

**Update to
Strategic Technology Plan
Final Report
City of Jacksonville, NC**

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1.0 EXECUTIVE SUMMARY

The City of Jacksonville is maturing in their management and use of information technology (IT) to improve City services. They have taken care of many of the basics of IT service delivery – stabilizing and improving their infrastructure including introducing redundancy, implementing a technology refresh program, deploying enterprise applications, implementing a Citywide wireless network, recognizing the value of a Citywide Geographic Information System (GIS) resource, and planning ahead for their IT needs. As such, they are beginning to focus on needs such as maximizing value from their existing IT investments and evolving the IT Services (ITS) Department into consultants.

Our firm found City leadership who recognize the value of technology and City departments that are supportive of the IT Director and his staff. Additionally, City employees are focused on their customers, truly committed to continual improvement of their service delivery, open to suggestions, and willing to work together. Satisfaction surveys revealed that customers are very satisfied with services from the ITS Department and ITS staff are satisfied with their working conditioning and relationships. These qualities put the City in the position to execute an outstanding Strategic Technology Plan and continue to reap the benefits of their investments in IT.

Despite these very positive findings, City Departments still believe that IT is under-resourced and that their departmental IT needs are not being met to the level they desire. Furthermore, they believe that they often get caught up in handling day-to-day issues and are not able to be as proactive as they wish. Finally, they correctly sense that they are not taking advantage of all the functionality available to them from their current IT systems.

The issues of IT resource constraints and meeting departmental IT needs can be addressed through:

- Implementation of IT demand management with a participatory Citywide IT governance process, which ensures that the organization's IT resources are focused on the City's recognized priorities and sets expectations appropriately; and
- Development of Service Level Agreements (SLAs) between ITS and each department, which clarifies responsibilities and further manages expectations.

Since the City is implementing both IT Governance and SLAs, it should quickly see further improvements in both IT customer and staff satisfaction as well as a better understanding and acceptance of where their limited IT resources are being used.

With regard to taking full advantage of functionality available in existing IT systems, several of the priorities recommended in this report, such as establishing an IT Super Users Program, implementing an IT Training Assessment Program, and redefining pre and post-implementation training

requirements, will help address this issue. Finally, providing resources to ITS to allow it to evolve its consulting and research functions will address the issue of moving into a proactive position.

The CIO Collaborative is pleased to present the results of its engagement with the City of Jacksonville for IT consulting services. These services were delivered within the time allocated and according to contract terms.

We thank you for the opportunity to work with the City.

FINDINGS

Consultants undertook several efforts to provide information to update the City's existing Strategic Technology Plan including conducting IT Customer and Employee Satisfaction surveys, meeting with City leadership, facilitating departmental and Citywide IT planning sessions, obtaining the status of 2006 IT related priorities, conducting a comparison of the City's IT salaries with national public sector IT salary data, and reviewing fiscal year 2007-08 IT-related budget submissions. Our findings are summarized below and detailed in the following report.

IT Customer Satisfaction

The IT Customer Satisfaction survey was conducted during the first half of November 2007 and 94 customers responded to the survey – a nearly 50% increase over the last year. The overall findings are excellent and ITS continues to enjoy a high level of customer satisfaction. More specifically, an analysis of responses revealed the following.

- When asked to provide an overall rating, more than 96% of respondents rated the ITS Department as Good or better.
- A majority of respondents are using the centralized Help Line and over 86% are Satisfied or Very Satisfied with their services.
- Response times for both routine (non-emergency) and emergency IT related issues improved.
- In all cases, over 80% of end users are Satisfied or Very Satisfied with their access to IT resources.
- While a majority of end users are also satisfied with the City's telephone system, satisfaction levels for voice mail are low.
- Respondents were satisfied with only 20% of the applications listed in the survey.
- More than 83% of respondents are Satisfied/Very Satisfied with GIS map making services but are much less satisfied with their access to GIS data and in-depth GIS analysis tools.
- When asked to rate their level of satisfaction for five (5) factors for ITS – responsiveness, helpfulness, courteousness, knowledge level, and communication skills - significant increases in the level of satisfaction were realized in all categories, especially in the areas of responsiveness (+15.2%) and helpfulness (+12.2%).

IT Employee Satisfaction

The IT Employee Satisfaction survey was conducted during the first half of November 2007 and 11 ITS employees responded – the same number as last year. Nearly 82% of IT staff are satisfied with their job, down from over 91% last year. The percentage of IT staff who feel a sense of pride or accomplishment for the work they do remained very high this year at 90%. Satisfaction with salary (54.6%) and benefits (63.7%) are below last year's rate of 75% each. Satisfaction with their supervisor (63.7%) increased from last year's rate of 50%.

Additionally, our analysis of responses revealed the following.

- IT staff indicated that their job duties and benefits were the most important overall factors contributing to their satisfaction.
- Overall IT staff believe that their job duties and assignments are what they expected (72.7% rated it Very Close) and nearly 73% would change their job duties Very Little (36.4%) or Not at All (36.4%).
- IT staff are much less satisfied with the connection between performance and pay (50%) and their workload (50%).
- With regard to opportunities, every rating in this area was high with the exception of opportunity for advancement (40% Satisfied/Somewhat Satisfied) with 90% of IT Staff rating it as Important or higher, with 30% indicating that it is Critical to their job satisfaction.
- Ninety percent (90%) are satisfied with the types of technical training available to them and 80% are satisfied with the amount of training received to perform their work.
- With regard to communications, 70% of IT staff are satisfied with communication with their supervisor and 90% are satisfied with communication with their peers and customers.
- IT staff are the least satisfied with confidentiality at all levels in the chain of command (40%). Confidentiality among peers (80%) and by other members within the ITS Department (70%) were rated much higher. Confidentiality was rated the most important communications factor along with communication with peers and customers in terms of impact on job performance.
- When rating satisfaction with their immediate supervisor, IT staff indicated that they enjoy a high level of satisfaction in this area with 70% satisfied with their overall relationship.
- IT Staff are satisfied with City Administration with 80% believing that the City's leadership team is committed to promoting employee satisfaction.
- When asked about their peers, IT staff rates their satisfaction in all areas very high and rated each category as Important or better 100% of the time, with the relationship with their peers within the ITS Department ranked as the most critical peer factor influencing their job satisfaction.
- IT Staff were asked to indicate their level of agreement with a number of statements both positive and negative. Notable findings in this area include the following.
 - 100% of IT staff are satisfied with the kind of work they perform.
 - 100% understand their job responsibilities.

- 100% believe they can act independently of their supervisor when performing job duties.

Salary Comparison

Given IT employee satisfaction rating for salaries is low (54.6%), down nearly 21% below last year's rating, the current and proposed (effective January 2008) salaries of the City's eight (8) IT positions were compared against national public sector IT salary data.

The comparison revealed that a majority of the proposed adjustments to the salary ranges address the problems identified when current salaries were compared against national data. Most notably, the City's current starting salaries are the lowest among all survey respondents in most cases.

The proposed adjustments to salary ranges address this issue. Despite the pending adjustments, four (4) positions – IT Director, Senior GIS Analyst, GIS Specialist, and Senior IT Specialist – are not competitive at the high end of the salary range and warrant further consideration.

