City of Mission Viejo
IT Strategic Plan Update

Prepared by Civic Resource Group

Submitted to the City of Mission Viejo

May 2012

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Introduction & Overview

The Information Technology (IT) Strategic Plan for the City of Mission Viejo represents an ongoing process to utilize information technology to improve City operations and overall service delivery. The IT Strategic Plan Update herein is a follow-up to the comprehensive IT planning effort that led to the adoption of the formal Information Technology Strategic Plan in 2006. The document set out a bold Technology Vision for the City:

> *The real power and potential of technology is to improve overall how an organization conducts its business, including how it delivers external public services, how it operates and manages internal business processes, and finally how it governs. The City has adopted and is making the effort to implement IT in this broader sense, that of changing the way the City operates, provides services and information to the public, and engages its citizens.* (City of Mission Viejo IT Strategic Plan, 2006)

The IT Strategic Plan focused on putting in place a foundation for moving City services online and automating key business processes. Much of that foundation is now in place, and the City has realized a high level of success from its technology and e-government implementations to date. Following are some of the key accomplishments the City has achieved over the past three to five years:

- Disaster Recovery Plan Implementation

- Technology and Network Infrastructure Upgrades

- Digitization of Documents and Records

- Implementation of E-government Website

- Launching of Numerous E-Services

- Unified Communications (UC) Platform

- WiFi at City Government Locations

- Initial Mobile E-government Applications

The Information Technology Strategic Plan Update detailed herein represents the next segment of the City's Technology roadmap covering the next three to five years and beyond. It aims to leverage the foundation set in place over the past five years along with new technologies and processes to improve the way the City conducts business, including the delivery of the highest quality public services;

streamline operations to achieve cost efficiencies and increased productivity; foster economic and community development; and govern in an open and transparent manner.

The current economic environment along with the continued mainstreaming of new technologies— mobile devices, the World Wide Web, cloud computing, social media, etc.—have directly led to rising expectations of citizens, employees and other City stakeholders. In the private sector, IT is regularly leveraged to create new business opportunities, and in many cases IT is transforming businesses and even whole industries. Workforces in the private sector are becoming more streamlined, more mobile and more productive—doing more with less primarily due to new technologies. Governments—elected officials, senior management along with staff—must take the same initiatives with IT.

The City's IT infrastructure, resources, and service delivery technologies are under ever increasing pressure and will need to be updated regularly to meet the current and future needs of the City. The purpose of the IT Strategic Plan Update is to chart a course for the City to utilize information technology in the effective delivery of City services. The plan includes a series of achievable projects and initiatives recommended for implementation over the next three to five year time span and beyond.

The guiding principle of the updated plan is to continue to align information technology with the City's strategic goals and overall daily operations. By providing a common framework for technology planning the City can greatly improve the way it conducts business and meets its overall objectives. Technologies will continue to change and the City will need to be able to adapt and align resources to ensure that the most optimal and appropriate technologies are utilized to achieve its goals. The plan includes a pipeline of new initiatives and technology refreshment efforts forecast for the near future, and communicates an approach and a prioritization for the work to be done.

It should be noted here that the City of Mission Viejo has done a commendable job with IT to date as outlined above. Through the discovery phase and the assessment process the City ranks very high in its IT capabilities. In fact, overall the City of Mission Viejo compares favorably to other comparable municipalities and has a number of advanced IT initiatives that are commensurate with the City's standing as one of the most livable cities in Orange County. These include a stable and reliable IT infrastructure, advanced internal business applications, and effective e-government services for citizens.

Even with this success, however, the City needs to prepare for the future, and continue to build the foundation now that will support the highest quality government services in the fast evolving digital world within which we now exist.

When the initial IT Strategic Plan was developed in 2006, social networking and mobile computing were in their infancy, and "cloud" computing was still only in its embryonic stages. These and other new technologies are now becoming increasingly important to IT delivery, and especially so in the current challenging economic environment. The City can and should build on all the good IT work that has come before and put in place a strong and innovative plan for the future of IT at the City that aligns City goals with the future of technology.

This document and the work that went into it serve two important objectives toward achieving that goal:

First, it provides a starting point for the continued implementation of IT initiatives in a strategic manner over the next three to five year period at the City; and,

Second, it validates the City's strategic direction and underscores the importance of continuing down the path of open and agile government and to lead the way in the effective and innovative use of information technology in municipal government.

With these dual purposes in mind, the IT Strategic Plan Outline presents information, ideas and recommendations at both the visionary level (the call to action), and the operational level (a framework and guidance for IT Strategic Plan development).

1.0 The Strategic Context for Information Technology at Mission Viejo

The world of municipal government is changing…dramatically. And along with it technology is changing at a rapid pace. While Information Technology (IT) has typically played a "back office" function in some municipal government operations it is increasingly playing a much greater strategic role spurred on by a number of key external developments, and supported by the City's own strategic priorities.

1.1 External Drivers

1. **Information Technology is a Core Element of the Global Economy**. Information technology can no longer be viewed simply as a back office resource for operational and administrative support. The new IT is woven seamlessly throughout the fabric of society, culture and the increasingly global economy.

2. **"Change" is the New Norm**. Organizations large and small that have resisted the massive changes occurring around them have found themselves either dying, or faced with unexpected challenges from distinctly different organizations that did not exist ten, five or even three years ago. Organizations that have wholly embraced the changes are reaping the benefits of new markets, new efficiencies, new products and new opportunities.

3. **Growing Demand for More IT and Better Use of IT**. The new IT creates a cycle of sorts: The more access users have to new IT, the more IT is used, leading to more innovation in IT, leading to demand for more IT and better IT, and so on. In the government context this will require close attention to the ways that citizens access information and services including mobile devices and social networks, and the IT services and skills required to support these changes.

