



# Information Technology Strategic Plan

Gwinnett County, GA  
June 2009

plante  
  
moran

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# 1 Information Technology Strategic Plan

## 1.1 Executive Summary

### 1.1.1 Introduction

Based on Gwinnett County's Unified Plan, the County's growth in population is expected to slow over the next 25 years as the supply of land is developed. Job growth is expected to remain strong, but will increase more slowly as some sectors of the economy mature, relocate for better access, and correspond to slowing residential growth. Coupled with the constraints imposed by the current economic environment, the mantra of "doing more with less" – delivering a higher level of service with less resources – has set the tone for the foreseeable future. Information technology (IT) will help bridge the gap.

The goal of the Information Technology Strategic Plan (ITSP) is to provide a County-wide information technology vision and mission. The ITSP will align Gwinnett County's information technology services and support with County Departments' information technology needs as defined by their business plans. These business plans continue to be developed as part of the County's annual business planning process. As such, the ITSP will need to be re-visited on an annual basis to ensure on-going alignment with the County's business plans.

As well, a one-year Tactical Plan was developed to identify the major initiatives that are required in year one to achieve the overall vision and mission. It is expected that the strategies defined in the ITSP will not all be accomplished during the first year; hence further planning will be required in subsequent years to identify the initiatives which will continue to support the overall strategies.

An IT Assessment was performed in connection with the ITSP in order to provide a baseline from which to measure the success of future IT initiatives. An IT Assessment is a report card - a snap shot in time - on how the County is performing relative to the selected assessment areas. In contrast, the ITSP is a "living" document that the County will update on a regular, consistent basis. As indicated previously, the intent of the Plan is to ensure that the defined projects and technology initiatives are aligned with and supportive of general business goals of the County. The following visual illustrates the nature of this inter-relationship.



## 1.1.2 Information Technology Assessment

Plante & Moran prepared a separate deliverable entitled “Information Technology Assessment” prior to developing the ITSP. The IT Assessment provided the basis for developing the ITSP. A summary of the information presented in the separate deliverable is provided in this section.

Overall, Gwinnett County is operating sufficiently relative to its information technology operation. In fact, in most areas, particularly with respect to infrastructure and operations, the County’s IT is better than most in its peer group. One area of exception is the County’s deployment of its enterprise resource planning (ERP) provided by SAP. IT Governance is another area of opportunity for the County.

The following provides a summary of the IT Assessment which was performed. A five-star rating (i.e., ★★★★★) represents best practice in the industry.

**County-Wide Information Technology Assessment  
Maturity Rating Summary by Topical Area**

| Organization Assessment              | Maturity Rating |
|--------------------------------------|-----------------|
| Governance                           | ★★★★★           |
| Coordination                         | ★★★★★           |
| IT Staffing                          | ★★★★★           |
| Administration Assessment            | Maturity Rating |
| End-User Services                    | ★★★★★           |
| IT Operations                        | ★★★★★           |
| IT Management Processes              | ★★★★★           |
| Technology Assessment                | Maturity Rating |
| Infrastructure                       | ★★★★★           |
| Data Center Management               | ★★★★★           |
| Enterprise Applications – FileNet    | ★★★★★           |
| Enterprise Applications – SAP        | ★★★★★           |
| Enterprise Applications - GIS        | ★★★★★           |
| Web Applications – Internet/Intranet | ★★★★★           |

Numerous areas of opportunity were identified during the IT Assessment. These areas of opportunity, several of which are listed below, provided a basis for developing the ITSP.

- Leverage current IT investments, particularly those solutions which are under-utilized in terms of solution capabilities versus what is actually being used (i.e., SAP and FileNet).
- In order to make better County-wide IT decisions and provide transparency relative to how IT decisions are made, institute a more formal IT governance model.
- Establish an IT planning process that is directly linked to the County’s business planning process and ensure alignment with Departmental Business Plans and Balanced Scorecard.

- Invest in technologies that will help to solve a particular business problem, particularly those involving Citizen access to County-wide services (e.g., via the web).

### 1.1.3 Information Technology Strategies

The following list provides several of the County's goals relative to IT. These goals were identified during the information technology planning process and include input from representatives throughout all agencies at Gwinnett County.

1. **Solution Delivery.** Enhance constituent interaction by providing solutions that will improve the quality and efficiency of services using technology, where appropriate.
2. **Enterprise Architecture.** Provide and support a current, stable, secure, flexible and supportable standards-based technology infrastructure.
3. **Centralized Technology Funding.** Maintain a centralized IT funding model, enabling timely strategic investments.
4. **Governance.** Provide enabling IT policies and procedures that encourage collaboration and guide County organizations in planning, deployment and maintenance of IT solutions.
5. **Privacy and Security.** Provide centralized technology security oversight and direction.
6. **Information Technology Workforce Management.** Implement strategies to recruit, retain and invest in a highly skilled technology workforce that is available, trained and effectively employed to efficiently achieve countywide objectives.

The County has achieved success in its deployment of IT through an acute understanding of its needs and an effective, systematic approach toward solution deployment. As the IT Assessment shows, some areas have been more successful than others. Throughout the writing of this Plan, the County continued to make strides toward improving its approach in IT solution deployment. At least part of the County's success can be attributed to its systematic approach toward business planning. This business planning process (BPP) should remain as a cornerstone of what drives IT solution deployment at the County.

Although the distributed technology support model has worked well for the County over the last several years, the County will likely face challenges going forward in effectively managing a County-wide IT environment that optimally services the needs of the staff and residents of the County. Larger Counties that Gwinnett County considers as peer organizations recognize the importance of more formalizing and, in some cases, centralizing or consolidating IT functions to optimally service the staff and residents of the County. For example, larger peer counties exhibit the following characteristics that are not yet evident in Gwinnett County:

- More formalized IT governance structure that revolves around departmental, line of business and enterprise planning and decision-making from a project, policy, budgeting and general technology issues perspective.
- View of e-Government as a strategic technology that requires coordinated planning and deployment.

The County has achieved a great amount of success in its use of technology and has a number of strategic initiatives going forward that should enhance its stature as a leader in the deployment of technology on a national basis. One of the greatest risks going forward is the inability to recognize that, as the County becomes larger and more complex, more formal technology governance structures need to be institutionalized to manage this growth. The ability to achieve this change in structure will likely be very difficult as it challenges the underlying thinking and culture of the County and departments within the County. With the current potential for forced budget reductions, it is likely that the trends in decentralized technology support and deployment will need to change, despite the cultural challenges.

The following is a summary of the IT strategies which were created which will allow Gwinnett County to achieve its goals

relative to IT.

Gwinnett County, GA  
Information Technology Strategies (2009)

| #  | IT Strategy                          | Brief Description  | Business Plan Alignment  |
|----|--------------------------------------|--|--|
| 1. | <b>e-Government</b>                  | Provide citizens/customers with ubiquitous, convenient and timely access to services and information electronically.           | <ul style="list-style-type: none"> <li>▪ Citizens / Customer Perspective</li> </ul>  |
| 2. | <b>Enterprise Content Management</b> | Enable a major leap toward streamlined workflow and a “paperless” environment.   | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> </ul>   |
| 3. | <b>IT Organizational Alignment</b>   | Ensure continued alignment of information technology human capital in support of organizational goals and objectives.          | <ul style="list-style-type: none"> <li>▪ Citizens / Customer Perspective</li> <li>▪ Internal Process Perspective</li> <li>▪ Financial Perspective</li> <li>▪ Learning Perspective</li> </ul> |
| 4. | <b>County-Wide IT Governance</b>     | Provide a framework to make better County-wide IT decisions and provide transparency relative to how these decisions are made. | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> <li>▪ Citizens / Customer Perspective</li> <li>▪ Learning / Growth Perspective</li> </ul>                         |
| 5. | <b>Project Portfolio Management</b>  | Implement a comprehensive and unified approach toward identifying and prioritizing IT projects.                                | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> </ul>   |
| 6. | <b>Solution Optimization</b>         | Leverage investments in existing technology to improve organizational performance and integration.                             | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> <li>▪ Citizens / Customer Perspective</li> </ul>  |
| 7. | <b>Cost Containment</b>              | Leverage information technology and related know-how to help reduce fixed and variable costs relative to IT and non-IT assets. | <ul style="list-style-type: none"> <li>▪ Financial Perspective</li> </ul>  |
| 8. | <b>Collaboration</b>                 | Provide tools to increase collaboration both within the County and with citizens/customers.                                    | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> <li>▪ Learning / Growth Perspective</li> </ul>  |

## 1.2 Background & Introduction

### 1.2.1 Gwinnett County, GA

Gwinnett County, GA is located approximately 25 miles northeast of Atlanta and is one of the fastest growing counties in the southeast. The County has grown from a population of 167,700 in 1980 to a population of over 780,000 in 2008. During this time, the County has experienced significant growth in the maturity and complexity of its business operations. For example, the County has recently undertaken a business planning process (BPP) as part of an overall strategic planning effort (i.e., creation of a “Unified Plan”). Gwinnett County is recognized as one of the most progressive and efficient county governments in the country.

Gwinnett County (the County) requested the development of an Information Technology Strategic Plan and Information Technology Tactical Plan in order to establish a direction for information technology within the County during the next three to five years. This effort further demonstrates the County’s progressive nature and desire to remain a leader in the deployment and use of information technology to improve citizen/customer service, improve internal business processes, contain costs and share knowledge and information. In fact, these benefits are in direct correlation with the primary area of the balanced scorecard which the County uses to measure progress and performance against Departmental business plans.

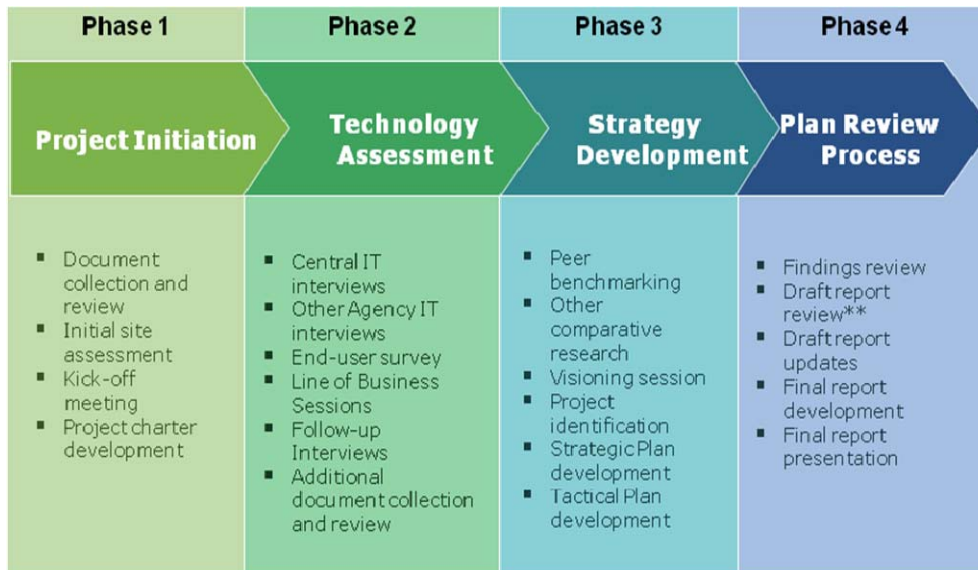
### 1.2.2 Purpose of the Plan

The goal of the Information Technology Strategic Plan (ITSP) is to provide a County-wide information technology vision and mission. The ITSP will align Gwinnett County’s information technology services and support with County Departments’ information technology needs as defined by their business plans. These business plans continue to be developed as part of the County’s annual business planning process. As such, the ITSP will need to be re-visited on an annual basis to ensure on-going alignment with the County’s business plans.