Priorities

Through the individual departmental IT planning sessions and a review of fiscal year 2007-08 IT related budget submissions, the following four (4) IT related initiatives were most often identified as priorities by departments.

1. Field (mobile) access to City systems – implementation of increased remote access to more systems by employees working in the field.
2. Training for IT systems and applications – development of a more comprehensive Citywide IT training program that addresses timing, delivery methods, types, and responsibilities.
3. IT consulting services from ITS – evolution of the ITS Department to provide more consulting and research services to ensure that departments are aware and take advantage of available technology.
4. Expansion of the Technology Replacement Program – expansion of the IT refresh program to include more equipment such as radios, handheld devices, faxes, and printers.

Two (2) of the most often identified departmental priorities were chosen as topics for Citywide IT planning sessions – Field Access and Citywide IT Training. The priorities identified in the planning sessions for these initiatives are as follows.

Field (Mobile) Access:

1. Remote Access to Maps & Images
2. Tablets in the Field for Access to HTE
3. Expand the Use of AVL/GPS

Citywide IT Training:

1. Establish an IT Power Users Program
2. Create an IT Training Assessment Program
3. Include ITS in the City's New Employee Orientation
4. Develop a Catalog of IT Products & Services
5. Redefine Pre & Post-Implementation Requirements

A review of the IT related priorities identified in the 2006 Strategic Technology Plan reveal that significant progress has been made with regard to the Level One priorities. Most specifically we found the following.

- All initiatives identified as Level One priorities are in process, nearly complete, or complete. These initiatives include efforts underway through our engagement such as implementing IT Governance and establishing SLAs.
- For Level Two priorities, one – wireless network expansion – is in process and one related to implementing project and performance dashboards is included in the new list of priorities as a business intelligence initiative. The remainder do not appear to be priorities for the City at this time.
- For Level Three priorities, no progress has been made and, again, these initiatives do not appear to be current priorities based on the results of our planning efforts.

RECOMMENDATIONS

Consultant makes the following recommendations based upon the key findings outlined above.

IT Customer Satisfaction

Based on our analysis of the IT Customer Satisfaction Survey results, we make the following recommendations for the areas that received lower than normal satisfaction ratings with high importance ratings.

- Continue the follow up process when Help Line calls are completed to ensure that the end user is aware that functionality has been restored and that the problem was resolved or the service was delivered to their satisfaction.
- To manage expectations, ITS should also implement feedback to end users when their problem or request for service will not be addressed quickly. This feedback can be brief and delivered via email but should include an anticipated time line for resolution.
- ITS should investigate and address the root cause of the low satisfaction ratings for:
 - Printing;
 - Voice mail reliability; and
 - Voice mail setup/assistance.

- ITS should investigate and develop a plan to address low satisfaction ratings for:
 - Applications – HTE Work Order, LGviewer, LGdispatch, LGcrimes, On-line Mapping, ArcView and ArcReader;
 - Access to GIS data; and
 - In-depth GIS analysis tools.

IT Employee Satisfaction

Based on our analysis of the IT Employee Satisfaction Survey results, we make the following recommendations for the areas that received lower than normal satisfaction ratings with high importance ratings.

- ITS should consider options to address the low satisfaction ratings for salary (54.6%) and benefits (63.7%), especially for the positions of IT Director, Senior GIS Analyst, GIS Specialist, and Senior IT Specialist.
- ITS should develop a plan to improve the connection between performance and pay and to address concerns with workload.
- ITS should consider alternate work schedules and increasing flexibility of work hours where possible as flexibility of work hours was rated the most critical factor influencing job satisfaction in its category.
- ITS should investigate ways to accommodate special requests for IT training.
- ITS should address IT staff's low satisfaction rating for confidentiality at all levels in the chain of command, especially since it was also rated high in importance to job satisfaction.
- ITS should develop a plan to increase supervisors involvement in their employee's career development.

Citywide IT Priorities

Based on the Citywide planning activities and other research conducted by our firm, we recommend the following IT related priorities for the City. The priority and number of initiatives to be addressed during the next year should be determined through the IT Governance process and based upon resource availability.

1. **Remote Access to Maps & Images** – The purpose of this initiative is to provide access to the City's geographic information system (GIS) maps and data (layers), as-builts, site plans, and other image files in the field to support decision making and job performance. This initiative includes identifying, organizing, cataloging, updating and publishing the City's many image-type files including producing CDs and DVDs for use in the field and establishing a process to directly download necessary images and maps to laptop and MDT hard drives. It also includes establishing a periodic update process for distribution of new or modified images. The major cost component of this initiative is IT staff time to identify, organize, catalog, update, and distribute these images. Additionally,

staff working in the field need the proper equipment and training to make use of these image files.

2. **Establish IT Super Users Program** – The purpose of this initiative is to improve end user support and training for the City’s various IT systems through identification, training, and support of Super Users; City employees who are not in the IT department but are above average users of a particular IT application. This initiative includes identifying one or more Super Users per department to address the City’s many IT applications; identifying certification programs for Super Users for the various IT applications; establishing User Groups for the City’s standard applications such as HTE; and identifying means to reward Super Users, such as access to better hardware and software and advanced training programs. The cost of this initiative is driven by training and certification needs.
3. **Complete Disaster Recovery/Business Continuity Plan** – The purpose of this initiative is to complete the efforts that have begun to address development of a DR/BC Plan for the City. Given its location and proximity to a military base, the City has a high risk of both man-made and natural disasters. This Plan should be completed before the next planning cycle.
4. **Deploy Tablets in the Field for HTE Access** – The purpose of this initiative is to increase remote access to the HTE system to provide viewing of work order, permit and other related data as well as input of information into the system. This initiative includes providing tablets for staff working in the field and training them to remotely access permit, metering, inspection, crime, and other data from the HTE system. The major cost component is the purchase of tablets and staff training.
5. **Create an IT Training Assessment Program** – The purpose of this initiative is to develop relevant IT-related training programs for new and existing City employees to ensure that they can be as productive as possible and fully utilize the City’s IT systems. This initiative includes identification and/or development of an on-line self assessment tool that captures employees’ level of knowledge and skill for the various IT systems they use to perform their work. It also includes development of a template that assists departments with identifying what systems a new employee would use and ensuring that new employees receive training to do so. It would result in the development of personalized training plans based on the results of these activities including Computer Basics for those employees who are not familiar with using a computer. The major cost component for this initiative is the on-line self assessment tool and the resources necessary to create and manage the training plans. The actual training is another cost factor for those areas where it does not currently exist.