4. **External Imperatives—Compliance, Accountability, Transparency, Open Government**. Especially in the public sector, the recent economic and political upheavals have placed renewed emphasis on external imperatives such as regulatory compliance, financial accountability and transparency.

5. **Mobility**. Mobile technology has fractured the person-place paradigm. Smartphones, tablets and other mobile devices are fast replacing computers as the primary means for users to access the Internet, and new "cloud" computing models will allow data, information and applications to be accessed anywhere, anytime, from any device. This enhances productivity and access, but also may require additional support for multiple devices and 24 hour connectivity.

6. **Free Flow of Ideas and Open Collaboration**. New technologies make very real all the possibilities related to openness, collaboration and the sharing of ideas, information and knowledge; there are, however, potential downsides as well.

7. **Scarce Resources Combined with Growing Technology Complexity**. This situation will require a new approach to planning and delivering for IT services, especially in the public sector. Organizations must rely on strategic approaches to new technologies, investments and creative ways to partner and manage limited resources.

1.2   City of Mission Viejo Strategic Priorities

Along with the external developments highlighted above, the strategic context for technology is constantly changing within the City as well. In 2011 the City engaged in a comprehensive budget prioritization and planning process that focused on better aligning resource allocation decisions with community values and strategic goals. This Priority Based Budgeting (PBB) work provides an excellent departure point for the updated IT Strategic Plan as well. A number of strategic goals, each with a range of articulated core values, were identified through the prioritization process. The first six strategic goals below flowed from the City's December 2008 goals. The last strategic goal below—Governance—was developed directly out of the PBB process (see City of Mission Viejo 2011-2013 Adopted Budget and Readers Guide).

1. **Community Building**

2. **Economic Development**

3. **Preserving and Enhancing the Beauty of the Community**

4. **Public Safety and Emergency Preparedness**

5. **Traffic Flow & Infrastructure Improvements**

6. **Improving Public Relations and Communication**

7. **Governance**

Thus, where applicable, the strategic goals and the specific core value/values for the strategic goals have been aligned for each of the six Priority IT Initiatives outlined in section 3.0 below. This strategic alignment will also be important for budgeting

2.0 Vision for Information Technology at Mission Viejo

The cornerstone of an effective IT Strategic Plan begins with an overall technology vision that is consistent with the City's overall goals and objectives. Four overarching themes that drive the City's overall technology vision were identified during the planning process:

1. **Citizen Services:** Enhance customer service to the residents and businesses of Mission Viejo.

2. **City Efficiency:** Increase overall operational efficiency, and where appropriate eliminate positions due to the efficiencies gained from technology deployments; increase overall productivity; realize cost savings, and potentially avoid new/additional costs—of growing importance given the current state and municipal budget environment.

3. **Community and Economic Development:** Utilize new technology and related strategies to support the City of Mission Viejo's position as one of the most vibrant and livable communities in Orange County; showcase Mission Viejo as a technologically savvy, highly connected and sustainable community.

4. **Secure City Assets and Risk Mitigation**: Provide an environment and infrastructure that is conducive to effectively, and safely, implementing new technology and City services including proper alignment of resources, skills and policies; disaster preparedness and information security; and baseline IT operations.

The challenge for the City is to develop a plan that embraces new technology and its potential to transform the City, yet is pragmatic in its approach. Rapid changes in technology and the wide array of solutions and approaches available in the marketplace require a set of guiding principles that are consistent with the City's technology vision. Based on current best practices in municipal IT, discussions with City management and staff, and the consultant's experience in the field, the key elements of a cohesive planning approach include the following core guiding principles:

• **Goals Driven** – Technology is simply a tool, albeit a potentially powerful tool, for government. E-government/technology implementation must always be aligned with clear customer service and citizen engagement goals, operational efficiency goals, and ultimately good government goals.

• **Leverage Current Infrastructure Investments** – New applications and services should work to the greatest extent possible with the City's current network, server, and computer infrastructure, thus leveraging current technology investments.

- **Continuous Improvement/Incremental Approach** – The City's technology decisions are best approached incrementally within an overall strategic perspective. This will help avoid costly or failed projects, and will build over time knowledge transfer and skill enhancement by City staff.

- **Business Minded** – The City's technology plan and decisions should be driven by business needs; new technology should not be implemented unless there is a sound business case.

- **Quality Products and Services** – The City strives for high quality technology implementations with systems that are robust, reliable and well supported. Best of Breed products and services should be chosen wherever possible as long as they fit within the City's overall IT framework and budget constraints.

- **Technology Standards** – The City should be open to technology solutions that meet specific needs, as long as they work within the overall technology framework, while at the same time working toward standardization wherever possible; the key is not to be wedded to a single platform or vendor, but to have enough standardization that all applications and platforms work together as a system.

- **Optimize City Staffing** – Wherever feasible, current City staff should be intimately involved in the development and implementation of IT. Staffing and resources for all future implementations should be carefully optimized among City staff, consultants/contractors and managed services. All new hires should have identified computer and specifically web skills, and current staff should be provided time and resources for technology related training. These subjects should be taken into account for HR performance evaluations.

- **Pragmatic Approach** – The City should maintain a pragmatic approach to implementing new technology and use technology in a cost effective manner.

3.0   Priority Strategic Initiatives to Achieve the IT Vision

Following is a summary of the major strategic priorities that should be addressed by the City over the next three to five year timeframe. Each initiative includes a narrative description along with a specific action plan summarizing the key implementation components. On overall Summary Action Plan including all the initiatives is incorporated as the concluding section of the IT Plan Update.