### 1.2.3 Approach

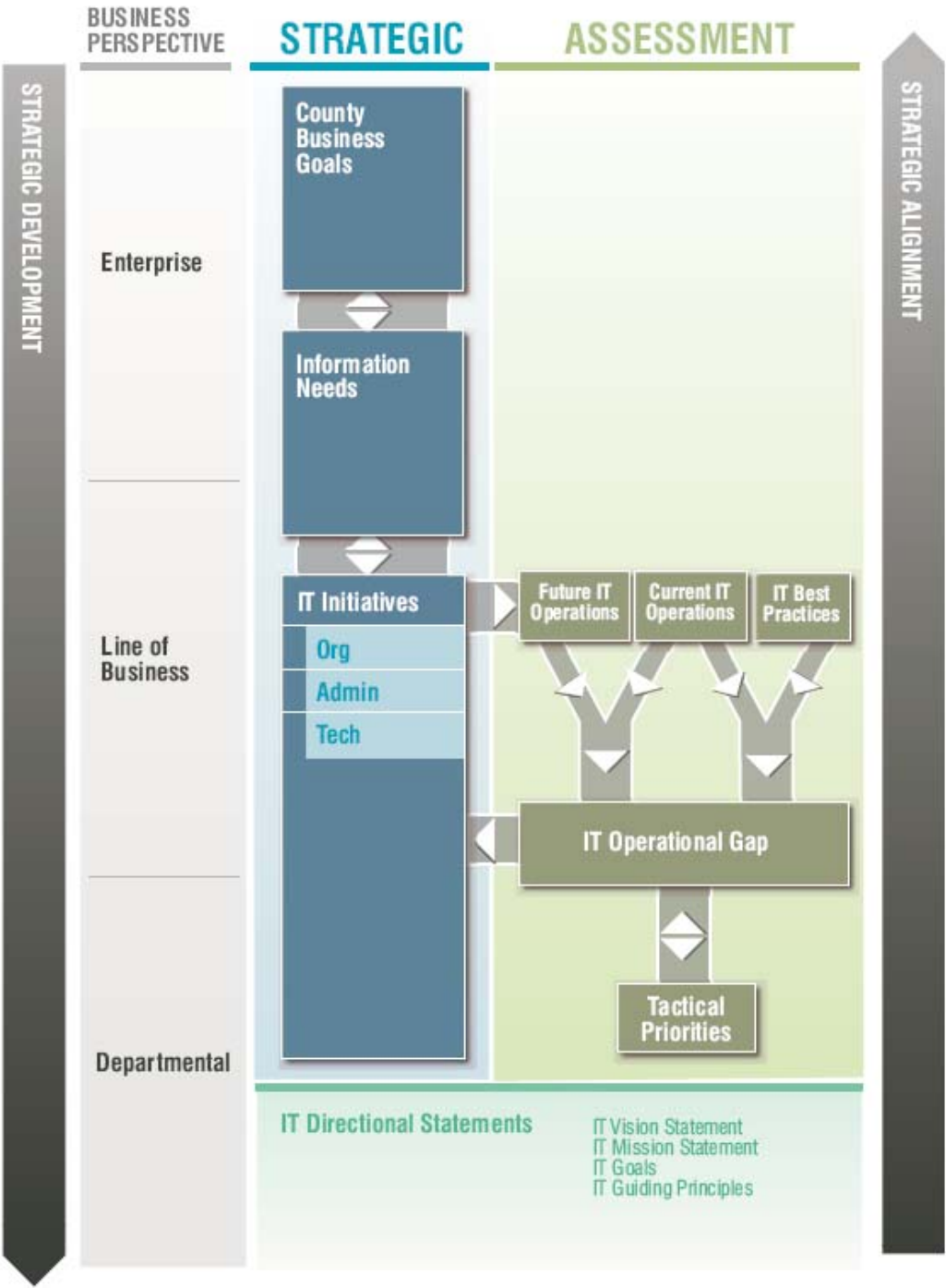
The following chart illustrates the approach that was taken in development of the ITSP.



\*\*Begins June 1, 2009. Includes both IT Strategic Plan and IT Tactical Plan.

The Information Technology Assessment, which is provided as a separate deliverable, is a report card - a snap shot in time - on how Information Technology (IT) is performing overall. The IT Assessment provides a baseline against which to measure the success of future IT initiatives. In contrast, the Strategic Technology Plan is a “living” document that the County will update on a regular basis. The intent of this Plan is to ensure that the defined projects and technology initiatives are aligned with the overall IT goals and supportive of general business goals of the County. The following illustrates the components of the comprehensive approach.

Gwinnett County - IT Strategic Planning Components



## 1.2.4 Information Technology Assessment

Based on the noted findings and Plante & Moran's industry experience, a current state assessment of information technology (IT) at the County was developed and quantified using a maturity rating for each topical area. The maturity rating is used to identify gaps and areas of opportunity for each of the identified topical areas. The following represents the scale used for the maturity rating:

| Maturity Description          | Level |
|-------------------------------|-------|
| Best Practice in the Industry | ★★★★★ |
| Mature or Fully Implemented   | ★★★★☆ |
| As Expected                   | ★★★☆☆ |
| Improvements Identified       | ★★★☆☆ |
| Needs Significant Improvement | ★★★☆☆ |

A thorough review of IT across the County was conducted with the following table summarizing the findings of the IT Assessment Report in the three major areas of organization, administration and technology.

### County-Wide Information Technology Assessment Maturity Rating Summary by Topical Area

| Organization Assessment              | Maturity Rating |
|--------------------------------------|-----------------|
| Governance                           | ★★★☆☆           |
| Coordination                         | ★★★★☆           |
| IT Staffing                          | ★★★★☆           |
| Administration Assessment            | Maturity Rating |
| End-User Services                    | ★★★★☆           |
| IT Operations                        | ★★★★☆           |
| IT Management Processes              | ★★★★☆           |
| Technology Assessment                | Maturity Rating |
| Infrastructure                       | ★★★★☆           |
| Data Center Management               | ★★★★★           |
| Enterprise Applications – FileNet    | ★★★★☆           |
| Enterprise Applications – SAP        | ★★★☆☆           |
| Enterprise Applications - GIS        | ★★★★★           |
| Web Applications – Internet/Intranet | ★★★★☆           |

### 1.2.5 Opportunities Summary

Based on the assessment of topical areas selected for Gwinnett County, opportunities were identified which will form the basis for some of the IT strategies and tactical plan items. The following represents an overview summary of these opportunities:

- Leverage current IT investments, particularly those solutions which are under-utilized in terms of solution capabilities versus what is actually being used (i.e., SAP and FileNet).
- In order to make better County-wide IT decisions and provide transparency relative to how IT decisions are made, institute a more formal IT governance model.
- Establish an IT planning process that is directly linked to the County's business planning process and ensure alignment with Departmental Business Plans and Balanced Scorecard.
- Invest in technologies that will help to solve a particular business problem, particularly those involving Citizen access to County-wide services (e.g., via the web).
- Continue efforts to align DoITS functions with business plans as defined by Departments within the County, including creation of a Communication Plan, establishing a Business Analyst role and selective consolidation of IT functions across the County.
- Implement tools which will enhance collaboration both within the County and with agencies outside the County, especially those which involve shared services and (potentially) costs.
- Continue to invest in IT infrastructure projects that will ensure the current and on-going performance, reliability, confidentiality and integrity of systems (e.g., redundant data center, fiber, server virtualization, etc.)

## 1.3 Market Analysis

### 1.3.1 Trends Impacting the Government Industry

The U.S. economy shrank at a 5.7 percent annual pace in the first quarter of 2009, capping its worst six-month performance in five decades and reflecting declines in housing, inventories and business investment.<sup>1</sup> The impact on local government such as Gwinnett County will be felt for some time as their overall budgets are impacted by a declining tax revenue base, among other factors. 38% of local government information technology budgets will decrease over the next two years as a result of the economic slowdown while 14% will increase according to a survey.<sup>2</sup>

In the face of this economic downturn, further IT spending will continue to be scrutinized. Local governments will need to do more with less, will have less discretionary funds available, and will need to make the business case for how IT can help the organization save money. Many local governments are looking at obtaining funding through the American Recovery and Reinvestment Act of 2009 (ARRA); however, with the exception of healthcare information technology and telecommunications, few funds are available relative to information technology improvements.<sup>3</sup>

IT within local governments will continue to look for IT professionals with business skills versus technical certifications to deal with the new economic environment.<sup>4</sup> Perhaps this trend will result in better IT performance without

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<sup>1</sup> U.S. Economy Contracted at 5.7% Rate in First Quarter, [www.bloomberg.com](http://www.bloomberg.com), June 2009

<sup>2</sup> State of City & County IT 2008 National Survey, INPUT and PTI, October 2008

<sup>3</sup> Released Guidance on AARA Funds for Local Governments, [www.gfoa.com](http://www.gfoa.com), June 2009

<sup>4</sup> Seven Trends that will Transform Local Government through Technology, Alan R. Shark, DPA, CAE, Spring 2009

commensurate increases in cost. Some studies show that IT spending in many organizations could decrease by up to 20% based on the fact that those are the margins many IT outsource service providers expect. These service providers have been known to achieve these margins with minimal decrease, if any, in service levels. What this trend demonstrates is that County IT may be able to achieve similar cost savings without negatively impacting service levels. In fact, they may not have a choice due to anticipated budget reductions.

The following tables include additional IT and business trends impacting government. Note, items with an asterisk (\*) are already deployed at Gwinnett County.

### Information Technology Trends in Government

| Technology                                    | Trends Relative to Government   |
|---|---|
| <b>Application Service Provider (ASP)</b>     | <ul style="list-style-type: none"> <li>■ Revival as specific niche solutions have been identified leveraging this model.</li> <li>■ Low level of interest from government to use ASP services with the exception of areas such as e-recording and, to a limited extent, business application systems.</li> </ul>  |
| <b>Cloud Computing</b>                        | <ul style="list-style-type: none"> <li>■ Similar to ASP, refers to computing over the Internet where the organization needs no knowledge of the scalable, virtual infrastructure that supports them.</li> <li>■ Often incorporates “as a service” model (e.g., Software as a Service or SaaS) where services are pay as you go.</li> <li>■ Some applications for government gaining traction but concerns remain regarding security.</li> </ul> |
| <b>Constituent Resource Management (CRM)*</b> | <ul style="list-style-type: none"> <li>■ Slowly gaining interest from larger and more sophisticated governmental organizations as a means of tracking contacts with citizens and other outside stakeholders.</li> <li>■ Intended to replace existing systems within departments that track citizen interactions.</li> <li>■ Frequently implemented in conjunction with a 311 system.</li> </ul>   |
| <b>Collaboration Tools*</b>                   | <ul style="list-style-type: none"> <li>■ Increased interest with deployment of web-based collaboration tools.</li> <li>■ Tools continue to advance that leverage existing workflow and email solutions into a single integrated solution.</li> </ul>  |
| <b>Enterprise Content Management*</b>         | <ul style="list-style-type: none"> <li>■ Increased interest in combining multiple modes of communication into a single integrated solution (fax, email, web, documents, etc.)</li> <li>■ Continued vendor consolidation.</li> </ul>   |
| <b>Data Warehousing*</b>                      | <ul style="list-style-type: none"> <li>■ Decreased costs for storage are making technology more attractive.</li> <li>■ Requires higher-level of collaboration between departments in data sharing situations.</li> <li>■ Tools are mature.</li> </ul>   |
| <b>Document Management*</b>                   | <ul style="list-style-type: none"> <li>■ Further integration of document management along with other content management technologies (i.e., e-forms, faxing, imaging, email, etc.)</li> <li>■ Increased use in integrating work flow technology with documents.</li> </ul>  |

| Technology                                   | Trends Relative to Government   |
|--|---|
| <b>E-Government*</b>                         | <ul style="list-style-type: none"> <li>■ Evolving technology.</li> <li>■ Focus on providing more on-line interactive services with citizens and businesses to support a 24-hour operation such that governmental services and information can be accessed and used anytime, anywhere.</li> </ul>  |
| <b>Identity Management</b>                   | <ul style="list-style-type: none"> <li>■ Increased interest based on numerous platforms and applications that users need to access.</li> <li>■ Technology still continuing to evolve.</li> <li>■ Multiple options including single sign-on and biometrics.</li> </ul>   |
| <b>Radio Frequency Identification (RFID)</b> | <ul style="list-style-type: none"> <li>■ Emerging technology that is still evolving as standards and security issues are being defined.</li> <li>■ Certain governments using technology to track documents and other items as a replacement for traditional bar coding technology.</li> </ul>   |
| <b>Relational Database Technology*</b>       | <ul style="list-style-type: none"> <li>■ Very mature technology.</li> <li>■ Employed on a variety of hardware and software platforms.</li> <li>■ Short list of major players including Oracle, Microsoft and IBM.</li> </ul>  |
| <b>Thin Client Computing</b>                 | <ul style="list-style-type: none"> <li>■ Increased interest in deploying this technology due to reduced total cost of ownership with purchasing, deploying and maintaining as compared to traditional desktop computers.</li> <li>■ Many Counties deploying in a significant manner (Cook County, Oakland County).</li> </ul>   |
| <b>Voice Over IP (VoIP)*</b>                 | <ul style="list-style-type: none"> <li>■ Deployment continues to increase to allow voice, video and data to flow across the same network.</li> <li>■ Increased use by IT support units including help desk.</li> </ul>  |
| <b>Wireless*</b>                             | <ul style="list-style-type: none"> <li>■ Deployment for staff to access information from the field.</li> <li>■ Establishment of “hot sites” within County buildings.</li> <li>■ General technologies are integrating with wireless (PCs, PDAs, cell phones, etc.).</li> </ul>   |
| <b>Open Source*</b>                          | <ul style="list-style-type: none"> <li>■ Mature, available open source products are becoming more accepted and used by public sector entities.</li> <li>■ Open source products are viewed as reliable, low cost replacement solutions to vendor provided solutions.</li> <li>■ Vendors are no longer viewing open source products as a fad but rather are bundling support services around these products.</li> </ul> |

| Technology | Trends Relative to Government   |
|------------|---|
| Web 2.0    | <ul style="list-style-type: none"> <li>Fairly generic term perceived to be a second generation of web development and web design facilitating communication, information sharing, interoperability, and collaboration on the World Wide Web.<sup>5</sup></li> <li>Involves the use of interactive tools available via the Web (i.e., Facebook, etc.)</li> <li>Gaining traction in the government industry.</li> </ul> |

### Business Trends Related to Government

In addition to general technology trends, the deployment of technology as a more integrated component of business has resulted in certain business trends related to technology that are highlighted below. The following tables include additional IT and business trends impacting government. Note, items with an asterisk (\*) are already deployed at Gwinnett County.