- 6. Implement ITIL Best Practices** – The purpose of this initiative is to complete ITIL certification of IT staff, develop an implementation plan, and begin implementation of best practices to improve IT operations and service management.
- 7. Increase Use of AVL/GPS** – The purpose of this initiative is to maximize routing efficiency and provide staff safety through the use of AVL and GPS. This initiative includes outfitting vehicles with AVL and implementing tracking and routing software for City functions such as sanitation, waste water, streets, and inspections. The major cost components of this initiative include the AVL/GPS technology as well as tracking and routing software and display devices.
- 8. Include IT in New Employee Orientation** – The purpose of this initiative is to educate new employees regarding the availability of all IT systems that can be used to support their job functions. This initiative includes the use of the Catalog of IT Products and Services described below and would include a review of IT-related policies and procedures, training opportunities, and participation in User Groups. The major cost component of this initiative is IT staff time to prepare for and attend New Employee Orientations.
- 9. Institute Project Justification Methodology** – The purpose of this initiative is to build on implementation of IT Governance and establish a process for project prioritization that includes business case justification. While many methods exist, the City should implement one that includes measures beyond traditional return on investment.
- 10. Develop Catalog of IT Products/Services** – The purpose of this initiative is educate new and existing employees regarding the availability of IT-related products and services, and policies and procedures related to the use of IT systems. This initiative includes creation of an on-line and hard copy catalog of IT-related products, services policies, and procedures for internal distribution including use at New Employee Orientations. The major cost component of this initiative is IT staff or 3rd party time to create the catalog.
- 11. Redefine Pre and Post-Implementation Training Requirements** – The purpose of this initiative is to maximize the training provided by vendors when a new system or major upgrades to an existing system are implemented. This initiative includes modifying the City's standard contract language to require both pre and post-implementation training for end users. Although there is no direct cost involved in changing the contract terms, the vendor's cost may increase for providing training in this manor.
- 12. Resource IT Consulting Services for the ITS Department** – The purpose of this initiative is to support the evolution of the ITS Department

to provide more consulting and research services for departments to ensure that departments are aware of available technology.

13. Expand the Technology Replacement Program – The purpose of this initiative is to expand the existing IT refresh/replacement program to include more IT-related equipment such as radios, handheld devices, faxes, and printers. A thorough analysis of the types and quantities of equipment to be added, plus determination of the replacement cycle (number of years) are required in order to determine the cost of this initiative.

14. Implement Business Intelligence Tools – The purpose of this initiative is to provide management-level information in a useful format based on the role and responsibilities of the end user. The City can make use of IT tools they already own such as Cognos and Microsoft SharePoint for assembling information and presenting in various ways on-line and in hard copy reports. The major cost component of this initiative is related to development of requirements, screen and report design, programming and development costs, as well as, IT technical and end user training.

15. Implement Formal Project Management – The purpose of this initiative is to begin using a more formal, best practice based project management methodology. It includes obtaining training, deploying a methodology, and obtaining tools. The major cost factors for this initiative are training and the purchase and deployment of project management software tools. Additional cost may be incurred if 3rd party resources are used to define and deploy a best practice based methodology.

Departmental IT Priorities

Over 30 IT initiatives were identified as departmental priorities during the planning process, with many of these initiatives overlapping the Citywide priorities noted above. The IT Governance process should be used to develop an overall prioritization of these initiatives and determine which ones will be funded in the next year, balancing the specific needs of the departments with Citywide needs.

IT Governance

Based on our firm's assessment and industry best practices, we recommend a tiered IT Governance structure for the City composed of five (5) decision making bodies:

- *City Leadership Team* –composed of City Manager (chair), IT Director and eight (8) Department Heads;
- *IT Advisory Committee (ITAC)* –composed of Assistant City Manager (chair), IT Manager and department deputies;
- *IT Management* –composed of the IT Director and his direct reports;

- *IT Project Steering Committee(s)* – composed of key stakeholders for the project and representatives from IT; and
- *IT Users Groups* – created as needed and are composed of end users, with support from the ITS Department.

The City has already begun implementation of this governance structure.

Additionally, we recommend that the Leadership Team, IT Advisory Committee and IT Management initially address the following.

- Adopt IT Principles for the City
- Adopt an updated Strategic Technology Plan
- Adopt a project prioritization methodology and use it to determine the prioritized list of IT initiatives, both Citywide and departmental, to be included in the next budget development cycle

Service Level Agreements

Our firm assisted with development of the SLA for the Police Department using a best-practice based template and trained City staff regarding the process. The City anticipates completing development of SLAs for the remaining seven (7) departments by March 2008. Once SLAs are in place for each department, ITS can use the information in them to identify optimal times to conduct system maintenance and review resource requirements for budgeting and staff allocation purposes.

2.0 INTRODUCTION

The City of Jacksonville embarked upon IT Strategic Planning in 2006, producing the City's first Strategic Technology Plan in August of that year. In an ongoing effort to be forwarding looking and make the best use of their IT resources, the City contracted with our firm for consulting services to update the Plan and assist them with establishing IT Governance and departmental Service Level Agreements. The consulting engagement began in September and is complete with acceptance of this report.

The following report provides background to the consulting engagement, summarizes key findings, and details our recommendations. The information in it is intended to be used to update the City's Strategic Technology Plan.

2.1 Background

Approximately seven years ago, the City of Jacksonville assembled an advisory group comprised of City employees, business leaders and citizens to assess the state of IT management and usage in the City. Their efforts resulted in a decision to centralize IT support, hire the City's first IT Director, and establish an IT Services Department.

Since that time, the City has enjoyed significant progress in its use of IT as a strategic resource including installation of robust network infrastructure, transition to voice over IP, installation of a storage area network, implementation of wireless access, as well as implementation of a Citywide enterprise application that serves many of the City's needs. Additionally, the 2006 Strategic Technology Plan identified nine (9) Priority Level One, three (3) Priority Level Two, and two (2) Level Priority Three IT initiatives. A review of status of these priorities reveals that most of the Priority Level One initiatives have been accomplished or are in process.

With the IT environment stabilized and significant achievements realized, the City desires to establish a more participatory planning process that ensures that the various departments' needs are included in the City's Strategic Technology Plan. They also desire to formalize the decision making process related to IT and expand it to include project prioritization, as well as, establish service level agreements between each department and ITS.

2.2 Technology Trends

As a basis for their IT planning efforts, participants considered the following IT industry trends for both public and private sector organizations.

Mobile government applications are becoming more popular as local government organizations take advantage of commercial and private wireless networks, both WiFi and cellular, to extend their connectivity. Using wireless technology enables government workers to access systems in the field, as well as collect and transmit data into the main system.

Government's use of **Geographic Information Systems (GIS)** is expanding beyond simple map making, to using geospatial based applications for everything from public safety to economic development. GIS can be an "integrator" by pulling together data from multiple databases and displaying it on a map. This approach allows organizations to get value out of the databases (layers) already in use within departments.

On-line payment processing or **electronic government** is the ability for local government customers to conduct business and make payments on-line via the Internet using a credit card and/or bank transfer. Today more than 78% of U.S. households connect to the Internet via broadband. Visiting a government website is now the 11th most frequent activity among Internet users. Considering these statistics together indicates that citizens will increasingly demand on-line access to government services and the ability to conduct transactions and make payments.

The document provided to planning session participants is attached in Exhibit 5.1. Additionally, participants were asked to consider a series of questions in preparation for departmental planning sessions. These questions are attached in Exhibit 5.2.

2.3 The ITS Department

The mission of the Information Technology Services Department (ITS) is:

To serve as a consultant to the City Council, City Manager, other departments and staff of the City of Jacksonville in the management and use of information technology.

