT) provides the foundation for many Smart City initiatives. Although some local governments look at Smart City in very tactical terms (involving highly-specialized and isolated IoT applications such as “Smart Intersections” and “Smart Corridors,”) the effective implementation and continued use of smart technologies requires a broader approach that includes:

- ◆ The development and implementation of open and collaborative processes to develop the visions for the implementation and governance of Smart Technologies
- ◆ The implementation of secure, resilient, and ubiquitous wireless services that enable access to smart services from any device, anywhere, and anytime and that can scale to meet expected surges in demand
- ◆ The development and management of public/private partnerships and regional partnerships (including regional transportation) including plans for regional collaboration and information exchange

- ◆ The development and implementation of the processes required to support continuing communication and collaboration with members of the community, as well as those to leverage the information produced by smart devices, including business intelligence and business analytics

Business Intelligence and Business Analytics (BI/BA)

There has been considerable progress in the development of tools that enable organizations to consume a growing body of information for either tactical/reactive purposes (business intelligence) or for strategic/proactive purposes (business analytics).

The development and maintenance of the “enterprise data architecture” required to support the use of BI/BA tools is one of the hidden costs of implementing Smart City technologies. This includes:

- ◆ Processes and staff to support the architecture, including processes for its governance, support, and evolution
- ◆ Standards and policies to ensure that business applications will be able to exchange information with other business applications and support the integration and compilation of information

Organizations without an enterprise data architecture, supporting standards, and staff to support it, often attempt to support decision-makers through a cumbersome combination of ad-hoc applications, databases, and spreadsheets. These tools often use data inconsistently, are seldom well documented or able to quickly meet new requirements, and eventually become a drain on organizational resources. This can quickly become a worst-case scenario as the total cost of ownership for these ad-hoc processes quickly mounts while the return on the organization’s investment decreases.

Digital Government

Digital government is a comprehensive approach to the use of the Internet and mobile technologies as conduits for providing information to the public and to enable them to conduct business. The development and maintenance of a digital government strategy has become more complex due to the rapid multiplication of the number of channels for communicating with the public, as well as the continued evolution of mobile devices.

The Federal Government has adopted a digital government strategy that is built on four principles that could be adapted for the use of other government agencies:

- ◆ An "Information-Centric" approach – Moves us from managing "documents" to managing discrete pieces of open data and content that can be tagged, shared, secured, mashed up, and presented in the way that is most useful for the consumer of that information
- ◆ A "Shared Platform" approach – Helps us work together, both within and across agencies, to reduce costs, streamline development, apply consistent standards, and ensure consistency in how we create and deliver information
- ◆ A "Customer-Centric" approach – Influences how we create, manage, and present data through websites, mobile applications, raw data sets, and other modes of delivery, and allows customers to shape, share and consume information, whenever and however they want it
- ◆ A platform of "Security and Privacy" – Ensures this innovation happens in a way that ensures the safe and secure delivery and use of digital services to protect information and privacy

3.2 Organizational Agility

Agility is both a trend and an outcome of the significant changes that have taken place in how local governments (and other organizations) respond to both new information technologies and how those information technologies are used by the public. The ability to agilely respond to both changes in IT and changes in user and public expectations rests largely on the ability of an organization to identify and prioritize requirements and to allocate and/or reallocate both IT and user resources accordingly. Effective planning and IT governance are key components of organizational agility.

Planning documents often speak to the need to align technology plans and directions with business or operational needs and priorities. Generally, this implies a two-step process in which operational plans are developed and then technology plans are crafted to support them. NexLevel believes that this process is not as effective as it could be since the transformative impact of technology should be considered in the course of developing business plans, not afterwards.

IT Governance is used as the catalyst to ensure the alignment between an organization's business goals and priorities and how it allocates its IT resources and assets. In the absence of effective alignment of business and IT direction, scarce resources can be allocated for IT projects that may be interesting, but fail to deliver real benefits to the organization.

3.3 Organizational Change Management (OCM)

The introduction of new enterprise-wide business applications and/or modifications to existing business applications often involves changes to existing business processes and organizational structure. These changes, as well as the effort required to implement the business application, have the potential to significantly disrupt operations.

Additionally, organizations have found that resistance to change can limit their ability to realize the intended benefits of business applications and prolong implementation projects, sometimes to the point that project success is in jeopardy.

Organizational Change Management (OCM) provides a methodological framework for managing the organizational impact of the implementation of new automation including changes in business processes, changes in organizational structure, and changes in culture by focusing on improving communication, setting expectations, and working to minimize the impact of misinformation.