- **Return on Investment (ROI)\*** – Relatively new concept for government that includes cost benefit analysis, payback period and other metrics to define a return on expenditures in the area of technology.
- **Balanced Scorecard\*** – Progressive approach used by a growing number of governmental entities that is defined as a strategic management system that enables organizations to clarify their vision and strategy and translate them into action. Typically this involves defining the perspectives, objectives and measures that are tied back to the strategic plan for the organization.
- **Project Management\*** – Increasingly, government is looking at the establishment of more formal processes and procedures around management of projects by adopting a set of standard tools, templates and methods that are frequently based on the Project Management Institute’s (PMI) Project Management Body of Knowledge (PMBOK). Larger organizations are establishing Project Management Offices (PMOs) as a resource pool for projects within the organization.
- **Consolidation\*** – Due to reduced budgets and cost cutting measures, consolidation of technology resources including staff and technology has been identified as a means of reducing costs without sacrificing service. Additionally, concerns about having proper Business Continuity Plans in place along with the increased security risks to desktop and server environment are supporting the need to consolidate IT resources.
- **Collaboration\*** – Similar to consolidation, reduced budgets and cost cutting measures are requiring governmental entities to look at opportunities to collaborate with other business partners to maximize the use of taxpayer dollars. This may include County government working more closely with municipalities to leverage network resources and GIS resources, as an example. Even internally with an organization, there is a need to leverage expertise among various IT support units.
- **Selective Outsourcing\*** – Reduced budgets and cost cutting measures are requiring government departments to evaluate their entire operations to determine their core area of expertise and identify areas that could be outsourced. (Note: Gwinnett County is in the process of converting contractor positions to internal positions)
- **Data Integration and Data Sharing\*** – With increased emphasis on leveraging shrinking tax dollars, governmental entities are embracing the opportunity for improved data integration and data sharing to improve processes and provide improved opportunities for decision-making. This can be evidenced by initiatives in areas including Constituent Resource Management (CRM), Integrated Public Safety, Integrated Land Records, Enterprise Resource Planning (ERP) and other County-wide technology initiatives that are being implemented.

As indicated by the asterisks (\*), above, Gwinnett County is fairly progressive in its deployment of information technology relative to continuing IT and business trends within the public sector. Similar trends are observed in other

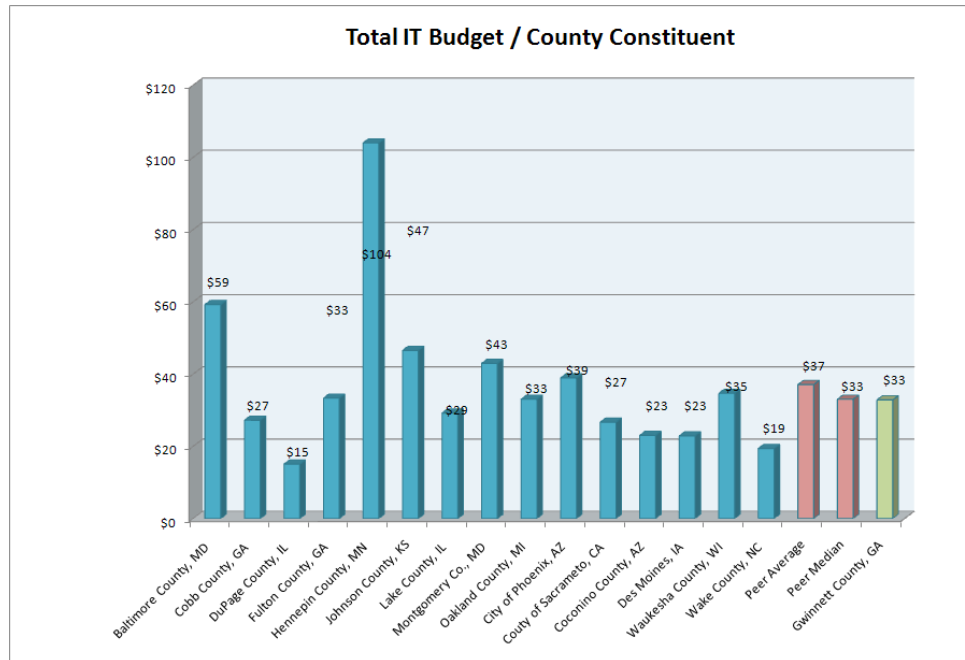
<sup>5</sup> www.wikipedia.org

industries; however, the public sector tends to lag in their deployment relative to these other sectors. It is expected that the ITSP will leverage these trends to the extent possible in order to maximize their benefit to the County and the citizens it serves.

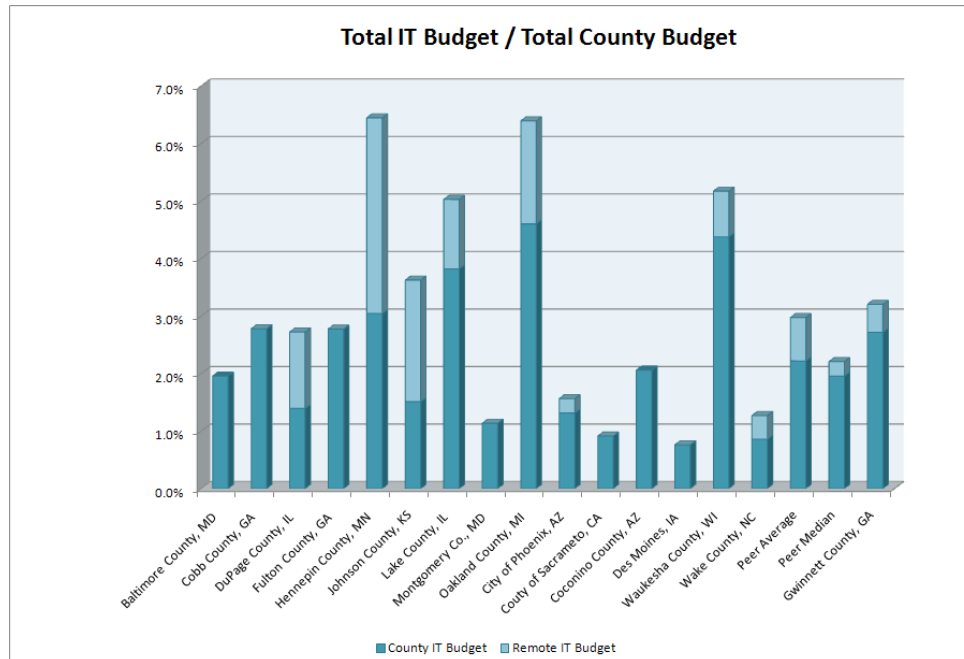


### 1.3.2 Benchmark Information

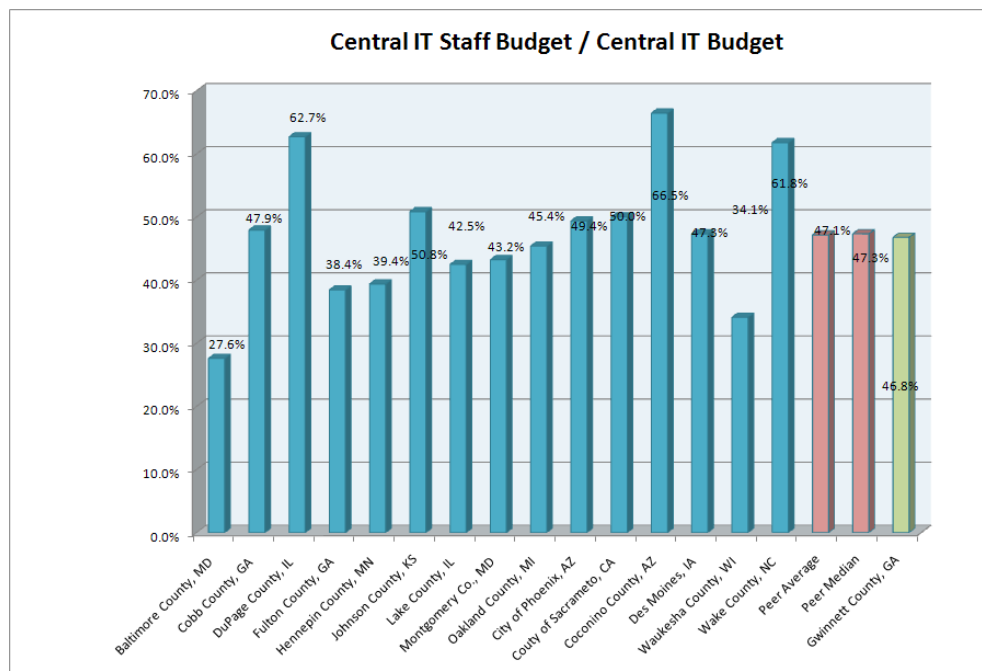
Plante & Moran collected benchmark data from several peer organizations primarily in order to gain an understanding of how Gwinnett County's budget and staffing levels compare to these peer organizations. In addition, data from past benchmarking studies was included. The graphics below and the explanations that follow provide a clear indication of how Gwinnett County compares to their peers.



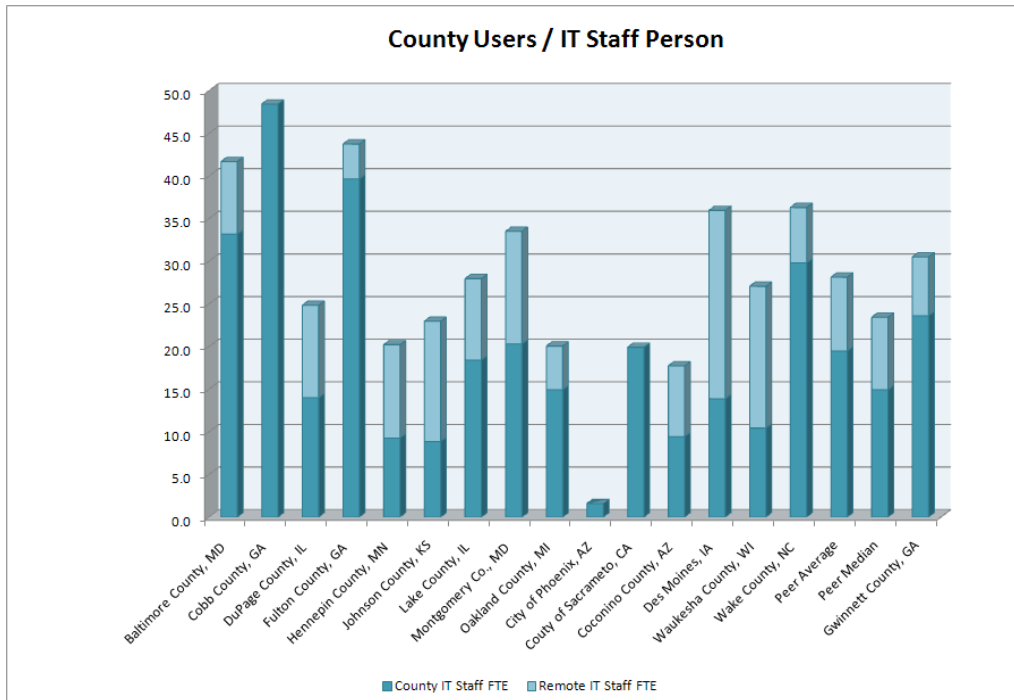
Gwinnett County, GA is roughly at the Peer Median relative to Total IT Budget / County Constituent, spending \$33 per constituent on IT. Hennepin County, MN was the highest Peer at \$104 per constituent which is significantly higher than the next highest organization (Baltimore County, MD at \$59 per constituent). It should be noted that Hennepin County's spending is higher due to two factors: 1) advanced deployment of best practices relative to IT, and b) IT at Hennepin County is highly centralized. This second factor suggests that it is much more difficult to track total IT costs in Counties where IT is highly de-centralized. In fact, both Coconino County, AZ and Des Moines, IA are highly de-centralized relative to IT and their IT spending is around \$23 per constituent, suggesting that not all IT costs are being captured.