The Department plans, purchases, manages, and maintains the computing and telecommunications hardware, software, and networking infrastructure to support the City's diverse departments in providing their services to the citizens. ITS is responsible for analyzing and implementing departments' IT related needs according to response time, storage requirements, hardware and software services, and ensuring that adequate training is available to end users. The Department provides a secure, layered network environment to protect the City's infrastructure and systems.

3.0 KEY FINDINGS

3.1 Customer Satisfaction

The 2006 IT strategic planning effort included conducting an IT Customer Satisfaction survey. This engagement continued the process with a very similar survey instrument so that the City has year to year comparison data. The most significant change to the survey was the addition of importance rating so that the City can identify those service areas that are in most need of improvement – the ones that receive the lowest satisfaction ratings coupled with a high importance rating by end users.

The survey was conducted during the first half of November 2007 and 94 customers responded to the survey – a nearly 50% increase over the last year. A clear majority, nearly 77%, of the respondents work a standard “City Hall” schedule.

“It’s hard to improve on near perfection.”

The overall findings are excellent and the ITS Department continues to enjoy a high level of customer satisfaction. The findings are summarized below with the full report attached as Exhibit 5.3. When viewing comparison charts note that more customers responded this year than last. Unless otherwise noted, the charts show number of respondents.

Assistance with IT Related Problems

IT customers were asked to rate their level of satisfaction with receiving service via a variety of methods. Results for 2006 and 2007 are included in the charts below. Please note that more customers responded this year than last.

With regard to receiving support over the phone, overall customer satisfaction has improved with no respondents indicating that they are Unsatisfied this year.

Customers' satisfaction with receiving support in person has also improved from last year with no respondents indicating that they are Unsatisfied to any degree.

As with the first two categories of support, respondents also indicated that satisfaction with receiving support via a remote connection to their PC has increased, with only one respondent indicated that he/she was Unsatisfied this year.

The level of satisfaction with support received outside of normal business hours remains fairly constant, with a majority of respondents indicating that this service is Not Applicable.

Mapping satisfaction levels against importance ratings did not result in the identification of any areas requiring improvement at this time. This finding is supported by the fact that customer satisfaction increased in three out of four categories.

Technical Support Response Times

IT customers were asked about their experience with technical support response times for both routine (non-emergency) and emergency issues. Response times improved in both instances with routine response within 8 hours 75% of the time for respondents – compared to just over 71% in 2006. Emergency response also improved with those issues receiving response within 4 hours over 96% of the time as compared to just under 89% last year. These response time rates remain exceptional.

“ITS is always willing to go the extra mile to keep us moving forward.”

Advance Notice of Planned Outages

ITS should retain their current process and time frames for notifying customers of planned service outages. Nearly 99% of survey respondents reported that they receive advance notice, with the same percentage indicating that the lead time of advance notice is just about right. No statistics for this category were provided for 2006.

Help Line Support

IT customers were asked about their experience with the ITS Help Line. More than 94% of respondents indicated that they use the Help Line to report their IT related problems. In 2006, respondents reported that they called the Help Line just over 95% of the time. The slight decrease could be attributed to the use of other means to report problems. Among other methods used to report IT related problems, email is the most popular among this year's respondents. (Respondents could check all that apply.)

Respondents indicate that their calls to the Help Line are answered within four (4) rings just over 97% of the time, up from nearly 92% last year.

The results of the 2006 customer satisfaction survey recommended improving end user notification to ensure that customers are aware that their system functionality is restored, as well as, verify that issues have been fully resolved. This year respondents indicated that follow up occurs via email "Almost Always" 33% of the time and "Sometimes" just over 51% of the time for a total of 84% of respondents being contacted. In 2006, the survey simply measured whether customers were ever notified, with approximately 75% indicating that they were contacted. A lack of notification that a problem is resolved was cited several times in the general comments. This area should continue to receive attention to ensure continued improvement.

Finally, customers were asked to rate the helpfulness of the ITS Help Desk in resolving their IT related problems. Over 86% of respondents are Satisfied or Very Satisfied.

System Performance

IT Customers were asked about their level of satisfaction with access to systems, reliability, and software applications and services.

Access

With regard to logging into the network, customer satisfaction has increased over last year, with over 86% of respondents indicating that they are Satisfied or Very Satisfied. One hundred percent (100%) of respondents indicated that logging onto the network is Important to performance of their jobs with nearly 55% indicating that it is Critical.

With regard to printing, 80.7% of respondents indicated that they were Satisfied or better, again an increase in overall satisfaction when compared with last year's results. As with network access, 100% of respondents believe that printing is Important to the performance of their job with nearly 48% saying it is Critical. Of the four areas surveyed, printing is the only one that did not score over 85% in customer satisfaction. Given its importance, this area should be further investigated.

With regard to accessing the Internet, just over 86.3% of respondents are Satisfied or better, also an increase over last year's results. Only 92% of respondents rated Internet access as Important to their job performance, with 21.6% indicating that it is Critical.

For the final category in access, over 88% of respondents indicated that they are Satisfied or better with access to e-mail. Overall satisfaction in this category also increased from last year. One hundred percent (100%) of respondents rated this access as Important to their job performance, with nearly 41% indicating it is Critical.

Telephone Systems

Although overall customer satisfaction regarding telephone and voice mail system improved over last year, the level of satisfaction for voice mail reliability and setup/ assistance are low with relatively high importance ratings. These two areas warrant research into the causes of dissatisfaction.

Category	Satisfied & Very Satisfied	Rated Important Or Higher	Rated Critical
Phone Reliability	87.3%	100%	56.3%
Phone Maintenance	80.5%	100%	43.7%
Voice Mail Reliability	77%	88.4%	26.4%
Voice Mail Setup/Assistance	62%	81.4%	16.3%

Software Applications

With regard to satisfaction using software applications, while every application received a high importance rating by respondents who use them, only two (2) out of the ten (10) included in the survey – HTE Financials and LGweb - received more Satisfied/Very Satisfied responses than Neutral and below. One (1) application was split almost evenly between Satisfied/Very Satisfied and Neutral and below – ConnectCTY.

Respondents who use the remaining applications – HTE Work Order, LGviewer, LGdispatch, LGcrimes, On-line Mapping, ArcView and ArcReader – rated their satisfaction as Neutral or below. Further research should be conducted to determine the causes of the low rating

for these seven (7) applications. Data for 2006 satisfaction levels was not made available for comparison purposes.

GIS

When asked about their satisfaction level with GIS related services, a clear majority of respondents who make map requests indicated that they are Satisfied or Very Satisfied with the level of service. The remaining two (2) categories of service were not rated as well. A majority of respondents who use these services indicated that the level of importance of these services in performing their job duties is Important or higher. The cause of the low satisfaction ratings for access to GIS data and in-depth GIS analysis tools should be further investigated.

Category	Satisfied & Very Satisfied	Rated Important Or Higher	Rated Critical
Map Requests	83.3%	88.9%	20.9%
Access to GIS Data	66.0%	82.7%	18.6%
Access to In-Depth GIS Analysis	62.5%	76.6%	14.0%

Overall Experience With ITS

IT Customers were asked to rate their level of satisfaction and importance to their job performance for five (5) factors when considering their overall experience with the ITS Department. Significant increases in the level of satisfaction (Satisfied/Very Satisfied) were realized in all categories, especially in the areas of Responsiveness (+15.2%) and Helpfulness (+12.2%).