The initiatives have been organized utilizing the same framework from the original IT master planning process. This framework groups projects and initiatives into the following four "pillars" of IT Strategy:

1. Organizational Preparedness

2. IT Infrastructure Preparedness

3. Business Improvement and Automation

4. E-Services and Digital Communications (Note: This has been slightly modified/updated to add "Digital Communications" in place of "Online Applications" which are subsumed in E-Services)

3.1   Organizational Preparedness: Priority Changes and Updates

3.1.1   Update IT Strategic Plan

This document is the initial output of the planned updating of the IT Strategic Plan. The City has stayed the course since the comprehensive strategic planning process initiated in 2006 that resulted in the City's IT Master Plan document. One of the key recommendations at the time was that the City should conduct periodic checkpoints and updates to the IT Plan so that it could always remain at the forefront of the technology curve, and be able to leverage the best available technologies and digital strategies for the benefit of the City and its constituents.

This IT Strategic plan update builds off of the core guiding principles of the initial plan completed in 2006. The Plan update was developed based on input from City staff including current IT staff, City departments and management, as well as members of the City Council. The process also included an internal technology assessment as well as an analysis of best IT practices by other city governments. Previous studies and reports were cross referenced and used as additional background information.
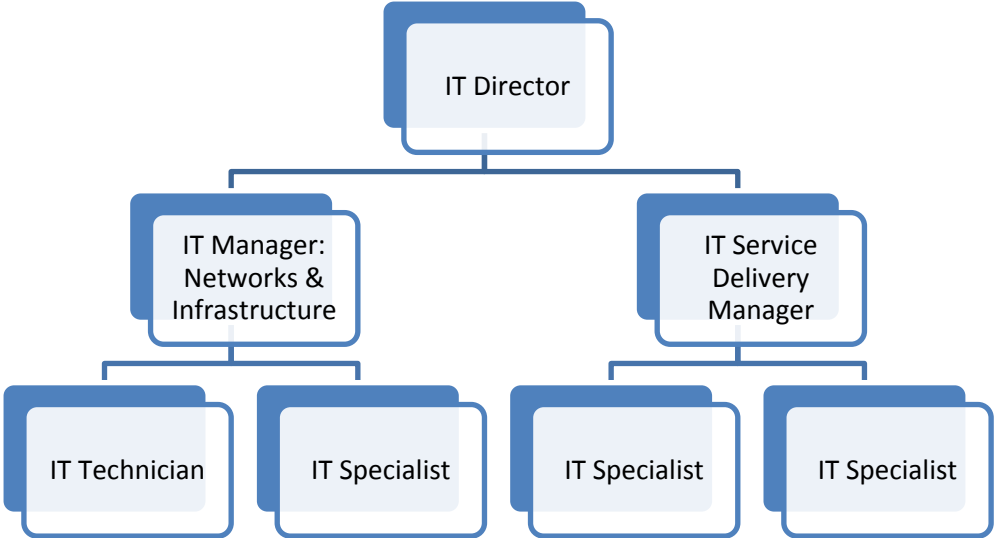
Initiative	Update IT Strategic Plan
Timeframe	In Progress
Alignment with City Strategic Goals	• Governance: Supports decision-making with timely & accurate short-term & long-range analysis • Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk • Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations
Key Action Items	• Obtain formal approval for IT Plan • Secure funding for new plan priorities • Begin implementation immediately including IT department reorganization and establishing Citywide IT governance
Resources/Budget	• Project completed; no additional funding required

3.1.2   Reorganize IT Department to better Prepare for the Future

As the City plans and prepares for the digital future, the organization of the IT Department needs to change as well. The IT Department should be reorganized into two groups, each with a manager. One group would focus on IT infrastructure and basic IT operations, the typical focus of most municipal IT departments. A new group would be formed to focus on the future needs relating to new business areas such as cloud computing and shared services which represent new and very high value initiatives for the City. The required skillset in this group would include project management including vendor relationships, communications, solutions development and problem solving, and IT decision making and financial management (IT "business value").

One of the key long term goals of the City is to control personnel costs—a major goal currently of just about every governmental entity in the United States, and beyond. The reality of modernization and digitization is that while over the long term people related costs are generally reduced, effective management and implementation of digital initiatives requires a fluid, flexible approach to staffing and professional services. This kind of agile approach to staffing is not typical of government, and presents a challenge but also a real opportunity for the City to serve as a model for others. Having resources available to staff up (and then back down) for certain initiatives—through contracted staffing, professional services, partnering, etc.—will be important for the long term success of the City's IT plan.

This reorganization follows a trend in government IT recognizing the need for IT organizations to do more than keeping internal systems and networks functioning, and to leverage new technologies and IT business models such as cloud services and shared services across their enterprises. The newly organized department is illustrated in the organization chart below.

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                        │ IT Director  │
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               ┌───────────────┴───────────────┐
      ┌────────┴─────────┐            ┌─────────┴────────┐
      │   IT Manager:    │            │   IT Service     │
      │   Networks &     │            │   Delivery       │
      │  Infrastructure  │            │   Manager        │
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  │    IT     │ │    IT      │      │    IT      │ │    IT      │
  │ Technician│ │ Specialist │      │ Specialist │ │ Specialist │
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Initiative	Reorganize IT Department to better Prepare for the Future
Timeframe	Initiate Changes in FY 2012-2013
Alignment with City Strategic Goals	• Governance: Attracts, motivates and develops a high-quality workforce dedicated to public service • Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Responsive, accessible & courteous to its customers
Key Action Items	• Establish new IT service Delivery Manager Position • Reorganize department along functional lines as identified in organization chart above • Begin project planning for new initiatives from updated IT Strategic Plan
Resources/Budget	• Requires level increase elevating position to IT Service Delivery Manager

3.1.3   Implement a Citywide IT Decision-making/Governance Process

The City over the past five years has done an excellent job of following its IT Strategic Plan and implementing high value technology projects. The City has managed to do this fairly effectively without a formal process. As the City moves into new technologies and considers projects that cut across departments and additional public facing projects, it will need to continue to refine the process in order to facilitate timely, cost effective, and goals-driven decision making on IT investments. This process does not have to be overly formal, and given the collaborative culture of the City, it probably should not be; however, the process has to be clear and have support throughout the organization.