At slightly above 3.0%, Gwinnett County is nearly a percentage point above the Peer Median for Total IT Budget / Total County Budget. Oakland County, MI and Hennepin County, MN spend nearly twice as much on IT at just over 6.0%. Note that some of the Peers in the study did not report de-centralized IT costs such that their percentage is lower than it actually should be.



Gwinnett County's Central IT Staff Budget is around 46.8% of the overall Central IT Budget, which is only about 0.5% below the Peer Median. Coconino County, AZ had the highest percentage of Staff Budget versus IT Budget at 66.5%. The lowest, was Baltimore County, MD at just 27.6% of the IT Budget.



When looking at # of County Users per IT Staff Person, Gwinnett County's 30 is above the Peer Median of just under 25. Note that the City of Phoenix, AZ data point was not reliable for this metric.

## 1.4 IT Service Imperative

### 1.4.1 Importance of IT Service Delivery

Like any enterprise, most government organizations are concerned with providing a high level of service to the citizens and customers within the communities they serve. During our discussions with County representatives at the line of business sessions and follow-up interviews, management and staff at Gwinnett County demonstrated a high-level of commitment and concern regarding the services being provided to the citizens and the community. They indicated that IT is an extremely important element that is needed to allow the County to achieve its overall mission.

During the past several years, the County has fully embraced a Business Planning Process (BPP) and Balanced Scorecard (BSC) which further demonstrates the County's commitment to excellence. Several pilots for the BPP were launched in 2008 and all Board of Commissioner (BOC) Departments are participating in 2009. Several of the non-BOC Departments have expressed an interest in participating, as well, though none have committed.

The following graphic represents the BPP for Gwinnett County.

### Gwinnett County - Business Planning Process



This commitment to excellence transcends the County, based on our observations. The BSC provides a means for measuring performance against goals developed by each organization, many of which are focused on citizens / customers. This BPP provides an excellent mechanism from which to create alignment between the IT Strategic Plan and the overall business goals and objectives of the County.

Based on the BPP process and timeline, we recommend that the IT Strategic Plan, including the Information Technology Tactical Plan be updated in March/April of each year and finalized at the Department Planning Meeting in May.

## 1.4.2 IT Vision / Mission / Goals

Representatives from various Departments throughout the County assisted in the development of an Information Technology Vision, Mission and Goals for the County. It is important to note that the IT Vision, Mission and Goals are closely aligned with the overall Vision and Mission for the County. The individuals who contributed toward the development of the following were well aware of the County's Vision and Mission and helped to create the alignment.

### 1.4.2.1 IT Vision

Gwinnett County will be a leader as a model of excellence in the use of technology which enables business practices that foster better government.

### 1.4.2.2 IT Mission

- Provide collaborative solutions for all facets of County government in order to ensure their business problems and goals are being met.
- Consider all of the opportunities for consolidation, convergence, and connectivity offered by technology and sound business practices.
- Satisfy customers' demands for technology services that will enhance the lives of the citizens and constituents of Gwinnett County.

### 1.4.2.3 IT Goals

1. **Solution Delivery.** Enhance constituent interaction by providing solutions that will improve the quality and efficiency of services using technology, where appropriate.
2. **Enterprise Architecture.** Provide and support a current, stable, secure, flexible and supportable standards-based technology infrastructure.
3. **Centralized Technology Funding.** Maintain a centralized IT funding model, enabling timely strategic investments.
4. **Governance.** Provide enabling IT policies and procedures that encourage collaboration and guide County organizations in planning, deployment and maintenance of IT solutions.
5. **Privacy and Security.** Provide centralized technology security oversight and direction.
6. **Information Technology Workforce Management.** Implement strategies to recruit, retain and invest in a highly skilled technology workforce that is available, trained and effectively employed to efficiently achieve countywide objectives.

### 1.4.3 IT Guiding Principles

As well, a set of guiding principles was developed and are based on sound business practices with respect to the information technology industry domain. Each of these principles is intended to guide IT decisions that are made throughout the County and will play an important role in IT Governance for the County.

1. Provide County stakeholders with timely, convenient access to information and services through the appropriate use of technology.
2. Evaluate business processes for redesign opportunities in conjunction with the appropriate deployment of supporting technology to achieve productivity improvements and other benefits that tie to departmental and County goals and objectives.
3. Strive to identify and exploit common business functions and processes across organizational boundaries when implementing new technologies and business applications.
4. Leverage the deployment of existing technologies versus procuring new technologies that perform similar functions.
5. Implement proven, value-oriented technologies.
6. Hardware and software shall adhere to vendor-independent standards and minimize proprietary solutions.
7. Manage information technology as an investment.
8. Business needs drive information technology solutions. Technology is a means to an end not an end in itself.
9. Information technology deployed in departmental operations is a shared responsibility between the department and County IT. Both will assume accountability for delivering productivity gains derived from technology investments.
10. Approach IT projects as a partnership of County IT and departmental staff.
11. Consider the purchase, integration and support of commercial-off-the-shelf (COTS) software requiring minimal customization as the first choice when implementing new business software applications.
12. When possible, capture data once in order to avoid cost, duplication of effort and potential for error and share the data where appropriate.
13. The portfolio of technology projects, individual projects and resource allocation will be managed using standard tools and methodologies.
14. Security will be considered in all aspects of technology operations.

## 1.5 Information Technology Strategies

Given the rapid evolution of available information technologies and ever-changing demands of citizens, employees, businesses and other government agencies with respect to their access and availability; it is important to periodically

reflect upon these changes and establish a clear direction for which strategies Gwinnett County should adopt relative to information technology. Information technology (IT) continues to evolve at a rapid pace and there is no sign of letting up. Gwinnett County's adoption of IT should be closely aligned with the current Business Planning Process (BPP) and support the achievement of goals and objectives established by the various Departments within their respective balanced scorecards.

The following information technology strategies were identified and confirmed with the County's IT Steering Committee in April 2009. They were developed with a strong consideration of the four main areas of the balanced scorecard (BSC): Citizen/Customer Perspective, Financial Perspective, Internal Process Perspective and Learning Perspective. Business goals and objectives, as defined by many of the Departments throughout the County as part of the BPP, are supported by key performance indicators (KPIs): metrics which allow tracking against achievement of these goals. For example, DoITS has established a goal of ensuring completion of ITS Help Desk calls. For this particular goal, two KPIs were established: 1) Infrastructure division help desk calls answered on-time (%) and 2) Enterprise systems division help desk calls answered on-time (%).

As with any new technology, each will have unique cost and risk implications. For example, cost implications should not only focus on the up-front capital cost in terms of software licensing, hardware, etc. It must also consider a total cost of ownership (TCO) in terms of up-front capital costs, on-going operating costs, as well as other more difficult to track costs including additional resource time to support, implement and use the technology. The County must carefully evaluate each technology before it is adopted using a consistent, transparent approach. One of the overall IT Strategies addresses the need to have a formal Project Portfolio Management strategy such that cost and risk are evaluated on a consistent basis throughout the entire County.

The IT Strategies should be instituted to enhance the overall service and value provided by the IT function throughout the County. The following table summarizes the IT Strategies while the sections that follow provide a more detailed explanation of each strategy. In particular, each strategy identifies which area of the BSC it is likely to have the greatest impact on, such that it supports the overall business plan.

Gwinnett County, GA  
Information Technology Strategies (2009)

| #  | IT Strategy                          | Brief Description  | Business Plan Alignment  | Sample Metrics  |
|----|--------------------------------------|--|--|---|
| 1. | <b>e-Government</b>                  | Provide citizens/customers with ubiquitous, convenient and timely access to services and information electronically.           | <ul style="list-style-type: none"> <li>▪ Citizens / Customer Perspective</li> </ul>  | <ul style="list-style-type: none"> <li>▪ # of services available on-line</li> <li>▪ Web site traffic</li> </ul>                                   |
| 2. | <b>Enterprise Content Management</b> | Enable a major leap toward streamlined workflow and a “paperless” environment.   | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> </ul>   | <ul style="list-style-type: none"> <li>▪ # of document types used</li> <li>▪ Reduction in paper storage costs</li> </ul>                          |
| 3. | <b>IT Organizational Alignment</b>   | Ensure continued alignment of information technology human capital in support of organizational goals and objectives.          | <ul style="list-style-type: none"> <li>▪ Citizens / Customer Perspective</li> <li>▪ Internal Process Perspective</li> <li>▪ Financial Perspective</li> <li>▪ Learning Perspective</li> </ul> | <ul style="list-style-type: none"> <li>▪ SLA metrics</li> <li>▪ % of projects appropriately assigned PM</li> <li>▪ RFQ turnaround time</li> </ul> |
| 4. | <b>County-Wide IT Governance</b>     | Provide a framework to make better County-wide IT decisions and provide transparency relative to how these decisions are made. | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> <li>▪ Citizens / Customer Perspective</li> <li>▪ Learning / Growth Perspective</li> </ul>                         | <ul style="list-style-type: none"> <li>▪ % departments assigned business analyst</li> </ul>   |
| 5. | <b>Project Portfolio Management</b>  | Implement a comprehensive and unified approach toward identifying and prioritizing IT projects.                                | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> </ul>   | <ul style="list-style-type: none"> <li>▪ # of projects completed on-time</li> </ul>   |
| 6. | <b>Solution Optimization</b>         | Leverage investments in existing technology to improve organizational performance and integration.                             | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> <li>▪ Citizens / Customer Perspective</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Customer satisfaction with Applications</li> </ul>   |
| 7. | <b>Cost Containment</b>              | Leverage information technology and related know-how to help reduce fixed and variable costs relative to IT and non-IT assets. | <ul style="list-style-type: none"> <li>▪ Financial Perspective</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Energy cost reduction \$</li> <li>▪ External support cost reduction \$</li> </ul>                        |
| 8. | <b>Collaboration</b>                 | Provide tools to increase collaboration both within the County and with citizens/customers.                                    | <ul style="list-style-type: none"> <li>▪ Internal Process Perspective</li> <li>▪ Learning / Growth Perspective</li> </ul>  | <ul style="list-style-type: none"> <li>▪ Number of SharePoint sites</li> </ul>  |

Note that for each IT Strategy, there is a corresponding Business Plan Alignment (i.e., which area of the County's BSC does the particular strategy address) and sample metrics (i.e., key performance indicators). The business plan alignment and establishment of metrics is a critical component of the IT Strategic Plan. Such alignment clearly indicates the purpose of IT is to support the County-wide and Departmental-driven business goals and objectives. If such alignment does not or ceases to exist, the particular IT Strategy will become obsolete (i.e., no longer needed). This is particularly useful in recognizing the fact that the County's business goals and objectives may change over time. In the event these goals and objectives change, so should the IT Strategic Plan. The Technology Review Process, presented later in this Plan, provides a mechanism for ensuring the continual alignment between the County's business goals and objectives and the IT Strategic Plan.



### 1.5.1 IT Strategy 1: e-Government

With respect to the BSC, a well-executed e-Government strategy will have the greatest impact relative to specific Departmental goals established in the **Citizen/Customer Perspective** area. E-Government has a broad set of definitions but typically refers to information technologies used to improve government services as well as interactions with citizens, employees, businesses and other government agencies.

One of the major strategies relative to e-Government has nothing to do with technology; rather it focuses on establishing a more formal, well communicated governance structure relative to specific branding and content decisions. Many organizations struggle with the distinction between who is responsible for these elements – Marketing versus Information Technology – but it usually winds up in one or both of these areas. Implementation of the IT Governance strategy will help to ensure these responsibilities are clearly defined but more importantly, ensure their alignment with the overall business goals of Gwinnett County.