“The staff in the ITS Department are extremely professional, courteous and conscientious.”

When asked about the importance of these five areas, respondents rated Knowledge Level (55.4%) and Responsiveness (51.8%) as the most critical to their job performance.

When asked to provide an overall rating for the ITS Department, more than 96% rated the Department as Good or better with a breakdown as follows.

“The ITS Department has grown in value and effectiveness.”

3.2 IT Employee Satisfaction

The 2006 IT strategic planning effort included conducting an IT Employee Satisfaction survey. This engagement continued the process with a very similar survey instrument so that the City has year to year comparison data. The most significant change to the survey was the addition of importance rating so that the City can identify those areas that are in most need of improvement – the ones that receive the low satisfaction rating coupled with a high importance rating.

The survey was conducted during the first half of November 2007 and 11 ITS employees responded – the same number as last year. Nearly 82% of IT staff are satisfied with their job, down from over 91% last year.

“I am proud to work with such fine folks.”

Overall Satisfaction

Additionally, satisfaction with salary (54.6%) and benefits (63.7%) are below last year’s rate of 75% each. Satisfaction with their supervisor (63.7%) increased from last year’s rate of 50%.

When asked about importance of these factors, IT staff indicated that their job duties and benefits were the most important factors contributing to their satisfaction.

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
City’s Leadership	81.9%	70%	10.0%
Job Duties/Assignments	81.8%	100%	54.5%
Benefits	63.7%	100%	36.5%
Supervisor	63.7%	89.1%	27.3%
Salary	54.6%	100%	27.3%

Overall IT staff believe that they job duties and assignments are what they expected (72.7% rated it very close) and nearly 73% would change their job duties very little (36.4%) or nothing at all (36.4%).

Working Conditions

While IT staff are satisfied with the flexibility of their work hours (80%), time allocated to complete assignments (70%), and physical work conditions (80%), they are much less satisfied with the connection between performance and pay (50%) and their workload (50%).

Many ratings in this area of the survey were lower than last year - connection between performance and pay (-17%), workload (-33%), and flexibility of work hours (-12%). Adding to the concern regarding lower satisfaction ratings is the rating of all items in this category as Important or better by 100% of respondents with the exception of physical working conditions (80%). Flexibility of work hours was rated the most critical factor influencing job satisfaction in this category.

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
Flexibility Work Hours	80%	100%	30%
Physical Work Conditions	80%	80%	0%
Time Allocated to Complete Work	70%	100%	0%
Connection Performance & Pay	50%	100%	20%
Workload	50%	100%	20%

Opportunities

All the ratings in this area were high with the exception of opportunity for advancement (40% Satisfied/Somewhat Satisfied). This rating is down from last year (-10%) and should be further investigated given 90% of IT Staff rated it as Important or higher, with 30% indicating that it is Critical to their job satisfaction. Satisfaction ratings increased for IT Staff abilities to influence decisions that affect their work (+3%) and ITS success (+13%) over last year, as well as, opportunities to use new technology (+7%) and work on interesting assignments (+7%).

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
Opportunity to Use New Technology	90%	90%	10%
Interesting Assignments	90%	90%	10%
Ability to Influence ITS Success	80%	90%	20%
Job Security	70%	90%	50%
Influence Decisions Affect Their Work	70%	90%	10%
Opportunity for Advancement	40%	90%	30%

IT Staff Training

IT Staff also rated training related topics very well. Ninety percent (90%) are satisfied with the types of technical training available to them and 80% are satisfied with the amount of training received to perform their

work. The amount of training available was rated the most critical factor influencing job satisfaction.

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
Types of Technical Training	90%	90%	10%
Amount of Training Available	80%	90%	30%
Types of Non-Technical Training	70%	50%	0%
Accommodations for Special Requests	60%	80%	10%

Communications & Confidentiality

With regard to communications, 70% of IT staff are satisfied with communication with their supervisor and 90% are satisfied with communication with their peers and customers. IT staff are the least satisfied with confidentiality at all levels in the chain of command (40%). Confidentiality among peers (80%) and by other members within the ITS Department (70%) were rated much higher. Ninety (90%) of IT staff are satisfied with the use of tools to maximize efficiency of communication. Confidentiality was rated the most important factor along with communication with peers and customers in terms of impact on job performance.

Several ratings in this category showed improvement over last year's results – communication with supervisors (+20%), communication with peers (+20), and confidentiality by peers (+10%). Confidentiality at all levels in the chain of command was 2% lower this year, remaining an area of concern especially with 90% of IT staff indicating it is important for job satisfaction.

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
Communication with Peers	90%	100%	50%
Communication with Customers	90%	100%	50%
Use of Communication Tools	90%	100%	20%
Confidentiality by Peers	80%	80%	50%
Communication with Supervisor	70%	100%	40%
Confidentiality with Other In Dept.	70%	80%	50%
Confidentiality at all Levels	40%	90%	50%

Immediate Supervisor

When rating satisfaction with their immediate supervisor, IT staff indicated that they enjoy a high level of satisfaction in this area with 70% satisfied with their overall relationship. They also rated these factors as Important, often Critical, to their job satisfaction.

IT staff's rating of the reasonableness of their supervisor's expectations increased (+13%) and their rating of their supervisor's management capabilities increased (+20%). They are less satisfied with their supervisor's involvement in their career development when compared to last year (-7%).

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
Feedback (positive & negative)	80%	100%	50%
Sensitivity to Personal Needs	80%	100%	50%
Overall Relationship	80%	100%	40%
Supervisor's Expectations	80%	100%	30%
Management Capabilities	70%	100%	20%
Level of Involvement in Career	60%	90%	20%

City Administration

IT Staff were also asked to rate their satisfaction level with City Administration. Again, they are satisfied with 80% believing that the City's leadership team is committed to promoting employee satisfaction. IT Staff rated fairness and ethical soundness/trustworthiness as most critical to their satisfaction in this area.

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
Commitment to Promoting Satisfaction	80%	100%	10%
Fairness to Employees	70%	100%	40%
Ethical Soundness/Trustworthiness	70%	100%	40%

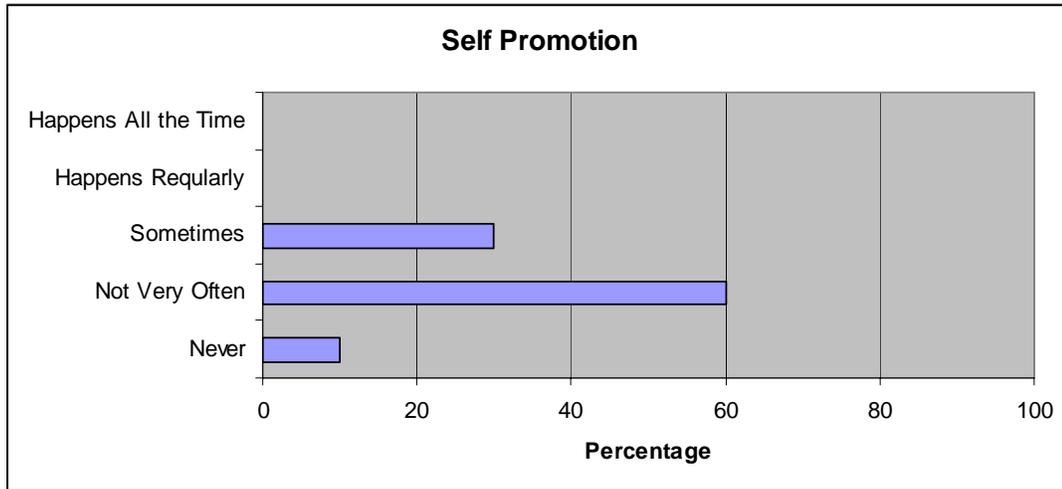
Peer Relationships

When asked about their peers, IT staff rates their satisfaction in all areas very high. They also rate each category as Important or better 100% of the time, with the relationship with their peers within the ITS Department

ranked as the most critical factor influencing their job satisfaction in this category.