In 1995, John Kotter introduced the following eight-step process for fostering the successful implementation of changes in organizational structure, business processes, and culture:

- ◆ Creating a shared sense of urgency regarding the need to change
- ◆ Forming a guiding coalition across the organization to support change
- ◆ Creating a vision for change
- ◆ Communicating the vision
- ◆ Preparing to overcome obstacles
- ◆ Planning for, and delivering, short-term wins to sustain momentum
- ◆ Remaining committed to the long-term process required to transform organizations
- ◆ "Anchoring" the changes in the culture of the organization

OCM is also dependent on performance management since it provides an objective and factual assessment as to whether the organization is obtaining the desired outcomes from changes to business processes, structure, and resourcing and the effectiveness of any subsequent steps that may be needed to overcome obstacles.

3.4 Cybersecurity

While the need to secure information systems is not new, the increased focus and importance of cybersecurity is a direct result of the increased utilization of the web for the delivery of information and services and the related rise of the use of mobile and personal devices.

The shift toward mobility and cloud services is placing a greater security burden on endpoints and mobile devices that in some cases may never even touch the corporate network. The fact is that mobile devices introduce security risk when they are used to access company resources; they easily connect with third-party cloud services and computers with security postures that are potentially unknown and outside of the enterprise's control. In addition, mobile malware is growing rapidly, which further increases risk.

Organizations can be crippled not just by attacks which result in the disclosure, modification, and destruction of information, but also by attacks that takeover or disable critical infrastructure components, or impede the ability of legitimate users to access information and services.

The nature of cybersecurity threats is continually evolving due to the growing sophistication of hackers, the resources available to them, and an increase in the range of motivations from mischief and activism to profit. As a result, the community of hackers has expanded to include criminal enterprises that profit through extortion as well as through the theft of digital assets.

As a result, organizations must adopt and implement systematic approaches to protect their information assets from cyber threats including the ability to detect and defeat these threats, limit the impact of potential intrusions, recover from them, and adapt processes to better manage similar attacks in the future. The National Institute of Standards and Technology (NIST) has developed a cybersecurity framework that enables organizations to progressively implement procedures to safeguard against cyber threats.

3.5 Enterprise Content/Document Management (ECM)

The management of enterprise content, including documents, audio, video, and images is not a new trend. However, due to the increasing amount of content (particularly video), organizations are adopting enhanced ECM strategies and capabilities in order to:

- ◆ Better organize and catalog documents and digital content so that they are more readily available across the organization and to ensure that users have access to the most current versions
- ◆ Improve the ability to collaborate with internal and external users (including the ability to annotate)
- ◆ Control access to documents, including permissions to add, read, copy, modify, and delete
- ◆ Conform to records management requirements
- ◆ Search documents and content in conformance with public records requests
- ◆ Support users working from remote locations

More recently, organizations have also realized that the absence of a document and content management framework limits the usefulness of field mobility since this depends on the ready availability of content. Consuming bandwidth and time to search for documents is frustrating for end-users and increases organizational costs for mobility.

Industry statistics regarding the costs related to the manual management of content are very compelling and have been validated by successive independent studies. A recent PriceWaterhouseCoopers study reports that the average worker spends 40% of their time managing non-essential documents, while the International Data Corporation (IDC) estimates that employees spend 20% of their day looking for information in hardcopy documents and only finding what they need 50% of the time.

3.6 Mobility and the Consumerization of IT

The consumerization of IT refers to the use of personal devices, most often mobile, to obtain access to organizational services and information. As a result, consumerization and mobility are closely linked. Collectively, they represent a significant opportunity for government to improve the effectiveness and timeliness of service to the public. However, they are also vexing for enterprise IT planners since:

- ◆ The proliferation of devices is a challenge for support organizations as users attempt to obtain connectivity to secured wireless networks and utilize applications
- ◆ User access to enterprise information and services from mobile/wireless devices potentially exposes them to cyber attacks
- ◆ Public-facing solutions need to be both open and adaptive to optimize the user experience from a universe of devices that is continually evolving
- ◆ “Follow me” mobility fundamentally changes the paradigm of the standard desktop computing model where the computer, the operating system, the applications, and the user’s data and preferences are integrated into a single platform

Despite these challenges, mobility is a “game changer” in the public sector enabling users to move as needed and to enter or update information on a real time basis. In addition, mobility enables access to information where/when it is most needed (i.e., in responding to incidents and emergencies).