The e-Government strategy for Gwinnett County will have two parts: On-line Services and Information On-Demand.

#### On-Line Services

Gwinnett County has already established an “e-Government” presence offering a vast array of services from the main page of [www.gwinnettcountry.com](http://www.gwinnettcountry.com). Most of these services are transactional such as applying for a building permit, paying taxes, paying a water bill, etc. They offer convenience versus added service. The e-Government strategy will serve to improve the experience for citizens/customers in terms of access to service, navigation, consistent look and feel, and usability. Integration with “back office” applications will also be essential to ensure transactions are processed in accordance with user expectations.

There are a variety of services that can be made available on-line for local governments. Fairfax County, VA, for example has included a comprehensive list in their information technology strategic plan, many of which are available via the web, with some also being available via Kiosk and/or interactive voice response (IVR). Services available via the web should be accessible from a single “portal” such that users do not need to figure out which Department is responsible to find what they are looking for. Example services and groupings include:

**Auto/Traffic:** Register a vehicle, Pay traffic tickets,

**Home:** Estimate electrical and building permit fee, Real estate property assessment and tax, Inspection scheduling status, Pay water bill on-line

**Regional:** Access GIS data

**Business:** Apply for County jobs

**Community:** Apply for a library card, Board of Commissioners complaint form

**Finances:** Pay taxes via eCheck/credit card, Pay water bill on-line

**Recreation:** Reserve a picnic area

#### Information On-Demand

For Gwinnett County, the e-Government strategy will focus on a specific set of information technologies which will enable a combination of both one-way (current state) and two-way communications. Obviously, with the former there is an exclusive level of control that Gwinnett County has in terms of published content that is openly available to the public. As such, one-way communications should focus on user choice focusing on providing citizens/customers with real-time information they find useful and in their preferred format. Two-way communication should be available initially through

closely moderated means with citizens and less so for employees, businesses and other government agencies.

There are four primary categories of content:

1. **Static:** Another way of looking at 'static' content is as brochureware, or informational. This content will not change much (such as overview pages.) The County should look to consolidate this content, simplify it down to key points. By including more imagery, this content can deliver more impact with fewer words.
2. **Dynamic content:** Information that changes with a degree of frequency. News, events, external feeds, blogs, etc. These are all examples of dynamic content. The key for the County is to monitor the 'freshness' of dynamic content, and make sure this information is featured prominently. Static content can easily appear stale and salesy. Dynamic content leaves an impression of innovation, hard work and versatility.
3. **Social content:** Here, users primarily control the content. Although certain checks can be put in place to counteract the negative impact of social content, these techniques deflate its objective.
4. **Multimedia:** Flash, video, audio, podcast, etc. are examples of multimedia content.

Emerging technologies which support on-demand communications are often referred to "Web 2.0" technologies. Web 2.0 can apply to all content categories noted above. Web 2.0 can be broadly defined under the concept of allowing users to pull information they need on-demand, as well as the facilitation of collaboration. Using Web 2.0 technologies, users can collect and/or share information; however, it is most convenient: via a mobile device, email, personal portal and/or via the public site. Examples which should be strongly considered by the County include:

- **RSS (Really Simple Syndication).** Provides users the ability to subscribe or 'pull' content from the County's site into a format of their own.
- **Blog (contraction of the term "weblog").** A blog is a type of website usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video.
- **Forums.** Generally reserved for support areas, forums are an excellent way to build an online help library. Many Counties are challenged with the means to maintain and monitor a forum.
- **Twitter ([www.twitter.com](http://www.twitter.com)).** Twitter is an online service/community where users subscribe to particular feeds (sponsored by individuals or organizations) where subscribers are able to quickly post text-like statements for all subscribers in the group to view.
- **Social Bookmarking.** Another simple means of allowing users to not only make a particular page a favorite, but share that page with a larger community.
- **Facebook ([www.facebook.com](http://www.facebook.com)).** Facebook is a social networking site with millions of members; Facebook provides an immediate venue for connecting an organization with a broad audience.
- **YouTube ([www.youtube.com](http://www.youtube.com)).** YouTube is another popular social media service; YouTube has proven itself to be a simple and effective means to connect with a very large audience.

## 1.5.2 IT Strategy 2: Enterprise Content Management

With respect to the BSC, a well-executed Enterprise Content Management (ECM) strategy will have the greatest impact relative to specific Departmental goals established in the **Internal Process Perspective** area. Secondary BSC items that would be impacted would be **Learning / Growth Perspective** based on the knowledge transfer that could take place and **Citizen / Customer Perspective** based on potential improvements in service.

ECM refers to the technologies, strategies, processes, methods and tools used to capture, manage, store, preserve, and deliver content and documents related to an organization and its processes. ECM technologies, such as the IBM FileNet solution used by Gwinnett County, allow for the management of an enterprise level organization's information. However, such technologies should not be the only area of focus regarding ECM. As indicated earlier, strategies, processes and tools should also play a vital role in an organization's ECM strategy.

There are several major technology areas that are integral to Gwinnett County's ECM strategy, including: Geographic Information System (GIS), Electronic Document Management (i.e., IBM FileNet), and Intranet (i.e., Microsoft SharePoint). All three areas represent major components of content which are managed throughout the County. By defining and executing an ECM strategy that includes all three of these components, the County will realize improvements in overall performance (e.g., reduce time required for filing and locating documents) and overall cost savings (e.g., reduction in paper storage costs). The County has already experienced such benefits related to GIS.

The County-wide GIS has a well defined plan and strategy which it has been executing in conjunction with major stakeholders throughout the County. The ECM strategy supports the continued effort relative to GIS; however, it should also encompass a County-wide effort to establish an addressing standard.

With respect to Internet/Intranet, key elements of the ECM strategy should be executed in connection with the e-Government and Collaboration strategies. The Intranet strategy surrounds the County's current deployment of Microsoft SharePoint, which is being converted from a legacy system. For both the Internet and Intranet, one of the key strategies will be to ensure relevant content is published for citizen / customer consumption in a timely manner.

The County has invested significant dollars and resources in implementing the IBM FileNet solution. The general consensus from users and other stakeholders of this system is that it is not being used to its full potential. Thus, a major focus of ECM involves establishing a clear direction and plan to optimize the use of IBM FileNet. This direction should include important Operational, Process and Technical elements.

As part of its ECM strategy, the County should distinguish IBM FileNet as a business process management tool utilizing content-centric workflow as the primary vehicle for process improvements. This functionality could then be leveraged further to improve citizen / customer service. The IBM FileNet content storage, classification, and retrieval should continue to be leveraged and expanded as additional process applications are brought online. IT Governance will play an important role in the County's ECM strategy such that it will ensure consistent standards are followed (e.g., taxonomy, etc.) The following list represents several of the key areas of improving FileNet that Gwinnett County should consider as part of the ECM strategy:

- A number of operational/process points. There are many easy to implement operational or process recommendations that can be implemented one at a time (maybe one every month or every other month would be reasonable).
- Begin coordination with SharePoint. This does not imply implementing a fully-integrated solution; however, if two separate paths are followed for FileNet versus SharePoint, there could be problems in the future. These

two technologies should be well aligned with each other, leveraging the strengths of each, while avoiding redundancy of functionality between both platforms.

- Collaboration/Version Control. Using FileNet (or SharePoint), allow users an easy mechanism to collaborate around content. Initially it should include areas such as Word/Excel/PowerPoint docs.
- Eliminate Print and Scan. This effort will significantly reduce existing redundancy including man-hours, physical resources (paper), and storage.
- Improved Metrics Reporting. This requires one new module installation (P8 Process Analyzer component) but once it is running, there's very little else for IT to do. Users will have the ability to manage their own aggregate process reporting needs through the "slice and dice" functionality provided.
- Improved Capture. Take the first step of implementing image enhancement to clean up images. Advanced capture (OCR/ICR) can be implemented later.

Microsoft SharePoint should be established for the industry-wide recognition of excellence in basic content services and as the collaboration tool of choice. It is important to realize that SharePoint implementations often create administrative situations in which content is easy to create but difficult to manage. As greater numbers of SharePoint sites are established for projects, lines of business, etc. and content is created by stakeholders in these groups in a decentralized manner, management of the resultant content becomes nearly impossible from a centralized standpoint. The County should realize this and embrace the benefits of collaboration and content creation, while working to retain sufficient management of County data through a defined and enforced taxonomy. Upfront coordination and planning significantly reduces the subsequent challenges faced when trying to enforce structure on a decentralized SharePoint implementation. An integrated SharePoint/IBM FileNet implementation yields significant support towards enforcing a defined structure.

Another important aspect to consider relative to IBM FileNet and Microsoft SharePoint is that there is "out of the box" integration between the two. This integration can take one of three forms:

1. Archive information from completed (e.g., discontinued, retired) SharePoint site to FileNet. This is the easiest of the three to implement, but only yields archived content to the enterprise-wide audience.
2. Content from SharePoint - typically a private view which is created collaboratively - is "published" to FileNet for public review when complete.
3. Tight integration between FileNet and SharePoint. Work within the familiar SharePoint interface to browse, extract, and store content to and from the FileNet repository. This is the hardest of the three to implement, but provides the greatest enterprise-wide flexibility.

From a pragmatic standpoint, the second option appears to be the most reasonable for Gwinnett County. This allows users to fully utilize the collaboration capabilities provided by SharePoint, while also leveraging the ability to share classified and security-aware content throughout the County with IBM FileNet.

Finally, deployment of Gwinnett County's ECM strategy will require user education and communication, preferably championed by the business function, fully supported by IT. Users will need to get past the "we did not know FileNet could do that" stage. An early success can help users embrace FileNet and increase the awareness of what it can do. One project that can provide an early win is the elimination of print/scan steps within a single area of the County. Users should focus on retaining one ECM-managed copy of a document, rather than managing paper, scanned, emailed, or otherwise duplicated versions of the same document. This can easily be achieved in fewer steps right within FileNet with adequate user training and buy-in from the selected Business sponsor, resulting in reduced data redundancy and improved

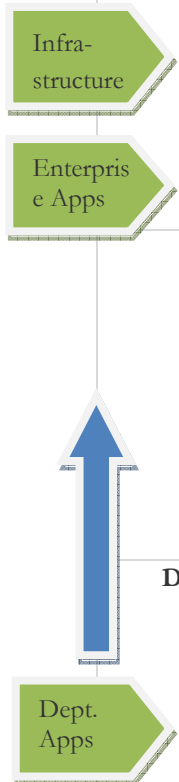
processes.

### 1.5.3 IT Strategy 3: IT Organizational Alignment

With respect to the BSC, a well-executed IT Organizational Alignment strategy will have the greatest impact relative to specific Departmental goals established in the **Learning/Growth Perspective** area. A secondary BSC item that would be impacted would be **Internal Process Perspective**. The current state of the IT function across the County indicates a trend toward centralization. In fact, changes were occurring during the development of this Plan whereby IT staff who were part of an agency outside of DoITS were transferred into DoITS.

The table below provides the anticipated strengths and weaknesses of centralized versus decentralized IT, along with identification of where Gwinnett County is currently operating. The County is currently largely centralized in terms of infrastructure, although some agencies have their own data center. One of these data centers will serve as a secondary data center for DoITS. Applications (i.e., application deployment and support) are de-centralized; however, the major enterprise applications (e.g., SAP) are supported centrally. The trend is toward a hybrid approach for applications support and this strategy is supportive of such an approach.