As an initial step, the City should review the current process for making IT decisions. Out of this review one or two alternatives for establishing a more refined IT governance process could be recommended. For example, a recommendation might be to form a technology advisory group that includes identified representatives from all or most departments, with the IT Director guiding and tracking the process. This is an IT governance approach that has been adopted by many municipalities, and it can be highly effective as long as it is supported and the processes are adhered to. Another alternative that might better suit the City of Mission Viejo specifically would be to form a technology innovation council that seeks out new ideas and best practices in addition to providing input and guidance on major technology decisions and investments within the City. The makeup of this Technology Innovation Council (TIC) would include "power" business users and other selected individuals who are actively interested and engaged in how technology can be used to provide better services and communications. In any case, time and some level of resources would have to be made available for the governance process and those who participate in it, and specific measureable outcomes and metrics would have to be identified.

Initiative	Implement Citywide IT Decision-making/Governance Process
Timeframe	• Initiate immediately • Formal Governance Process in Place FY 2012-2013
Alignment with City Strategic Goals	• Governance: Supports decision-making with timely & accurate short-term & long-range analysis • Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk • Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all

	operations
	• Governance: Responsive, accessible & courteous to its customers
Key Action Items	• Select IT governance model/process that best fits City's culture and is aligned with the IT strategic plan
	• Communicate new governance process to key stakeholders
	• Recruit participants in City advisory group(s) as part of governance process
Resources/Budget	• No material budget impact
	• Requires department participation in new governance organizational structure

3.2 IT Infrastructure Preparedness: Priority Changes and Updates

3.2.1 Prepare for Cloud Computing

Cloud and pervasive computing—devices that are always connected to the Internet, always generating real time data, content and communications—represent a very real vision of the future. Cloud computing has held great promise for the public sector, but it only recently has become realizable with proven technologies and business models driven by the largest commercial players including Google, Amazon, Microsoft and others. Transitioning to cloud infrastructure and services now in anticipation of the future will generate real benefits now—better services, cost efficiencies, enhanced communications—and keep Mission Viejo at the forefront of effective government.

The transition to cloud services should be done in a phased approach, and be directly aligned with the City's overall strategic framework. To its credit, the City's IT department has already recognized this trend, and has taken the initial steps to move to the cloud. The next steps should be to fully implement one or two services utilizing a cloud model so as to gradually build experience and expertise with cloud services, and develop a framework and strategy that will best serve the City as it moves more services to the cloud. The initial services to test fully in the cloud should be internal; this will allow IT staff to more closely monitor and test the service, and not have to worry about any disruption to public facing services and communications.

Initiative	Prepare for Cloud Computing
Timeframe	• Initiate Planning Immediately • Initial Cloud Pilot in FY 2012-2013 • Migration of Data, Services, Business Applications to Cloud Beginning in FY 2013-1014
Alignment with City Strategic Goals	• Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations • Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Responsive, accessible & courteous to its customers • Community Development: Provides superior services that meet the unique & distinctive needs of the community, setting it apart from other cities in the area • Economic Development: Facilitates business development through community partnerships & "business-friendly" processes
Key Action Items	• Establish decision making criteria/framework for moving IT applications and services to the cloud • Prioritize key applications and services that are appropriate/well positioned to move to the cloud • Create project plan for implementation of cloud services
Resources/Budget	• $25,000 in Professional Services for Planning • $10,000 FY12-13 Funding Request • Potential reserves for as needed temporary staffing augmentation and/or professional services

3.2.2 Develop Master Data Framework

New developments in web technologies including cloud computing and web services are having a profound impact on government agencies at all levels. Constituents are increasingly demanding greater transparency, accountability, and access to information which is a driving force behind what is known as the Open Data movement in government. Open data is the notion that government data should be freely available to everyone to access via the web.

For the City specifically, a master data framework will guide the acquisition, creation, distribution, presentation, use, integration, and storage of all or most key data assets within the City. Further, this data framework will facilitate the City's move to cloud services, and its ability to provide more and better e-government services over the web and through mobile access.

Initiative	Develop Master Data Framework
Timeframe	• Initiate Planning Immediately • Implement any Required Hardware, Software, Network Upgrades and Standardization in FY 2012-2013 • Assess for Migrating Data to the Cloud in Second Half of FY 2012-2013 • Assess for Including in Shared Services Expansion in FY 2013-2014
Alignment with City Strategic Goals	• Economic Development: Potential to facilitate business development through greater connections with businesses and the community. Examples including providing Open Data feeds for Business listings, Vacant Property, etc. • Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk • Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations • Governance: Responsive, accessible & courteous to its customers
Key Action Items	• Conduct best practices review of master data management for municipal government • Develop inventory of key City data assets that can be made available to the public, other public entities, and across City departments—include ownership, usage, licensing information • Prioritize data assets and develop policy for public dissemination and usage • Create framework and classification system/taxonomy for City Data used for input into the Open Data initiative (4.2)
Resources/Budget	• $30,000 in Professional Services • $10,000 FY12-13 Funding Request

3.2.3   Continue and Expand Disaster Recovery Planning Efforts

An overarching goal of the initial IT Strategic Plan included risk mitigation and preparedness and continues to be central to all aspects of IT at the City of Mission Viejo. The City has made a significant investment in this area and will continue to be an important initiative going forward.   One of the City's major IT achievements over the past few years has been the implementation of a leading edge Disaster Recovery (DR) plan. The City consolidated its physical servers, upgraded its storage area network (SAN) and replicates its data center outside of the area using new virtualization technologies.

Given the City's investment in this area and a high level of interest from other local agencies, disaster recovery related services are prime candidates to be offered to other public sector organizations in the initial Shared Services pilot.