Category	Satisfied & Somewhat Satisfied	Rated Important Or Higher	Rated Critical
Relationship with Peers in ITS	90%	100%	40%
Relationship with Peers outside ITS	90%	100%	20%
Trust in Peers Across City	80%	100%	10%
Level of Confidence in Peer Support	80%	100%	22.2%

While 10% of IT Staff believe that their peers are never self-promoting at the expense of their co-workers, an impressive 60% believe it does not happen very often.



General Statements

IT Staff were asked to indicate their level of agreement with a number of statements both positive and negative. Notable findings in this area include the following:

- 100% of IT staff are satisfied with the kind of work they perform (+9);
- 100% understand their job responsibilities;
- 100% believe they can act independently of their supervisor when performing job duties;
- 90% do not mind spending time after normal business hours to finish up a task (+6.7%);
- 90% are confident they will have a job if they do good work;
- 90% believe they are kept informed about changes that affect their work;

- 80% believe adequate opportunities exist to pursue professional development beyond the scope of their current position;
- 80% believe that City employees are treated fairly regardless of race, age, gender, ethnicity or sexual orientation;
- 80% believe that they help make decisions that impact their work (+5%); and
- 80% feel as if the City's problems are their problems as well.

Areas needing improvement include:

- 70% believe that management is interested in the welfare of their employees;
- 70% feel that their skills are used the best way possible for the City:
- 60% of IT staff believe that management within the ITS Department act with sincerity; and
- 40% believe that City Administration truly holds themselves to a higher standard than most employees.

Only 20% of IT Staff would probably accept a position with another organization if they were offered more money. The majority (50%) responded that they are Neutral and 30% indicated that they would take the position.

Finally, the percentage of IT staff who feel a sense of pride or accomplishment for the work they do remained very high this year at 90%, down just 2% from last year.

3.3 Departmental Planning

Through the individual departmental IT planning sessions, the following three (3) IT related initiatives were most often identified as priorities by departments (listed in order).

1. Field (mobile) access to City systems – implementation of increased remote access to more systems by employees when working in the field.
2. Training for IT systems and applications – development of a more comprehensive Citywide IT training program that addresses timing, delivery methods, types, and responsibilities.
3. IT consulting services from the ITS Department – evolution of ITS to provide more consulting and research services to ensure that departments are aware and take advantage of available technology.

Other IT related initiatives that were frequently mentioned include Customer Relationship Management/3-1-1; executive information dashboards; and improvements to the City's mass communication tool.

Needs

Numerous IT related needs were articulated by participants in the eight individual departmental planning sessions. While many of the needs captured in the summaries are specific to individual departments and support their priorities, several themes emerged as noted below.

- Improved scanning and production capabilities – the desire to reduce the amount of paper that is moved around the organization and stored coupled with a need for better production capabilities when hard copy is needed.
- Handheld devices including text messaging – the need to increase the use of handheld devices in the field to improve communication and information dissemination.

A review of fiscal year 2007-08 IT budget requests revealed the following.

- A majority of departments requested IT related equipment needed for replacement of existing equipment or for new positions (56);
- Eight (8) submissions were related to software needs; and
- Three (3) submissions were for GPS technology.

In addition, IT requested equipment to support backup/recovery needs and GIS technology.

These requests address individual departmental needs but do not address Citywide or multi-departmental needs.

Strengths, Weaknesses, Opportunities, and Threats

Numerous IT related strengths, weaknesses, opportunities and threats (SWOTs) were identified by participants in the eight individual departmental planning sessions. While many of the SWOTs listed in the departmental summaries are specific to individual departments and support their priorities and needs, several themes emerged as noted below. The items listed below are listed as suggested by participants. It is important to note that many of the weaknesses and threats can easily be turned into opportunities.

Strengths

- A staff with a desire to use technology
- City owned wireless network that is being expanded
- AVL system
- Citywide GIS system that is increasingly being used by departments

Weaknesses

- HTE is not user friendly and does not interface well with other programs
- Wireless coverage is not in all areas
- Lack of standardization resulting in hire support demands and complications for sharing data
- City is still fairly reactive since they are busy handling daily issues and do not have adequate time for pre-planning and improving operations

Opportunities

- Expand the use of the City current document stations
- Expand the existing training program to improve use of systems and train employees to get maximum values out of the City's systems
- Increase usage of cellular phones and other devices such as Blackberries for mass communication and messaging in the field
- Increase usage of AVL
- Expand coverage of the City's wireless network which is at about 60% currently

Threats

- Data quality
- System performance

3.4 Citywide Planning

Two (2) of the most often identified departmental priorities were also chosen as topics for the Citywide Planning sessions – Field Access and Citywide IT Training. The top potential initiatives for these two priorities are as follows. More detail is included in the planning summaries attached as Exhibit 5.6.

Field (Mobile) Access:

1. Remote Access to Maps & Images
2. Tablets in the Field for Access to HTE
3. Expand the Use of AVL/GPS

Citywide IT Training:

1. Establish an IT Super User Program
2. Create IT Training Assessment Program
3. Include ITS in the City's New Employee Orientation
4. Develop Catalog of IT Products & Services
5. Redefine Pre & Post-Implementation Requirements

Important to note is that the top five (5) priorities related to Citywide IT Training do not require significant expenditures.

3.5 2006 IT Priorities

A review of the technology priorities identified in the existing Technology Strategic Plan reveals the following status of each.

Level One Priorities

1. Disaster Recovery/Business Continuity – In process

ITS has made progress in the area of disaster recovery and continues their efforts in this regard. Business continuity planning has not yet occurred. This part of the effort requires participation by every department.

2. IT Governance Structure – Anticipated completion January 2008

The City is in the process of implementing IT Governance and will address the recommendations included in the Plan.

3. Service Level Agreements – Anticipated completion March 2008

ITS, with our firm's assistance, has completed the SLA for the Police Department and are working to complete SLAs for all other departments.

4. ITIL (IT Service Management) – In process

ITS has obtained ITIL certification for two (2) employees and other employees are scheduled for training. They plan to implement ITIL best practices in a manner that will work best for the City.

5. Project Justification Methodology – To be developed

This priority can be addressed in conjunction with implementation of IT Governance. The City needs to identify a process with which they are comfortable and then begin using it in their environment.

6. Storage Area Network – Complete

The City has implemented a SAN and is replicating data.