**Centralized versus Decentralized IT  
Strengths versus Weaknesses**



| Information Technology Organizational Model | Typical Strengths   | Typical Weaknesses   |
|---|---|--|
| <b>Centralized</b>                          | <ul style="list-style-type: none"> <li>Economies of Scale</li> <li>Uniform Standards</li> <li>Architectural Control</li> <li>Asset Protection</li> <li>High Integrity</li> <li>Enterprise Security</li> </ul>   | <ul style="list-style-type: none"> <li>Danger of Isolation</li> <li>User Frustration</li> <li>Communication Costs</li> </ul>   |
| <b>Hybrid</b>                               | <ul style="list-style-type: none"> <li>Business Unit Economies of Scale</li> <li>Leveraged Development Standards</li> <li>Local Architectural Control</li> <li>Sourcing and Budget Flexibility</li> <li>Development of Best Practices</li> <li>Distribution of Competencies</li> <li>Business/Technology Integration</li> </ul> | <ul style="list-style-type: none"> <li>Standards of Governance</li> <li>Enterprise Architectural Diffusion</li> <li>Challenge of Matrix Management</li> <li>Redundant Costs</li> <li>Unproductive Technical Diversity</li> </ul> |
| <b>Decentralized</b>                        | <ul style="list-style-type: none"> <li>Responsiveness</li> <li>Business Awareness</li> <li>Local Control of Priorities</li> <li>Appropriateness of Solutions</li> <li>Local Cost Control</li> <li>Rapid Development</li> <li>High Integrity</li> </ul>  | <ul style="list-style-type: none"> <li>Architectural Diffusion</li> <li>Redundant Cost</li> <li>Lack of Long-Term Flexibility</li> <li>Enterprise Learning</li> <li>Isolation of Best Practice</li> </ul>                        |

The County should continue to consolidate the information technology function into DoITS. In addition, redundant IT infrastructure components located at remote data centers should be reviewed and potentially moved to the County's primary data center managed by DoITS. In addition, all staff currently employed by the agencies whose primary function is to provide information technology support to County staff should be re-assigned and report directly to DoITS. This strategy of centralizing the IT function will benefit the County as follows:

1. Allow for improved standardization of IT across the County which will allow for lower long-term maintenance and replacement costs.
2. Allow for elimination of redundant IT services such that the County can enjoy cost savings.
3. Allow for greater leverage of IT resources and in negotiations with vendors such that the County can enjoy cost savings.
4. Allow for greater cross-training among staff who currently perform IT functions. Central IT's current staff development process will ensure this will happen.

5. Not cause significant degradation of service levels currently enjoyed by the several Departments. All calls for information technology support will be handled by the Central IT Help Desk, just as calls are from other Departments throughout the County.

It is important to note that not all IT functions should be centralized. For example, if an agency has a need to support a particular type of server that is not a standard (as established through County Wide IT Governance), the competency required to provide support should reside in the particular Department. However, consistent with the trend towards County-wide IT standards and centralization, if it makes sense to migrate the particular technology toward a standard, the corresponding support function should be centralized.

#### 1.5.4 IT Strategy 4: County-Wide IT Governance

With respect to the BSC, a well-executed IT Governance strategy will have the greatest impact relative to specific Departmental goals established in the **Internal Process Perspective** area. However, there will be a secondary positive impact in both the **Citizen / Customer Perspective** and the **Learning Growth Perspective**. Information Technology Governance refers to the system by which the current and future use of IT is directed and controlled within the County. It involves evaluating and directing the plans for the use of IT to support the organization and monitoring this use to achieve plans. It also includes the strategy and policies for using IT within the County.

The intent of IT Governance is to ensure that the defined projects and technology initiatives are aligned with the overall IT goals and supportive of the general business goals of the County. There is a need at Gwinnett County to establish a stronger, more formal IT Governance structure in order to support a process to evaluate the impacts of applying technology that extend, expand, or improve the services available to Gwinnett County citizens and customers as defined by the Business Planning Process.

To be effective, IT Governance at Gwinnett County should include representation from all of the stakeholder Departments such that all voices are heard and considered relative to IT. Departments will participate and provide input, as necessary to ensure a consistent, standards-based approach is applied in all major decisions regarding IT (including implementation of the IT Strategic Plan) and that the decision-making process is as transparent as possible.

The following IT Governance Model is recommended for Gwinnett County. Presented in a table format, the columns represent the major components of IT Governance which should be implemented (i.e., IT Policies & Procedures, IT Standards, Annual Planning, etc.) while the rows represent the various participants in the IT Governance process.

Gwinnett County, GA  
IT Governance Model (2009)

|                           | IT Policies & Procedures  | IT Standards   | Annual Technology Planning   | Annual Technology Budget   | Departmental and Line of Business Projects <sup>*</sup> | Enterprise Projects  |
|---------------------------|---|--|--|--|---|--|
| County Administrator (CA) | <ul style="list-style-type: none"> <li>■ Approve recommended IT policies and procedures</li> <li>■ Communicate IT procedures County-wide</li> </ul> | <ul style="list-style-type: none"> <li>■ Approve recommended standards</li> <li>■ Communicate standards County-wide</li> </ul> |  | <ul style="list-style-type: none"> <li>■ Review and approve budgets and requests to the County Board of Commissioners</li> </ul>   |   | <ul style="list-style-type: none"> <li>■ Authorize and support enterprise level projects</li> </ul>  |
| IT Leadership Team        | <ul style="list-style-type: none"> <li>■ Review and recommend IT procedures to CA</li> </ul>  | <ul style="list-style-type: none"> <li>■ Approve and enforce IT standards</li> </ul>   | <ul style="list-style-type: none"> <li>■ Review and update, as needed, the Information Technology Strategies in terms of relevance and priority</li> <li>■ Participate in annual planning process</li> </ul> | <ul style="list-style-type: none"> <li>■ Develop and maintain the project prioritization criteria and weightings</li> <li>■ Review, rank and prioritize ad-hoc committee project requests to the County Administrator</li> </ul> |   | <ul style="list-style-type: none"> <li>■ Gives life to potential enterprise initiatives that may originate from multiple sources</li> <li>■ Initiate a Leadership Team subcommittee to evaluate enterprise initiative feasibility</li> <li>■ Periodic monitoring of enterprise projects</li> </ul> |



|                                | IT Policies & Procedures  | IT Standards  | Annual Technology Planning  | Annual Technology Budget   | Departmental and Line of Business Projects`   | Enterprise Projects   |
|--------------------------------|---|---|---|--|---|---|
| Technology Standards Committee | <ul style="list-style-type: none"> <li>Generate Policies and Procedures</li> </ul>                                      | <ul style="list-style-type: none"> <li>Develop and maintain IT standard deviation request process</li> <li>Develop and recommend County IT standards to the Leadership Team for review</li> <li>Review and provide input related to standard deviation requests</li> <li>Maintain the IT standards repository for the County</li> </ul> |   |  |   |   |
| ITS Director (CIO) Office      | <ul style="list-style-type: none"> <li>Recommend policies and procedures to the Leadership Team for approval</li> </ul> | <ul style="list-style-type: none"> <li>Recommend IT Standards to Leadership Team for approval</li> <li>Identify IT standards that need to be developed</li> <li>CIO to participate on Leadership Team and Standards Committee</li> </ul>  | <ul style="list-style-type: none"> <li>Draft updates to the Strategic Plan</li> <li>Draft updates to the Tactical Plan</li> </ul> | <ul style="list-style-type: none"> <li>Develop recommended IT budget</li> <li>Consider Collaboration Opportunities (Alliance Partners)</li> <li>Benchmarking Trends</li> </ul> | <ul style="list-style-type: none"> <li>Approval of all Tactical Plan items and IT projects based on Standards, IT Strategic Plan and Tactical Plan</li> </ul> | <ul style="list-style-type: none"> <li>Approval of all Tactical Plan items and IT projects based on Standards, IT Strategic Plan and Tactical Plan</li> </ul> |

|                                     | IT Policies & Procedures   | IT Standards   | Annual Technology Planning   | Annual Technology Budget  | Departmental and Line of Business Projects <sup>*</sup>  | Enterprise Projects  |
|-------------------------------------|--|--|--|---|--|--|
| Ad-Hoc Committee (Line of Business) | <ul style="list-style-type: none"> <li>Understand the relevance of developed IT policies and procedures to the technology standards function</li> <li>As needed, develop IT procedures in areas deemed necessary by the Leadership Team</li> </ul>   | <ul style="list-style-type: none"> <li>Understand the relevance of developed IT standards as it applies to the subcommittee's charge</li> <li>Review deviation requests from County IT standards and recommend to the Leadership Team</li> </ul> |  | <ul style="list-style-type: none"> <li>Develop ROI and budget requests for Line of Business and Enterprise Projects</li> </ul>                                  | <ul style="list-style-type: none"> <li>Identify Departmental and Line of Business Projects and articulate benefits</li> <li>Provide strong leadership/support for approved projects</li> </ul> | <ul style="list-style-type: none"> <li>May provide project oversight to multi-departmental projects</li> </ul>             |
| Department IT                       | <ul style="list-style-type: none"> <li>Understand the relevance of developed IT policies and procedures to their Line of Business (LOB)</li> <li>Communication channel between central IT and departments</li> </ul>   | <ul style="list-style-type: none"> <li>Understand the relevance of developed IT standards as it applies to their IT initiatives</li> <li>Initiate requests to deviate</li> </ul>   | <ul style="list-style-type: none"> <li>Review and update, as needed, technology goals applicable to the LOB</li> </ul> | <ul style="list-style-type: none"> <li>Review and rank departmental IT initiatives</li> </ul>   | <ul style="list-style-type: none"> <li><i>*Often first line of support</i></li> </ul>  | <ul style="list-style-type: none"> <li><i>*Often first line of support</i></li> </ul>                                      |
| Central IT Staff                    | <ul style="list-style-type: none"> <li>As needed, develop IT policies and procedures in areas deemed necessary by the Leadership Team</li> <li>Identify areas where IT procedures need to be developed</li> <li>Participate in the development of IT procedures</li> <li>Implement recommended and approved IT procedures</li> </ul> | <ul style="list-style-type: none"> <li>Assist with the development and communication of IT standards for those areas that are deemed as core to the County ITS function</li> <li>Initiate requests to deviate</li> </ul>                         | <ul style="list-style-type: none"> <li>Provide input to Plan</li> </ul>  | <ul style="list-style-type: none"> <li>Work with departments in developing project ROIs</li> <li>Provide staff capacity input to the Leadership Team</li> </ul> | <ul style="list-style-type: none"> <li>Coordinate with department IT staff, or perform directly</li> </ul>   | <ul style="list-style-type: none"> <li>Support enterprise projects</li> <li>Coordinate with Department IT staff</li> </ul> |

|                     | IT Policies & Procedures  | IT Standards  | Annual Technology Planning  | Annual Technology Budget   | Departmental and Line of Business Projects`   | Enterprise Projects  |
|---------------------|---|---|---|--|---|--|
| Department IT Staff | <ul style="list-style-type: none"> <li>Review and provide feedback on draft IT policies and procedures</li> <li>Participate in the development of IT procedures that impact their area of operation</li> <li>Implement approved IT procedures, as appropriate</li> <li>Adhere to and support the developed IT procedures</li> </ul> | <ul style="list-style-type: none"> <li>Review and provide feedback on draft IT standards</li> <li>Adhere to and support the developed IT standards</li> <li>Initiate requests to deviate</li> </ul> | <ul style="list-style-type: none"> <li>Provide input to Plan</li> </ul> | <ul style="list-style-type: none"> <li>Participate in development of project ROIs</li> <li>Identify IT initiatives for the upcoming fiscal year</li> </ul> | <ul style="list-style-type: none"> <li>Coordinate with central IT</li> <li>Implement department level projects where appropriate</li> </ul> | <ul style="list-style-type: none"> <li>Coordinate with central IT</li> </ul> |

### 1.5.5 IT Strategy 5: Project Portfolio Management

With respect to the BSC, a well-executed Project Portfolio Management strategy will have the greatest impact relative to specific Departmental goals established in the **Internal Process Perspective** area. However, this strategy is born more out of necessity than having a real impact on internal processes. As with the IT Governance strategy, the Project Portfolio Management strategy is more about improving the information technology infrastructure at the County, setting clear expectations and improving Departmental/other satisfaction with IT at the County.

The County can realize many benefits by developing and implementing a comprehensive and unified approach towards identifying and prioritizing technology projects as part of a well-executed Project Portfolio Management strategy.

Benefits of an identification and prioritization process include:

- Generating a more complete and quantifiable analyses of each project such that alignment with the County's goals and objectives are achieved.
- Creating a transparent process so customers can track the progress for their requests.
- Gaining more positive consensus-building for participants.
- Streamlining the duration for decisions.
- Gaining an understanding of the true costs of IT.

Currently, IT staff has challenges in balancing their day-to-day work, emergency fixes, and long-term projects. It is difficult to develop fixed project schedules and resource assignments, when operational activities take precedence over some ongoing projects.