Initiative	Continue Disaster Recovery Planning Efforts
Timeframe	• Ongoing • Potentially tie in with Shared Services Pilot in second half of 2012-2013
Alignment with City Strategic Goals	• Public Safety & Emergency Preparedness: Prepares & provides for a well-planned, coordinated & prompt response to emergencies & call for service • Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk • Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations
Key Action Items	• Update Disaster Recovery plan on a regular annual/basis • Conduct periodic tests that disaster recovery plan procedures are adhered to • Look for opportunities to include disaster recovery into shared services initiative (e.g.
Resources/Budget	• No additional funding request; item included in department approved operating budget

3.3 Business Improvement & Process Automation: Priority Changes and Updates

3.3.1 Replacement of City's Financial System/New ERP System

The City is due for a major upgrade/changeover of its current Financial Management System. This will be one of the major IT investments and upgrades over the next few years, and the timing is optimal. The City recently hired a new Finance Director who has direct experience overseeing the implementation of a new financial management system/ERP and is very supportive of the project. The current system (Bi-Tech IFAS) presents a number of challenges to the City including system usability, customer support, systems integration, end user training and technology obsolescence among others. The technology on which IFAS is built is based on older mainframe technology and has a number of deficiencies that impact City operations and customer service. Since the City purchased IFAS two decades ago the computer software industry has advanced rapidly and Bitech's products have failed to keep pace with these advancements most notably in the areas of usability/graphical interface, interoperability, and the use of the web.

The new City enterprise system will provide a number of benefits to the City and translate directly into improved customer service and operational efficiencies. Notable benefits of the new system among others include the following:

- Improved system functionality
- Better reporting and access to information
- Enhanced tracking of capital improvement projects
- Interoperability with other City systems
- Human Resource (HR) capabilities
- Significant customer service improvements/functionality including utility billing

Initiative	Replacement of City's Financial Management System/New Enterprise Resource Planning (ERP) System
Timeframe	• Initiate Planning Immediately • Issue RFP in Fall 2012 • Vendor Selection early 2013 • Project Implementation Initiated in Spring 2013 • Target Go-Live in July 2014
Alignment with City Strategic	• Governance: Supports decision-making with timely &

Goals	accurate short-term & long-range analysis
	• Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk
	• Governance: Protects & prudently manages financial, human, physical & technology resources
	• Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations
	• Governance: Responsive, accessible & courteous to its customers
Key Action Items	• Hire third party independent project manager to oversee project throughout process
	• Write RFP and conduct vendor selection process through contracting
	• Prepare for System implementation including necessary IT upgrades to support new system and plan for data migration
	• System implementation and "Go-Live"
Resources/Budget	• $35,000 in Hardware Costs
	• $950,000 in Software Costs
	• $300,000 in Professional Services
	• $125,000 FY12-13 Funding Request; Total estimated project cost of $1,420,00 all inclusive

3.3.2   Ongoing Business Systems and Support Upgrades and Enhancements

The City has done a commendable job over the past two to three years putting in place a modern IT foundation that can support all of the City's services and activities in the future. It will be critical to plan for and continue ongoing enhancements, upgrades and refreshes across all City systems: devices (PCs, mobile devices, tablets) and productivity tools; Line of Business (LOB) systems and applications; and IT infrastructure support and helpdesk tools among others. Additionally, as a key part of its longer term planning the City should enhance its training resources specifically for business users. This training will accomplish three key objectives: 1) Reduce the level of basic support required from IT, especially for lower level user support which is most effectively addressed with self-help and/or collaborative team help; 2) Increase greatly the productivity of business users, especially regarding the use of advanced tools and features that are available with most business applications and systems, but often go unused

because of lack of training; and, 3) Provides built-in checkpoints by business users to review the effectiveness of key business systems, thereby facilitating planning and resources for upgrades, enhancements, or replacements.

The City recently upgraded to Track-IT version 10.5, a leading software package that includes ITIL (Information Technology Infrastructure Library) and change management features. The upgraded software has capabilities for employees to directly log support incidents online and track cases among others. The City should continue fully implementing the Track-IT software including the new features. In the future and in line with moving to the cloud, the City should assess hosted solutions known as Software as a Service (SaaS). These solutions are becoming mainstream and offer a viable alternative to more traditional packaged software including ITIL support. There are a number of new offerings that allow for integration with Active Directory and can be a more cost effective alternative over the long run. These web based applications are built from the ground up to be interoperable with existing IT environments and may be a viable alternative to software installed locally on City servers and desktops.

The City currently has a periodic refresh cycle that allows for ongoing upgrades on an annual basis to replace older PCs. The City has held off on upgrading to newer versions of Microsoft's operating system and desktop productivity suite which presents a timely opportunity to replace all PCs in the City at one time and include the most up to date productivity tools.

Effective systems management software is critical to ensuring system reliability, security, uptime, and end user satisfaction. Continued progress on this front will help lower overall maintenance costs and help mitigate costly system downtime. Improved help desk and system management tools for are critically important in advance of major new enterprise software projects that will result in greater support calls during rollout.

Initiative	**Ongoing Business Systems and Support Upgrades and Enhancements**
	• Enhanced Help Desk System/ITIL
	• Ongoing PC/Desktop Productivity Refresh Cycle
	• Ongoing Training for Business Users
	• Periodic Planned Line of Business (LOB) Systems Upgrade Reviews
Timeframe	Ongoing with Regularly Planned Milestones and Reviews
Alignment with City Strategic Goals	• Governance: Responsive, accessible & courteous to its customers
	• Governance: Protects & prudently manages financial, human, physical & technology resources

	• Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk
Key Action Items	• Review and plan for regular PC refresh • Implement additional enhancements to Help Desk System, including ITIL
Resources/Budget	• $40,000 in Hardware Costs • $20,000 in Software Costs • $25,000 in Professional Services • $35,000 FY12-13 Funding Request • Plan for adequate reserves for future refresh, upgrades, enhancements

3.3.3 Continue IT Security Initiatives—Focus on Web, Mobile, Cloud

Network security is one of the most important areas of technology planning and implementation. It impacts all aspects of IT from physical infrastructure to hardware and software. The City has made significant strides in securing its systems over the last several years including upgrades to its network infrastructure. Additionally, security must not be viewed as a single project or piece of technology but an ongoing process that must be continually revisited. The City has embraced this approach and conducts periodic security audits and risk assessments including the use of professionals who probe the City's systems for vulnerabilities, a best practice in network security.   All new technology initiatives should be analyzed to determine their security implications.