Some organizations have adopted a “bring your own device” policy as being preferential to attempting to limit the devices that users employ, often with the caveat that IT support for devices other than those officially supported will be provided only as available and with no guarantees as to response time. The practicality of these policies tends to be limited since the priority of a service request tends to be driven more by the nature of the incident or request and the person reporting it than by the device involved.

3.7 Strategic Sourcing and Cloud Services

Strategic sourcing is based on the concept of using the most effective service provider to respond to user needs, thus enabling permanent IT staff members to focus on high-priority, high-value tasks and technologies.

For many organizations in both the public and private sector who have aging IT facilities and infrastructures, the use of "cloud" based services including Infrastructure as a Service (IaaS), Desktop as a Service (DaaS), and Software as a Service (SaaS) offer an alternative to initial capital expenditures, the recruitment of additional staff members, or the procurement of traditional staff-supplementation services (contractors). An additional benefit for many organizations is that using SaaS simplifies their disaster recovery and business continuity planning since they can quickly resume operations from a facility that has connection to the internet.

Common strategies for cloud-based services include:

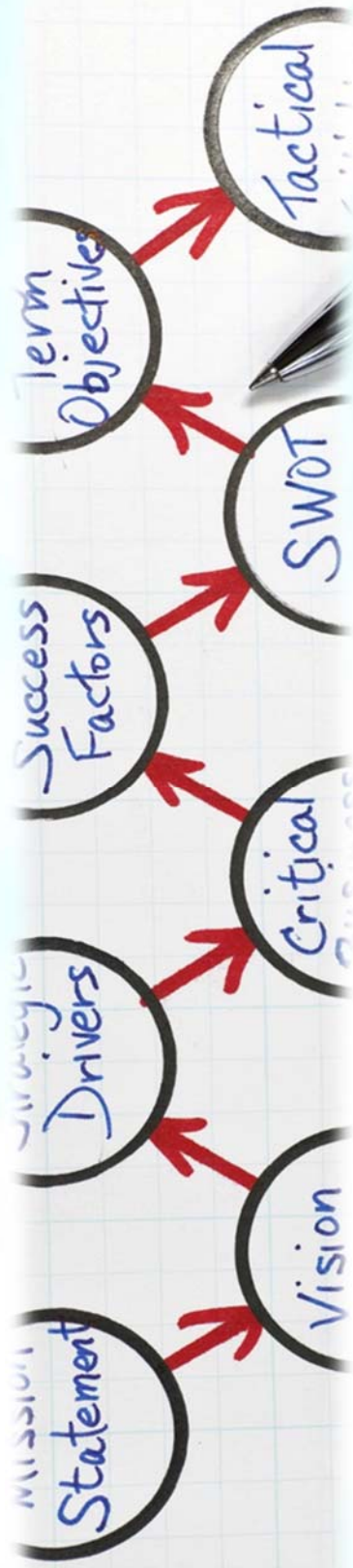
- ◆ Public Cloud – Public Cloud services are generally shared (thus "public") with users sharing a common code base, but with their data maintained separately
- ◆ Private Cloud – is similar to a Public Cloud, but in a COTS/SaaS environment the private cloud is based on a separate code base and database for each organization (although multiple organizations may share a virtualized computing environment)
- ◆ Hybrid Cloud – a combination of private and public cloud services, potentially from different service provider, this permits organizations to use more expensive private cloud services for mission-critical applications and confidential information, while leveraging the public cloud for less critical applications and information

Key benefits of sourcing include:

- ◆ The ability to obtain services under the terms of a service level agreement
- ◆ The ability to obtain service coverage for extended hours of operation including 24x7
- ◆ The ability to defer, or avoid, capital costs for the acquisition of IT infrastructure assets
- ◆ The ability to more readily scale the IT environment to meet demand
- ◆ Reduced dependence on local staff resources, including training and planning for staff succession
- ◆ Less risk since the applications are hosted in a remote data center

Nonetheless, organizations seeking to use external services (cloud-based or not) need to carefully consider:

- ◆ The cost of implementation
- ◆ The continuing costs for utilization
- ◆ The provisions for the availability and security of information that is stored off-site
- ◆ Data ownership
- ◆ The costs and effort related to potentially exiting the sourcing arrangement in the future



4.0 IT Strategic Plan (ITSP)

Strategic planning enables organizations to find a balance between immediate and long-term needs. It follows that the process for the development of an IT strategic plan needs to take the same considerations into account.

4.1 Methodology

Without an IT strategic plan to serve as a baseline to manage and respond to change, organizations tend to become reactive rather than proactive and, as a result, obtain reduced benefits for their investments in IT.

Figure 5 depicts the ITSP methodology/development process.