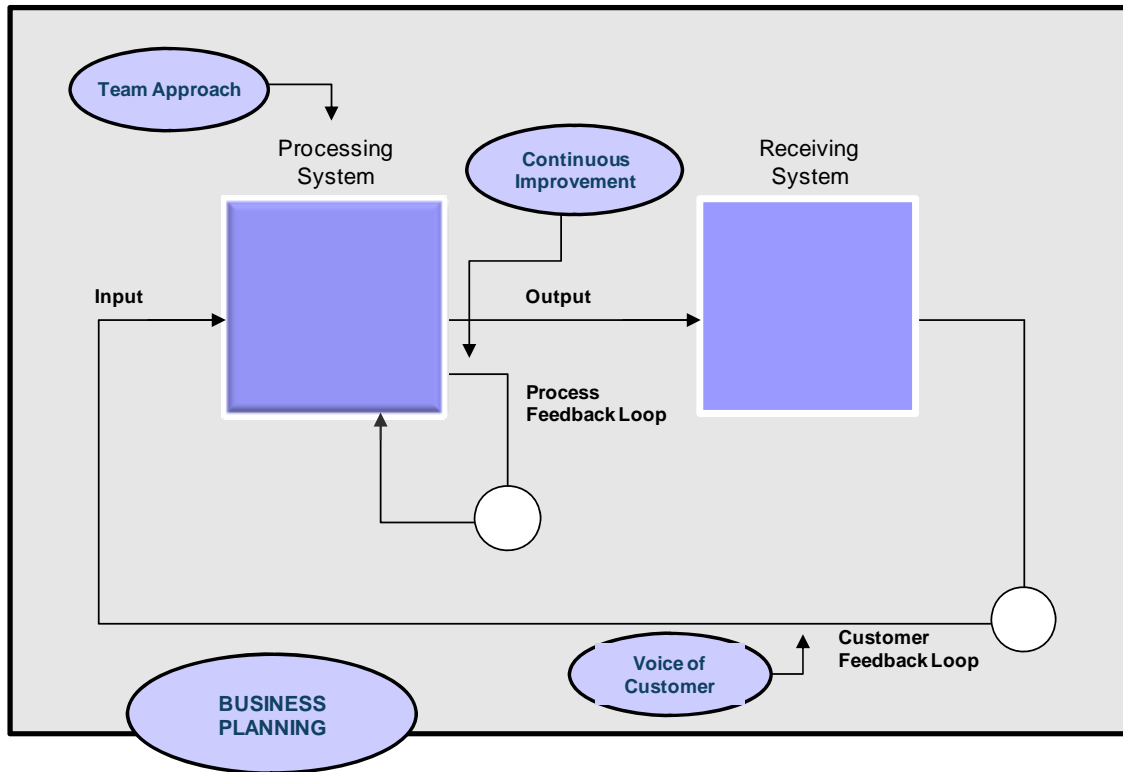
Part of this challenge is that the term 'project' is not clearly defined, priorities are not clearly defined or communicated, and existing project management tools are cumbersome and time consuming. Improvements to the IT Governance Strategy at the County will better clarify how projects are approved and specifically how a priority is assigned to a project. Improvements will also clarify and better communicate technology project decisions.

A structured, but flexible project portfolio management process is proposed to include identification, analysis, cost justification, approval, and implementation. Using the General Process Model as a guide, below, the process should incorporate the following:

- **Input.** Project requests.
- **Output.** Outcome of project requests (i.e., approved/denied, status, etc.)
- **Processing System.** A process for understanding the source of technology-related projects/initiatives (i.e., need, benefit, etc.), how these projects should be reviewed and how they should be prioritized.
- **Receiving System.** A process for receiving the outcome of project prioritization (e.g., establish expectations, schedule, etc.)
- **Process Feedback Loop.** A framework to measure and track performance and progress on project portfolio management. Such feedback, when acted upon, will help to continually improve the process.
- **Customer Feedback Loop.** A means by which customers (i.e., users) can provide feedback on project portfolio management. Such feedback, when acted upon, will help to continually improve the process.

The implementation of this process will help to insure that the project decision process is efficient, consistent, transparent and in alignment with the County's Business Planning Process.

**General Process Model**  
**Gwinnett County's Project Portfolio Management Process**



Included with this Strategic Plan is a Sample Technology Review Process which will help in keeping track of projects underway at the County.

### 1.5.6 IT Strategy 6: Solution Optimization

With respect to the BSC, a well-executed Solution Optimization strategy will have the greatest impact relative to specific Departmental goals established in the **Internal Process Perspective** area. However, there will be a secondary positive impact in both the **Citizen / Customer Perspective** and the **Learning Growth Perspective**. The Solution Optimization strategy focuses on getting the most out of current solutions which Gwinnett County has already invested in versus looking to delve into new technologies. The major focus for the foreseeable future with regard to solutions that are in place is SAP.

The Solution Optimization strategy is necessary given the County's past investment in and commitment to SAP. With respect to SAP, it is clear from the IT Assessment that the County's perception of SAP is as follows:

- Some areas (i.e., HR) are benefiting from SAP more than others.
- There is a profound sense that reports should be, yet cannot be produced at the "touch of a button".
- Some areas have suggested that SAP was implemented with one/several department's needs in mind while other department's needs were not entirely considered.

- SAP is not being used to its fullest potential.

Based on the IT Assessment leveraging SAP better is more of a necessity rather than an option. The Solution Optimization strategy should address the following:

1. Prioritizing “pain points” within the County. Such pain points will be associated with specific business processes and their prioritization should be based on how closely they support the goals and objectives defined during the business planning process. The Project Portfolio Management process should be used to prioritize pain points.
2. Alignment of resources. A critical element of executing the Solution Optimization strategy is to identify resources within the County who have functional knowledge relative to the specific Department they are working with and how SAP can be leveraged to solve business process issues. This Business Analyst role is a key element of the IT Governance strategy. For Gwinnett County, there should be a Business Analyst role assigned to each Department within the County (note: each Business Analyst could support more than one Department, depending on need).
3. Establishment of a “Center of Excellence” for SAP. SAP uses the Center of Excellence term in describing a best practice in the industry for deployment and maintenance of SAP. Such Centers of Excellence include the following elements, each of which may or may not reside in a central IT function:
  - a. BASIS or technical administrator responsible for installation and testing of enhancement and support packs.
  - b. Functional expertise requiring people to understand the business requirements (i.e., Business Analyst role).
  - c. SAP development expertise.
  - d. Security oversight and configuration.
  - e. Quality assurance and testing.
  - f. Project Management involving key elements of project management, change management, etc.
4. Establish a migration path and process for SAP. As with any software, SAP provides any number of enhancements and bug fixes via “packs” which must be applied to the software. Gwinnett County should perform updates for both enhancement packs and service packs on a semi-annual basis. Further, the County should upgrade to SAP ECC 6.0 before support increases commence for the current version, 4.7.
5. New SAP technology. The Optimization Strategy should strongly consider investments in new SAP technology using the Project Portfolio Management process as a tool for determining the value of such investments to the County. New technology investments should be closely aligned with (1) above (i.e., how well do they address pain points identified).
6. Communication Planning. The user community must be re-engaged in a new process for optimizing SAP in order to change perspectives, identified above, that have emerged during the past several years. This Solution Optimization strategy along with the accompanying tactical plan must be clearly articulated and near-term, “quick win” benefits demonstrated during the first year.

## 1.5.7 IT Strategy 7: Cost Containment

With respect to the BSC, a well-executed Cost Containment strategy will have the greatest impact relative to specific Departmental goals established in the **Financial Perspective** area. For obvious reasons, given the current economic climate, cost containment is an important strategy for the County. Based on an assessment of the current local economy, budget cuts are likely going to be instituted throughout the County, including for IT and, specifically, DoITS.

Gwinnett County has been addressing cost containment relative to IT in several ways during the past twelve months:

1. The current process to convert contractor positions to internal ITS employees has and will likely continue to save the County significant dollars.
2. Continued centralization of IT resources across the County can present cost savings. The success of this centralization should be measured in terms of cost savings and sustainability of service levels.
3. Server consolidation, such as the conversion of servers to a “virtualized” environment can provide benefit both in terms of hard dollar savings and “Green IT”.
4. The conversion of phone systems to voice over internet protocol (“VoIP”) will provide the County with the potential for long-term cost savings.

Continued efforts in these areas will continue to contain costs and this Plan supports these initiatives. Further strategies which could serve to contain costs include:

| Key Cost Drivers  | Containment Strategy  |
|---|---|
| <b>Staffing.</b> Staff costs are the largest cost component of an IT organization and, as a result, it is important to ensure that County IT has the right number of staff, with the right skill sets to support current and future technology needs of the County. | <ul style="list-style-type: none"> <li>■ Ensure that County IT staff are adequately trained</li> <li>■ Continually evaluate those functions that are deemed core to the County versus functions that are more appropriate for outsourcing.</li> <li>■ Identify opportunities for internal and external collaboration where staff resources can be leveraged to the benefit of all who are involved.</li> </ul>  |
| <b>Technology Obsolescence.</b> Implementing technology that becomes obsolete within a few years resulting in the need to replace with more current technology at a significant cost.   | <ul style="list-style-type: none"> <li>■ Select and implement a tool to effectively manage the County's technology inventory.</li> <li>■ Select and implement technology-based solutions that are considered mainstream and are proven.</li> <li>■ Continually monitor the vendor marketplace in areas of technology that are core to the County's architectural environment.</li> </ul>  |
| <b>Project Risk.</b> Appropriately managing project risks is a major factor in being able to contain costs especially in situations involving large and complex projects.   | <ul style="list-style-type: none"> <li>■ Select and implement an application and project portfolio management tool to more effectively manage project risks.</li> <li>■ Where appropriate, outsource project management and/or business analysis on large, complex projects especially in those areas where the County lacks needed expertise.</li> <li>■ Ensure that effective project management methods, including risk management activities, are followed on all IT projects.</li> </ul> |

| Key Cost Drivers  | Containment Strategy   |
|---|--|
| <b>Technology Standardization.</b> Adherence to defined technology standards that are consistently followed will result in fewer technologies to support and provide greater synergies between various technology solutions.                            | <ul style="list-style-type: none"> <li>■ Select and implement technologies that have synergies with each other (i.e., complement each other).</li> <li>■ Select and implement technologies that are consistent with established County IT standards.</li> <li>■ Implement packaged solutions with minimal customizations.</li> <li>■ Continue to look at opportunities for reducing the number of technology environments.</li> </ul>  |
| <b>Appropriate Technology-Based Solutions.</b> The County should ensure that it implements solutions that are appropriate for the size and complexity of the County versus being solutions that are geared to significantly smaller or larger Counties. | <ul style="list-style-type: none"> <li>■ Select and implement solutions that are geared towards the size and complexity of the County versus overbuying where a solution is significantly more complex than what the County needs and under buying where the solution has significant gaps in meeting the stated business need.</li> <li>■ Review application licensing across the entire County to determine if there are unneeded licenses or duplicate licenses.</li> </ul> |

This strategy will consider both cost savings and cost avoidance with respect to any IT initiative or project which is being considered by the County. As indicated in the IT Governance and Project Portfolio Management strategies, every IT project that is under consideration will have an element of alignment with areas of the BSC. In particular, the Financial Perspective area of the BSC will ensure that each and every IT project considered by the County will assess whether or not there is any cost savings / avoidance associated with it (i.e., ROI).

The County's business planning process (BPP) will ultimately dictate how important cost will be for any initiative being considered by the County, including IT initiatives. For the time being, Financial Perspective may receive a greater "weight" when looking to implement a specific IT project over, for example, Internal Process Perspective. IT projects that provide process improvements typically do not result in any direct cost savings; rather, the typical model is that the improvements result in greater productivity which is a benefit to staff morale (i.e., they should not need to work as hard) and/or their time can be diverted to other value-added activities (e.g., providing more services to citizens / customers, etc.) This is especially important in governmental organizations since labor accounts for the majority of the overall cost.



### 1.5.8 IT Strategy 8: Collaboration

With respect to the BSC, a well-executed Collaboration strategy will have the greatest impact relative to specific Departmental goals established in the **Learning / Growth** area. Collaboration is defined as an iterative process where two or more people or organizations work together toward an intersection of common goals. With the advent of networks and the Internet and development of new tools that can be deployed over it, information technology offers new ways for organizations such as Gwinnett County to collaborate and achieve better results.

Results of projects and other initiatives throughout the County can be enhanced through collaboration. The County should invest in collaboration tools to improve the overall transfer of knowledge and eliminate organizational/other barriers. Collaboration tools can provide an effective way to improve results relative to internal initiatives as well as those conducted with other organizations.

Given this distinction, the County should utilize Microsoft SharePoint as its primary tool for collaboration on projects as they are defined in the PPM Strategy. For each project, a separate SharePoint site should be setup to include the following elements which will allow for greater collaboration:

- **Wiki.** A wiki is a website that uses wiki software allowing the creation and editing of any number of interlinked Web pages, using a simplified markup language. Wikis are often used to create collaborative websites and to power community websites.
- **Blog.** A blog is a type of website usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video.
- **Document repository.** A repository where documents can be shared. Users can view, print, download, check in/checkout documents from the repository.
- **Calendar.** A calendar feature indicating important milestone dates and regularly scheduled meetings.