An effective security program is more than simply installing technology hardware such as a firewall or an intrusion detection system. It requires a well thought out program that includes policies, procedures, training, and a proper understanding of the potential vulnerabilities to City's systems that can occur in the following key areas:

- Physical Security
- Operational Security
- Application and System security
- Disaster Recovery and Continuity planning

Initiative	Continue IT Security Initiatives—Focus on Web, Mobile, Cloud
Timeframe	Ongoing/In Progress
Alignment with City Strategic Goals	• Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk • Governance: Protects & prudently manages financial, human, physical & technology resources • Public Safety & Emergency Preparedness: Prepares & provides for a well-planned, coordinated & prompt response to emergencies & call for service
Key Action Items	• Conduct periodic reviews of IT security risks including impact of newer/emerging technologies including web and cloud computing • Continue implementation of recommendations from outside security consultant
Resources/Budget	• No additional funding request; item included in department approved operating budget

3.3.4   Pilot Shared Services Program

The City and its IT consultants have explored a number of innovative IT practices including shared services: delivering certain types of IT related services to other area governments and agencies. This "shared services" model is emerging in the government sector as an innovative practice whereby governments can work together collaboratively to acquire, develop and deliver services to each other and the public more effectively and with potential cost savings or even revenue generation.

The City should plan on implementing a shared services pilot focusing on a manageable range of IT services. These services might include disaster recovery services, data storage, and specific web related services. The City has already shown a high degree of competence, innovation and leadership in these areas, making them prime candidates for shared services. Additionally, the City has preliminarily discussed certain of these efforts with neighboring municipalities and agencies including the City of Aliso Viejo and the El Toro Water District. Specific steps for the pilot include:

• Develop an engagement "package" for the shared services pilot including an easy to understand background/marketing piece, along with a more formal engagement document such as a Memorandum of Understanding (MOU).

- Define the initial set of IT services to be offered for the pilot phase. Preliminarily, the City has identified a few areas in which Mission Viejo is well ahead of other municipalities and agencies, such as disaster recovery services, data storage/management, and website related applications and services.

- Identify and engage two to three municipal government partners/participants for the pilot. These partners should be willing to officially participate, including signing on to the MOU and committing to some level of effort to initiate and evaluate the pilot.

- Create a preliminary business plan for shared services. The plan should include detailed alternatives and recommendations for the business model, an initial financial plan including revenue generation, and recommendations for expansion and sustainability beyond the pilot phase.

Initiative	Pilot Shared Services on a Limited Basis
Timeframe	• Initiate Planning Immediately • Implement Phased Pilot beginning in Second Half of FY 2012-2013 and through FY 2013-2014
Alignment with City Strategic Goals	• Economic Development: Facilitates business development through community partnerships & "business-friendly" processes • Community Development: Provides superior services that meet the unique & distinctive needs of the community, setting it apart from other cities in the area • Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations • Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Responsive, accessible & courteous to its customers • Improving Public Relations and Communications
Key Action Items	• Develop shared services preliminary business plan including prioritization of services, revenue forecast, and agency agreements options including MOU's • Implement shared services on a select basis to prove out business model

Resources/Budget	• $50,000 in Professional Services
	• $30,000 FY12-13 Funding Request
	• Plan for potential future staffing needs—assuming success and expansion of Shared Services initiative

3.4   E-Services and Digital Communications: Priority Changes and Updates

3.4.1   Social Media and Digital Communications Planning

The use of social media in government communications is no longer a luxury, or something to be considered as an afterthought. Social media such as Twitter, Facebook, FourSquare, Google+ and numerous others are now mainstay forms of communications for millions of Americans, especially members of the younger generations. Other forms of digital communications such as blogs, RSS feeds and e-alerts also provide multiple ways for users to communicate and engage with municipal governments and vice versa. The effective use of social media for communications and resource management in numerous emergency situations has been well documented over the past few years and presents a very real opportunity for governments to "harness" community action and knowledge.

The explosion of social media and its adoption in the public sector, however, are outpacing the ability of most municipal governments to develop adequate policies, guidelines and support for such activities. Most municipalities do not have sound policies and guidelines to help manage the effective and safe use of social media and digital communications tools. Another issue that will need to be addressed is what the proper role of IT is in supporting, managing, guiding or even producing content for social media and digital communications. As the use of and demand for social media rises, these are very real issues that the City needs to address from a policy and a resource standpoint.

Initiative	Social Media & Digital Communications Planning
Timeframe	• Initiate Planning Immediately
	• Develop Policies, Guidelines and Electronic Communications Plan in FY 2012-2013
	• Continue Integrating Social Media and Digital Tools into Overall City Communications—In Accordance with the Policies and Guidelines Developed

Alignment with City Strategic Goals	• Governance: Responsive, accessible & courteous to its customers
	• Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk
	• Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations
	• Community Development: Creates & fosters a sense of community pride through citizen involvement, engagement & participation
	• Improving Public Relations and Communications
	• Public Safety & Emergency Preparedness: Prepares & provides for a well-planned, coordinated & prompt response to emergencies & call for service
	• Public Safety & Emergency Preparedness: Builds an informed, involved & engaged community that shares responsibility for being safe & prepared for emergency situations
Key Action Items	• Complete Policies, Guidelines, and Electronic Communications Plan
	• Selectively implement new social media and digital tools in a phased manner and in accordance with polices and guidelines developed
Resources/Budget	• $50,000 in Professional Services
	• $30,000 FY12-13 Funding Request

3.4.2   Implement Citywide Open Data Initiative

In 2009, one of the first acts by the newly elected President of the United States was to issue the landmark Transparency and Open Government memorandum to the heads of all executive departments and agencies. One of the cornerstones of the subsequent transparency and open government initiative was to make government data of all types accessible to the public in electronic formats—this became commonly known as "open data." Since that time, a range of open data initiatives have been launched by federal agencies, states and municipal governments of all sizes. The primary driver for most open data initiatives is to provide transparency and direct public access to information. These objectives are of course good, but most open data initiatives end up simply being searchable online data archives that are not very user friendly, usable, or indeed, useful.