7. Document Management System – In process

The City has implemented a document management system. They are working on workflow issues and processes to integrate it into their daily operations.

8. Training for End Users – Ongoing

ITS offers training courses for end users. This subject remains very important to the City and is described in other sections of this report.

9. Training for IT Staff – Ongoing

The City has allocated ample funds for training of IT staff and they are using them for currency and to meet the City's priorities and objectives.

Level Two Priorities

1. Wireless Network Extension – In process

The City continues to invest in the wireless network that now covers approximately 60% of the City.

2. Project & Performance Dashboards for Administration & Council

The City has not pursued implementation of management dashboards to date but has identified this initiative as a priority that will be considered by IT Governance.

3. Establishment of IT Security Specialist

Currently, several ITS employees function as the Security Specialist. Policies are approved by the City Manager.

Level Three Priorities

1. 3-1-1 Call System

The City has not pursued implementation of 3-1-1 either for itself or in collaboration with the County and Military Base.

2. Asset Management Plan/System

While the City has not implemented an asset management plan or new system, it is considering use of existing systems to meet this objective.

3.6 Salary Comparison

Given the continued low satisfaction rating for IT Employee salaries, our firm conducted a review of current and proposed (effective January 2008) ITS Department salaries against the 2007 edition of the *National Public Sector IT Salary Survey Report*. Our findings for the **proposed salaries** are summarized in the tables included in Exhibit 5.8.

We conducted a variety of comparisons of low (starting salary) and high (top of salary range) including comparing the City's **proposed IT salary ranges** against:

1. All respondents to the survey;
2. All respondents from the southern region;
3. All respondents in the same size category – 50,000 to 100,000 residents;
4. All respondents in the southern region AND the same size category; and
5. All Cities in the southern region AND the same size category.

Our findings reveal that the City's proposed starting salaries are no longer often the lowest in many of the above categories. By raising the starting salaries, the City will be more competitive for new hires.

With regard to top of the salary range, the proposed highest salaries for one (1) position, GIS Specialist, is more than 10% lower than the top of the salary range for all five (5) categories above. Additionally, our research shows that the top salary for this position is lower than the median salary (half way point for the range) for this position in southern City's of similar size.

The proposed highest salary for three (3) positions – IT Director, Senior GIS Analyst and Senior IT Specialist – are more than 10% lower than four (4) out of five (5) of the above categories. Additionally, our research indicates that the top salary for the IT Director position is just over the median for this position in southern City's of similar size. The top salary for the Senior GIS Analyst and Senior IT Specialist is lower than the median salary for these positions in southern City's of similar size.

These discrepancies at the top end of the salary range mean that the City is less competitive when hiring or promoting experienced employees into these positions and/or may have a more difficult time retaining employees in these positions as they build tenure with the City.

The lower than average satisfaction ratings for career development compound this issue. Given the size of the City's IT workforce, a career development path based on promotions through the ranks is difficult to institute. Organizations of this size generally depend upon "steps" within a given position's salary range to recognize growth in knowledge, skills

and abilities. This approach is difficult to implement in a situation where salary ranges are narrow and/or the top salary is significantly below competitors' top salary.

Further consideration should be given to the four (4) positions identified above if the City wishes to be competitive for experienced employees in those positions. Additionally, City leadership should further consider whether to proceed with lowering the top salary for the IT Director position as proposed. Additionally, the IT Manager position's top salary is more than 10% less than the top salary in three (3) of the five (5) categories above, which may also lead to similar issues in the future.

4.0 RECOMMENDATIONS

4.1 *Customer Satisfaction*

Based on our analysis of the IT Customer Satisfaction Survey results, we make the following recommendations for the areas that received lower than normal satisfaction ratings with high importance ratings.

- Continue the follow up process when Help Line calls are completed to ensure that the end user is aware that functionality has been restored and the problem was resolved or the service was delivered to their satisfaction.
- To manage expectations, ITS should also implement feedback to end users when their problem or request for service will not be addressed quickly. This feedback can be brief and delivered via email but should include an anticipated time line for resolution.
- ITS should investigate and address the root cause of the low satisfaction ratings for:
 - Printing;
 - Voice mail reliability; and
 - Voice mail setup/assistance.
- ITS should investigate and develop a plan to address low satisfaction ratings for:
 - Applications – HTE Work Order, LGviewer, LGdispatch, LGcrimes, On-line Mapping, ArcView and ArcReader;
 - Access to GIS data; and
 - In-depth GIS analysis tools.

4.2 *IT Employee Satisfaction*

Based on our analysis of the IT Employee Satisfaction Survey results, we make the following recommendations for the areas that received lower than normal satisfaction ratings with high importance ratings.

- ITS should consider options to address the low satisfaction ratings for salary (54.6%) and benefits (63.7%), especially for the positions of IT Director, Senior GIS Analyst, Senior IT Specialist and GIS Specialist as indicated in the findings.
- ITS should develop a plan to improve the connection between performance and pay and to address concerns with workload.
- ITS should consider alternate work schedules and increasing flexibility of work hours where possible as flexibility of work hours was rated the most critical factor influencing job satisfaction in its category.
- ITS should investigate ways to accommodate special requests for IT training.
- ITS should address IT staff's low satisfaction rating for confidentiality at all levels in the chain of command, especially since it was also rated high in importance to job satisfaction.

- ITS should develop a plan to increase supervisors involvement in their employee's career development.

4.3 Priorities

Based on the Citywide planning activities and other research conducted by our firm, we recommend the following IT related priorities for the City. The priority and number of initiatives to be addressed during the next year should be determined through the IT Governance process and based upon resource availability.

Citywide Priorities

- 1. Remote Access to Maps & Images** – The purpose of this initiative is to provide access to the City's geographic information system (GIS) maps and data (layers), as-builts, site plans, and other image files in the field to support decision making and job performance. This initiative includes identifying, organizing, cataloging, updating and publishing the City's many image-type files including producing CDs and DVDs for use in the field and establishing a process to directly download necessary images and maps to laptop and MDT hard drives. It also includes establishing a periodic update process for distribution of new or modified images. The major cost component of this initiative is IT staff time to identify, organize, catalog, update, and distribute these images. Additionally, staff working in the field need the proper equipment and training to make use of these image files.
- 2. Establish IT Super Users Program** – The purpose of this initiative is to improve end user support and training for the City's various IT systems through identification, training, and support of Super Users; City employees who are not in the IT department but are above average users of a particular IT application. This initiative includes identifying one or more Super Users per department to address the City's many IT applications; identifying certification programs for Super Users for the various IT applications; establishing User Groups for the City's standard applications such as HTE; and identifying means to reward Super Users, such as access to better hardware and software and advanced training programs. The cost of this initiative is driven by training and certification needs.
- 3. Complete Disaster Recovery/Business Continuity Plan** – The purpose of this initiative is to complete the efforts that have begun to address development of a DR/BC Plan for the City. Given its location and proximity to a military base, the City has a high risk of both man-made and natural disasters. This Plan should be completed before the next planning cycle.
- 4. Deploy Tablets in the Field for HTE Access** – The purpose of this initiative is to increase remote access to the HTE system to provide

viewing of work order, permit and other related data as well as input of information into the system. This initiative includes providing tablets for staff working in the field and training them to remotely access permit, metering, inspection, crime, and other data from the HTE system. The major cost component is the purchase of tablets and staff training.