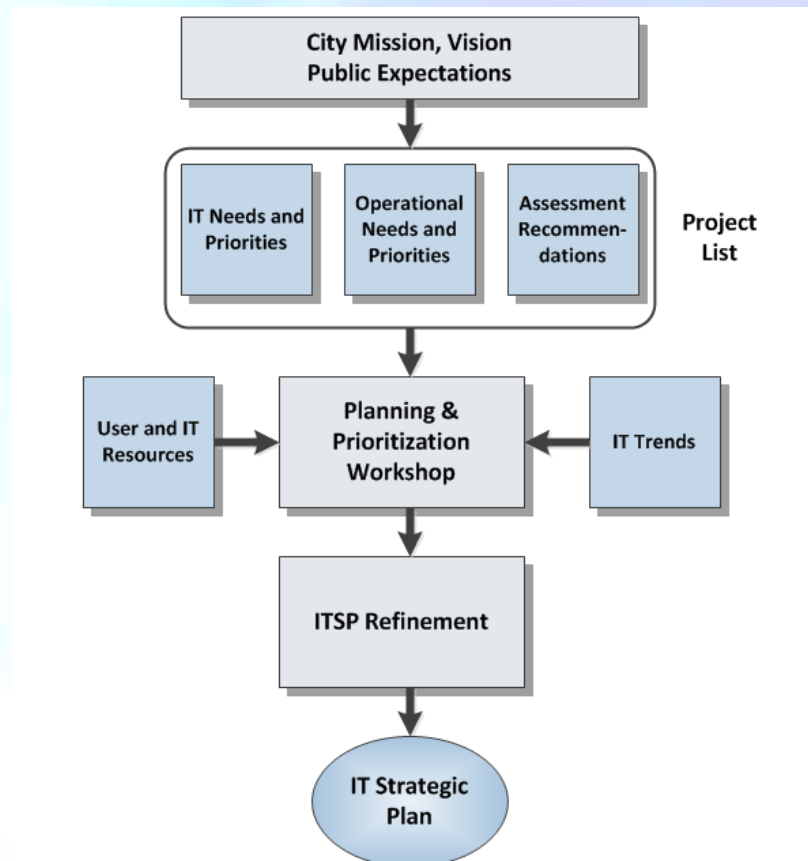


Figure 5 – IT Strategic Plan Development

Strategic projects were identified based on operational needs and priorities identified in the course of the interviews with the City's user stakeholders, IT needs and priorities, and the recommendations that NexLevel identified for the City.

The resulting project list was reviewed with the City's management team and refined considering both the user and IT resources that would be required to implement the projects and information regarding information technology trends.

The refined project list was to serve as the foundation for the planning and prioritization workshop. However, due to a City resource shortage and budget short-fall, these technology projects have been placed on hold. Only technology projects approved as part of the annual CIP budget have been included in the plan.

4.2 Project Portfolio

Provided as attachments (6.0 Attachments), the following figures summarize the projects in the portfolio, as well as the projects that have been placed on hold:

- ◆ Attachment A – Prioritized CIP IT Projects
- ◆ Attachment B – Project Descriptions for the CIP IT Projects
- ◆ Attachment C – CIP IT Project Funding and Timeline
- ◆ Attachment D – List of IT Projects On Hold (non-funded, non-prioritized, and sorted by department)



5.0 Conclusion

The ITSP is a roadmap in that it charts the route to get from where the City is today to where it needs to be. However, there are other similarities as well. Just like any trip, the destination may change as may the stops along the way, and as anyone who has travelled with family knows, there are often those who ask questions:

- ◆ "Do we really have to go?"
- ◆ "Are we there yet?"
- ◆ "Are you sure this is the right way?"

These questions are all too familiar to organizations that are working to transform their IT environments (including the ways in which they strategically govern IT, manage the delivery of IT services, and deliver them) to a target state, and underscore the critical role that IT governance, combined with a focused approach to organizational change management and well-defined and measurable objectives, plays in organizational transformation.

The City's management team must continue to be committed to maintaining and communicating the City's IT vision, mission, values, etc. adapting all as circumstances require changes in priorities, and considering alternative approaches to enable the City to attain its objectives.

Support of the ITSP will need to come in terms of priorities, dollars, policies and practices. Successful implementation may mean making compromises, and it will mean exercising patience, taking an organization-wide perspective, and maintaining a continued focus on revising the plan as events take place. Finally, it will take cooperation, communication and flexibility to adapt to changing needs, technologies and resources.

6.0 Attachments

The ITSP attachments are included in a separate document.