The best, most innovative open data initiatives are fashioned specifically to engage the community, to stimulate new economic activity, and to provide value to both the government provider and the public consumers beyond just the raw data. The City has started down this path with some key data resources such as fire maps, and plans for more public access to City GIS resources. The City has a wide variety of high value data and datasets that could be made more accessible to the public including the business community. To the extent many of these datasets are non-mission critical, they can and should be managed and provided to the public in electronic/machine readable formats via a cloud solution. Providing new data sources to the public methodically over time—via an Open Data Initiative or Program with periodic data product "releases"—would also continue to place Mission Viejo at the forefront of good government.

Initiative	Implement Citywide Open Data Initiative
Timeframe	• Initiate Planning Immediately • Phased Pilot Implementation beginning in FY 2012-2013
Alignment with City Strategic Goals	• Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations • Economic Development: Facilitates business development through community partnerships & "business-friendly" processes • Community Development: Provides superior services that meet the unique & distinctive needs of the community, setting it apart from other cities in the area • Improving Public Relations and Communications
Key Action Items	• Identify key data assets for pilot program • Utilize master data framework to create data sets • Implement pilot program
Resources/Budget	• $35,000 in Software Costs • $15,000 in Professional Services • $30,000 FY12-13 Funding Request

3.4.3   Expand Mobile Services and Solutions

Access to the Internet via mobile devices, tablets and other "untethered" devices will overtake access via desktop computers as early as the end of 2012. Given this massive trend, the City should simultaneously continue to expand the data, information and services that it provides in a "pervasive" manner—most notably via mobile services and applications.

- **Mobile**: The City has recently launched a number of public services that are accessible via mobile devices. This is a good start, and in the future mobile should become an integral part of all IT related planning so that City employees are able to work more effectively using mobile devices, citizens and businesses are able to access information and conduct business with the City via mobile devices, and all City data and information is "mobile enabled." This mobile enablement of data should be addressed as part of the City's Master Data Framework (Initiative 2.2).

- **Tablet**: The tablet computing market has exploded since the launch of the iPad. The third generation iPad was released in Spring 2012, and the competitive landscape for Android operated tablet computers has become incredibly rich in response. Like smartphones, tablets are here to stay, and are becoming an integral part of our digital lives, both at work and at home. It should be noted that Council Members at the City now use iPads to access agendas, email and other information during City Council meetings.

- **Digital Media/Signage**: The City has explored implementing digital media signage in key City locations with content fed and managed over the Internet. Combined with the City's past infrastructure enhancements and the current recommendations for moving more aggressively to open data, electronic information and communications, and cloud services, providing content, media and data via semi-mobile digital displays and "public interactives" would be a worthy endeavor.

Initiative	Expand Mobile Services/Solutions
Timeframe	Initiate Immediately
Alignment with City Strategic Goals	• Governance: Supports decision-making with timely & accurate short-term & long-range analysis • Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk • Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Enables & enhances transparency,

	accountability, integrity, efficiency & innovation in all operations • Governance: Responsive, accessible & courteous to its customers
Key Action Items	• Conduct analysis of mobile market for municipal government including prioritization of applications of highest value to the City of Mission Viejo • Establish mobile device policies and standards/preferred platforms • Implement new mobile solutions on a select basis
Resources/Budget	• $24,000 in Hardware Costs • $50,000 in Software Costs • $28,000 FY12-13 Funding Request

3.4.4   Enhance, Expand and Continue to Standardize City Website Offerings

E-Services and online applications represent customer facing applications and provide an important barometer of the overall state of IT at the City. The City has done an excellent job of continuously enhancing its web presence and online services, and has approached the web as a true business, service delivery and communications platform that is constantly evolving. This ongoing initiative requires a solid understanding of customer needs. The City has made significant progress in this area with a new website update underway. The current website updates require only incremental improvements due to the progress already made in these areas as well as the need to prioritize resources on a new enterprise finance system (ERP). The implementation of the new ERP should include online capabilities that can be utilized in rolling out new e-services and capabilities.

Initiative	**Expand, Enhance, Standardize City Website Offerings**
Timeframe	• Initiate Immediately—In Progress • Complete Current Upgrade Spring 2012 • Plan for New Site Features, Enhancements for FY 2012-2013
Alignment with City Strategic Goals	• Governance: Supports decision-making with timely & accurate short-term & long-range analysis • Governance: Provides assurance of regulatory & policy compliance to minimize & mitigate risk

	• Governance: Protects & prudently manages financial, human, physical & technology resources • Governance: Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations • Governance: Responsive, accessible & courteous to its customers
Key Action Items	• Enhance City website with new features on a recurring basis to further promote the use of the web as a key customer service channel • Integrate new web features with other related IT initiatives including the Finance/ERP System Upgrade, Open Data, and Mobile services
Resources/Budget	• $5,000 in Hardware Costs • $30,000 in Software Costs • $30,000 in Professional Services • $25,000 FY12-13 Funding Request

4.0   Implementation Framework and Key Success Factors

4.1   Key Success Factors

This section provides an outline for the plans that should be included for implementation, including the basis for monitoring and measuring success. As project planning and implementations proceed for each of the strategic priorities above, the City will need to identify at least the following:

1. Assignment of responsibility for initiating implementation

2. Cost factors and budget sources—for both the initial implementation and ongoing sustainability

3. IT Vision elements directly supported/furthered by implementation

4. Cross Department value; relationship to/impacts on other strategic priorities

5. Strategic placement of each individual IT project/initiative within rolling 2 year IT Action Plans

6. Benchmarks of success in implementation

   a. Structure/process measures for implementation

   b. Results in meeting goals

   c. Measures of results in effectiveness

7. Timeline for implementation

8. Appropriate communication and outreach plans about the IT initiative

4.2   Summary Action Plan

Finally, the Action Plan on the following page summarizes the initiatives included in the IT Strategic Plan Update.