- 5. Create an IT Training Assessment Program** – The purpose of this initiative is to develop relevant IT-related training programs for new and existing City employees to ensure that they can be as productive as possible and fully utilize the City’s IT systems. This initiative includes identification and/or development of an on-line self assessment tool that captures employees’ level of knowledge and skill for the various IT systems they use to perform their work. It also includes development of a template that assists departments with identifying what systems a new employee would use and ensuring that new employees receive training to do so. It would result in the development of personalized training plans based on the results of these activities including Computer Basics for those employees who are not familiar with using a computer. The major cost component for this initiative is the on-line self assessment tool and the resources necessary to create and manage the training plans. The actual training is another cost factor for those areas where it does not currently exist.
- 6. Implement ITIL Best Practices** – The purpose of this initiative is to complete ITIL certification of IT staff, develop an implementation plan, and begin implementation of best practices to improve IT operations and service management.
- 7. Increase Use of AVL/GPS** – The purpose of this initiative is to maximize routing efficiency and provide staff safety through the use of AVL and GPS. This initiative includes outfitting vehicles with AVL and implementing tracking and routing software for City functions such as sanitation, waste water, streets, and inspections. The major cost components of this initiative include the AVL/GPS technology as well as tracking and routing software and display devices.
- 8. Include IT in New Employee Orientation** – The purpose of this initiative is to educate new employees regarding the availability of all IT systems that can be used to support their job functions. This initiative includes the use of the Catalog of IT Products and Services described below and would include a review of IT-related policies and procedures, training opportunities, and participation in User Groups. The major cost component of this initiative is IT staff time to prepare for and attend New Employee Orientations.
- 9. Institute Project Justification Methodology** – The purpose of this initiative is to build on implementation of IT Governance and establish a process for project prioritization that includes business case justification.

While many methods exist, the City should implement one that includes measures beyond traditional return on investment.

- 10. Develop Catalog of IT Products/Services** – The purpose of this initiative is educate new and existing employees regarding the availability of IT-related products and services, and policies and procedures related to the use of IT systems. This initiative includes creation of an on-line and hard copy catalog of IT-related products, services policies, and procedures for internal distribution including use at New Employee Orientations. The major cost component of this initiative is IT staff time to create the catalog.
- 11. Redefine Pre and Post-Implementation Training Requirements** – The purpose of this initiative is to maximize the training provided by vendors when a new system or major upgrades to an existing system are implemented. This initiative includes modifying the City’s standard contract language to require both pre and post-implementation training for end users. Although there is no cost involved in changing the contract terms, the vendor’s cost may increase for providing training in this manor.
- 12. Resource IT Consulting Services from the ITS Department** – The purpose of this initiative is to support the evolution of the ITS Department to provide more consulting and research services for departments to ensure that departments are aware of available technology.
- 13. Expand the Technology Replacement Program** – The purpose of this initiative is to expand the existing IT refresh/replacement program to include more IT-related equipment such as radios, handheld devices, faxes, and printers. A thorough analysis of the types and quantities of equipment to be added, plus determination of the replacement cycle (number of years) are required in order to determine the cost of this initiative.
- 14. Implement Business Intelligence Tools** – The purpose of this initiative is to provide management-level information in a useful format based on the role and responsibilities of the end user. The City can make use of IT tools they already own such as Cognos and Microsoft SharePoint for assembling information and presenting in various ways on-line and in hard copy reports. The major cost component of this initiative is related to development of requirements, screen and report design, programming and development costs, as well as, IT technical and end user training.
- 15. Implement Formal Project Management** – The purpose of this initiative is to begin using a more formal, best practice based project management methodology. It includes obtaining training, deploying a methodology, and obtaining tools. The major cost factors for this initiative are training and the purchase and deployment of project management software tools. Additional cost may be incurred if 3rd party resources are used to define and deploy a best practice based methodology.

Departmental Priorities

Over 30 IT initiatives were identified as departmental priorities during the planning process, with many of these initiatives overlapping the Citywide priorities noted above. The IT Governance process should be used to develop an overall prioritization of these initiatives and determine which ones will be funded in the next year, balancing the specific needs of the departments with Citywide needs.

4.4 IT Governance

Based on our firm's assessment and industry best practices, we recommend the following tiered IT Governance structure for the City composed of following five (5) decision making bodies.

- *City Leadership Team* – This governance body is composed of City Manager, IT Director and eight (8) Department Heads, who are responsible for communicating the organization's strategy, reviewing and approving IT related principles, policies and standards, determining IT priorities and resource allocation levels, and resolving policy issues.
- *IT Advisory Committee (ITAC)* – This governance body is composed of Assistant City Manager, IT Manager and department deputies, who are responsible for translating executive strategy into operational needs, collecting input from their departments, assisting with drafting recommendations and presenting/forwarding them to the Leadership Team, serving as project sponsors, and/or staffing Project Steering Committees.
- *IT Management* – This governance body is composed of the IT Director and his direct reports, who are responsible for turning the organization's strategy and operational needs into IT deliverables, developing the City's IT Architecture and Infrastructure Strategy, providing direction to ITS staff, holding ITS accountable for delivery, and communicating with the City's Leadership Team, ITAC and departments.
- *IT Project Steering Committee(s)* – This governance body is composed of key stakeholders for the project and representatives from IT, who are responsible for providing direction and oversight for IT projects, reviewing and approving the project charter, schedules and resource allocations, resolving operational issues, escalating policy issues as needed to ITAC, and holding the project team accountable for delivery.
- *IT Users Groups* – These groups are created as needed and are composed of end users, with support from the ITS Department, who are responsible for sharing knowledge and lessons learned from a user perspective, discussing enhancements and improvements, drafting project and budget recommendations, and serving as super-users.

These governance groups work together as outlined in Exhibit 5.9.

We recommend that the Leadership Team, IT Advisory Committee and IT Management initially address the following as it related to IT Governance responsibilities.

- Adopt IT Principles for the City (see samples in Exhibit 5.10)
- Adopt an updated Strategic Technology Plan
- Adopt a project prioritization methodology and use it to determine the prioritized list of IT initiatives, both Citywide and departmental, to be included in the next budget development cycle

4.5 Service Level Agreements

The purpose of establishing service level agreements (SLAs) is to manage service expectations, clarify responsibilities, and improve communication between ITS and the City's departments. The objectives of SLAs are to identify services, establish expectations, and define mechanisms for measuring effectiveness to the satisfaction of both ITS and departments.

Each SLA includes a list of IT systems and services used by the department and identification of their respective goals (e.g. always on, maximum available, good to have, etc.) as well as determination of criticality for each. It also includes a description of ITS staff availability and critical operational periods, as well as, identification of response time and service targets for each criticality level. Finally, SLAs address monitoring mechanisms and service reporting.

Our firm assisted with development of the SLA for the Police Department using a best-practice based template. The City anticipates completing development of SLAs for the remaining seven (7) departments by March 2008. Once SLAs are in place for each department, ITS can use the information in them to identify optimal times to conduct system maintenance and review resource requirements for budgeting and staff allocation purposes.

5.0 EXHIBITS