Summary Action Plan

Priority Initiative	Benefits/Value	Cost Factors/Notes
1. Organizational Preparedness		
1.1 Update IT Strategic Plan	• Aligns technology initiatives with City's strategic goals • Better management of financial, human, physical & technology resources • Formalizes IT planning process as an ongoing program within the City and builds off of accomplishments from initial plan	• Project completed • Plan for review checkpoint in 12-18 months as part of implementation
1.2 Reorganize IT Department	• Better aligns City IT organization with new developments in IT industry including cloud computing and mobile technologies • Provides much needed managerial support for higher value added services including project management, vendor management, and introduction of new IT services/applications • Provides better career growth path for internal IT staff and succession planning.	• Requires level increase elevating position to IT Service Delivery Manager • Need to plan for flexible IT resources to staff up for periods of time during implementation—contract staffing, professional services, etc.
1.3 Implement Citywide IT Governance	• Supports decision-making with timely & accurate short-term & long-range analysis • Helps ensure better use of City funds. • Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations • Improves collaboration and communication among City employees.	• No material budget impact • Requires department and key business user participation in new governance process
2. Infrastructure Preparedness		
2.1 Prepare for Cloud Computing	• Provides a strategic and phased approach to moving IT services to the cloud • Helps maximize existing City investments in internal IT infrastructure during transition period • Helps mitigate risk by properly addressing security risks associate with moving to cloud solutions	• $25,000 in Professional Services • $10,000 FY12-13 Funding Request

Priority Initiative	Benefits/Value	Cost Factors/Notes
2.2 Develop Master Data Framework	• Key initiative that is part of an overall trend at all levels of government to provide access to government data and information in machine readable formats • Responsive to constituents demands for greater transparency, accountability and access to information • Addresses important policy guidelines on digital information made available to the public including privacy and security	• $30,000 in Professional Services • $10,000 FY12-13 Funding Request
2.3 Continue Disaster Recovery Planning	• Ensure secure and reliable systems including disaster mitigation planning • Risk avoidance—Secure against random (e.g., virus, hackers) and malicious intrusion, protect City electronic assets, ensure business uptime. • Standardize security architecture for future technology decisions	• No additional funding request • Item included in department approved operating budget
3. Business Improvement and Process Automation		
3.1 Financial Management System Replacement/New ERP	• Improved business processes and worker productivity • enhanced customer service including better support for web/online e-business capabilities • Greatly Improved access to data and Information • Improved auditing and control features • Better Interoperability and Integration with other City systems (e.g. Document Management, GIS)	• $35,000 in Hardware Costs • $950,000 in Software Costs • $300,000 in Professional Services • $125,000 FY12-13 Funding Request
3.2 Desktop Productivity/PC Refresh	• Improved Worker Productivity and lowered support costs • Better Compatibility with newer versions of desktop productivity applications including Microsoft office • Optimal PC environment for planned new finance/ERP System upgrade project • Lower Support Costs	• $40,000 in Hardware Costs • $20,000 in Software Costs • $25,000 in Professional Services • $35,000 FY12-13 Funding Request

Priority Initiative	Benefits/Value	Cost Factors/Notes
3.3 IT Security—Web, Mobile, Digital	• Ensure secure and reliable systems across new platforms including web and mobile • Improved overall security and protection of City assets • Standardize security approach for new IT systems/applications	• No additional funding request. Item included in department approved operating budget
3.4 Pilot Shared Services Program	• Maximizes return on investment (ROI) on City's information technology infrastructure/assets • Allows the City to do 'more with less" through shared services revenue model • Aligned with City's strategic goal of prudently managing financial, human, physical, and technology resources	• $50,000 in Professional Services • $30,000 FY12-13 Funding Request
4. E-Services and Digital Communications		
4.1 Social Media & Digital Communications	• Improved Customer Service • Responsive to constituents demands for greater interaction via digital communications • Leverages new development in information technology to improve operations	• $10,000 in Professional Services • $6,500 FY12-13 Funding Request
4.2 Open Data Initiative	• Enables & enhances transparency, accountability, integrity, efficiency & innovation in all operations • More efficient means of delivering data and information to the public • Allows the City to plan proactively plan for an initiative that is being mandated at the Federal level and will impact state and local government agencies in the near future	• $35,000 in Software Costs • $15,000 in Professional Services • $30,000 FY12-13 Funding Request
4.3 Expand Mobile Services/Solutions	• Improved customer service • Demonstrates City's responsiveness to a massive shift in constituent usage of mobile devices • Improved operational efficiencies	• $24,000 in Hardware Costs • $50,000 in Software Costs • $28,000 FY12-13 Funding Request
4.4 Website Upgrades/ Standardization	• Improved Customer Service • Upgrade Key Features that provide greatest	• $5,000 in Hardware Costs

Priority Initiative	Benefits/Value	Cost Factors/Notes
	value to users (e.g. Search) while planning for longer term roll-out of Line of business web application components as part of finance system/ERP upgrade project • Cost effective approach to service delivery	• $30,000 in Software Costs • $30,000 in Professional Services • $25,000 FY12-13 Funding Request