Furthermore, other network-based tools that allow for improved collaboration should be vigorously explored by the County. For example, instant messaging (IM) is an excellent alternative to using the phone and/or e-mail when a quick response to a question is needed. Through IM, users can set their status such that other users who are on-line know when they are available and when they are busy. IM provides an excellent means for two-way communications to take place with minimal disruption such that projects and processes can move forward.

Gwinnett County should also continue to explore collaboration opportunities outside of the County as well (i.e., with other communities within or outside the County) relative to the deployment of information technology. The Criminal Justice Information System (CJIS) project is a perfect example of a collaborative effort and one that should be modeled for future initiatives involving Gwinnett County and agencies outside of the County.

Currently, shared services are a topic of much discussion within local governments. Shared services refer to the provision of a service by one organization to another whereby that service had previously been found in both organizations. Thus the funding and resourcing of the service is shared and the providing organization effectively becomes a service provider. Gwinnett County is in an excellent position to become a service provider in this regard given its robust information technology architecture and infrastructure.

## 2 Information Technology Tactical Plan

### 2.1 Introduction

The IT Tactical Plan provides a road map for implementing the IT Strategies defined in the Information Technology Strategic Plan. The IT Strategies will allow the County to:

- Look at the “big picture” and establish a clear vision and direction relative to IT.
- Create a road-map for long-term alignment and growth of IT in support of Gwinnett County’s business plans and Unified Plan.
- Define and communicate County-wide IT goals and objectives.

In contrast, the Tactical Plan will provide:

- Short term action items with a focus on results in the near term (one to two years).
- The necessary steps to implement the IT Strategic Plan.
- The resources required to achieve the stated goals.
- Relative priorities based on the ability of tactical items to support the IT Strategies.

This section identifies the short term tactical items required to support each of the eight IT Strategies. High priority items have been identified with a goal of completing them during the first year (Calendar Year 2010). Such items are annotated with ‘(2010)’ later in the section. High priority items were chosen based on their ability to support the IT Strategies and whether other tactical items were dependent upon their completion.

### 2.2 Information Technology Tactical Plan Items

The following sections represent the major tactical items required to implement the IT Strategies defined in the Information Technology Strategic Plan. The high priority items are prefaced with “(2010)” which indicates that implementation should begin in Year 1 (i.e., 2010) of the Plan. These items were selected based on the Project Selection Criteria listed above. The County should consider implementing additional/other items in the IT Tactical Plan should priorities change.

In order to view the relative priorities, associated costs, etc., please refer to the accompanying 2010 IT Tactical Plan which includes the Project Portfolio.

#### 2.2.1 E-Government Tactical Items

##### 2.2.1.1 Enhance Current E-Government

1. (2010) Establish an IT Governance Plan. The Plan should incorporate web services.
2. (2010) Implement a Deliberate e-Government Planning Process. Develop a Web Mission and Vision (Internet and Intranet). An e-government planning process should be undertaken that consists of requirements identification, requirements validation, interdepartmental coordination, project prioritization, resource allocation, process re-alignment, project execution, and project oversight. Properly executed e-Government initiatives will require departmental involvement beyond DoITS.

3. (2010) Align Web Services Development Staffing with Deliberate Planning. Establish role of technical architect, information architect, and content manager. The newly formed team should build a reputation of delivering user-centric solutions and rename the team to reflect new objective.
4. (2010) Web services development is an ideal place to use outsourcing. The County should use a core staff of project managers and technical staff who are County employees to manage the development staffing provided by contract workers or vendor development staff. This model would allow the County to expand and contract its development staff as financial resources and project demands require.
5. (2010) Create an e-Government Steering Committee. This committee, consisting of representatives from various departments, would provide input and prioritization to the e-Government strategic plan and oversight of e-Government initiatives.
6. Implement a More Robust Decentralized Content Creation Role. In addition to the functionality that will be programmed into the e-Government deliberate planning process during strategic planning, departments should have more ownership, responsibility, and accountability for the content that is delivered on the pages of the Internet and intranet for which they are responsible.
7. Develop a Consistent Navigation Scheme. When the site is redeveloped using the new tool, ensure navigational consistency. The navigational choices in this redevelopment should be aligned to the tasks that constituents normally interact with the County for. Those tasks should be collected by role (not department). Tools like (an intuitive) search mechanism and a site map will help make a wide-range of content more accessible.
8. Implement an Enterprise Search Solution - A more advanced search appliance would provide the County with advanced functionality and the ability to provide results on a wider variety of indexes in the same search query (federated search). This type of enterprise search solution will be found in Microsoft SharePoint.
9. Develop a Fees Schedule. As other e-Government functionality comes on-line, the County will need to address a fee structure for some of those functions. A fine balance should be struck on the level of these fees between being high enough to demonstrate the value of the tool to constituents and low enough to facilitate the trial of these functions.

### 2.2.1.2 Investigate E-Government Tools

#### 1. (2010) Facebook ([www.facebook.com](http://www.facebook.com))

Facebook is a social networking site with millions of members; Facebook provides an immediate venue for connecting an organization with a broad audience. Originally designed as a means for college students connecting on-campus, this application has been stretched much further.

A number of municipalities have leveraged Facebook to broadcast events, attractions and hot topics to draw in their constituency. This is typically in the form of a Facebook site or share, as opposed to a Facebook application.

Facebook share is very similar to social bookmarking or RSS, where a visitor can share specified content with their Facebook friends. We recommend that the County consider taking this simple step of 'sharing' content on the public site as a first step to engaging Facebook.

Facebook sites pose a higher level of commitment and appear to deliver mixed results with municipalities. The ultimate goal of a Facebook site is to encourage viral marketing growth, which can only be achieved with open comments and threads from the user base. Municipalities often restrict posts to staff-only and as a result do not reap the benefits of a traditional Facebook site. We would not recommend a Facebook site initially for the County.

Oakland County relies on blogs and forums for building a community, and could additionally offer a Facebook share for this content. <http://community.oakgov.com/>

The City of Mesa, Arizona offers a Facebook site at <http://www.facebook.com/pages/Mesa/City-of-Mesa-Arizona/71387879392>. Notice that this serves only as a feed of data, not as a source of networking.

## 2. (2010) RSS (Really Simple Syndication)

Provides users the ability to subscribe or 'pull' content from the County's site into a format of their own. A user may have a personal portal (such as iGoogle) and desires to read that feed in their own page. That feed may be County Events, County News or potentially every page on the site. This is a common and simple practice. The only roadblock is whether or not the technology selected by the County supports RSS feeds.

## 3. Blog (contraction of the term "weblog")

A blog is a type of website usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video.

- Scenario: The building inspector starts a blog; it is a child site of the parent County site. The inspector has found that he/she observes situations on a weekly basis that many in the community could learn from. This would also in effect make the building inspector and his/her staff more efficient by answering fewer questions from constituents and archiving an otherwise transient knowledge base. Each week, the inspector posts one or two short articles to a blog. With each onsite inspection or call he/she refers people to the blog for more answers. Interested users subscribe (via RSS) to the articles, which improves community relations.
- Blogs are typically used as a real-time newsletter for tech-savvy users. This is what is replacing many newspapers and magazines and will be a channel for users to come.
- It can be challenging to build adoption for blogs within a County. The weekly commitment to create content is critical to a blog's success.

## 4. Forums

Generally reserved for support areas, forums are an excellent way to build an online help library. The County can create topics such as 'Building Permits' and the community members are left to publish posts such as 'where can I put a shed' and members of the community can contribute to the discussion.

- In most instances users are given sound advice or are directed to the website or a particular document for more information.
- County staff would sometimes contribute to the forum to provide authoritative guidance that all participants would benefit from.

Many Counties are challenged with the means to maintain and monitor a forum. In the long run, a County may find that efficiencies gained in traditional support (such as phone or on-site visits) will justify the resource commitment to monitoring an online forum. Measures can be put in place to keep the discussion filtered and limited to safe subjects and screened contributors.

## 5. Twitter ([www.twitter.com](http://www.twitter.com))

Twitter is an online service/community where users subscribe to particular feeds (sponsored by individuals or organizations) where subscribers are able to quickly post text-like statements for all subscribers in the group to view. These statements are often viewed and posted via a mobile device, considering the 'stream of consciousness' nature of the service.

Fairfax County example: Pasted from <http://twitter.com/fairfaxcounty>

- Measles exposure now in Fairfax County; call the hotline if you were at the 3 locations btwn April 10-14 <http://tinyurl.com/cy25mp1>:43 PM Apr 21st from web
- HOT Lanes construction: Parts of Rt. 123 at I-495 will be closed 24/7 from late April to Nov; PDF flyer:

<http://tinyurl.com/hotlanes...>

Twitter was engineered originally as an alert system making it a good fit for e-Government. However, users would consider Twitter more of a 'soft' technology (a gadget, something applicable for personal use) than a community solution. A service such as TextCaster may be considered for a mobile device alert system instead.

## **6. Social Bookmarking**

Another simple means of allowing users to not only make a particular page a favorite, but share that page with a larger community. One of the most popular social bookmarking services is [del.icio.us](http://del.icio.us).

## **7. YouTube ([www.youtube.com](http://www.youtube.com))**

YouTube is another popular social media service; YouTube has proven itself to be a simple and effective means to connect with a very large audience. Organizations can create a YouTube channel, posting videos, tagging and describing each of them for the general public to access. Videos need to be encoded in a YouTube-friendly format, which is a straight-forward process. If the County has video to publish, this is a simple and quick win.

The County would need to consider the 'social' aspect of YouTube. The videos would be commented on by the public. Visitors would also be able to browse the broader YouTube video library. There is no way to control the community on YouTube. For an example, visit the City of Mesa Arizona's channel at <http://www.youtube.com/mesagov>.

## **2.2.2 Enterprise Content Management Tactical Items**

### **2.2.2.1 Operational Components**

#### **1. (2010) Cross Training of Support Staff.**

Most of IBM FileNet is deployed over web-based applications. However, IBM FileNet Capture Professional requires a desktop installation and configuration on each workstation intended for use in the document capture (scanning/indexing) process. Existing field technicians dedicated to end user support – Desktop Support – should be cross-trained to handle IBM FileNet Capture Professional installs, standard configuration, and scanner hardware support. This removes duplication of effort when a Desktop Support employee must request assistance from an IBM FileNet team member to solve a user issue.

#### **2. Records Management Inclusion.**

Gwinnett County currently has a Records Management Department that manages all physical records, sets retention policies, and executes destruction of the records when a record's disposition schedule has been reached. As part of the initiative to deploy IBM FileNet Records Management (RM), DoITS should work closely with the existing Records Management Department personnel to develop a File Plan, the governing document that outlines each record series, the retention periods for each record series, and the disposition actions for each record series. The File Plan should be based on the existing policies managed by the Records Management Department and should be jointly developed to include both electronic and physical content. Once established, the scope of the Records Management Department responsibilities should be extended to include custodial management of physical and electronic records. RM functionality encompasses electronic records and physical records, thus providing a robust enterprise-class tool to the Records Management Department.

In addition to collaboration with the Records Management Department, Legal representation should be included in discussions regarding records management for purposes of addressing potential legal electronic discovery (eDiscovery) requests.

### **3. (2010) SharePoint.**

SharePoint provides highly useful, easily deployed, and decentralized management of Basic Content Services (BCS) – a subset of a full ECM solution such as IBM FileNet. Once deployed, the adoption rate of SharePoint within an enterprise is often far greater than anticipated. The ease of use and familiarity of the interface provide the means by which users quickly adapt to the tool with little or no training. While this creates a semi-utopia scenario for users, it tends to have a “viral” effect as it spreads uncontrolled throughout the enterprise.

The IBM FileNet Team should immediately engage with the Web Services team to coordinate the SharePoint initiative. IBM FileNet provides straightforward SharePoint integration tools to allow IBM FileNet content and workflow to be accessed from within the SharePoint interface – seamless to the user. By leveraging the strong ECM knowledge of the IBM FileNet team and the interoperability of the SharePoint application, Gwinnett County can quickly gain the best of both worlds without losing control of enterprise data.

## **2.2.2.2 Process Components**

### **1. Central Scanning.**

Decentralized scanning naturally increases security and quality of indexing within the document capture process. However, it necessitates redundancy and sometimes permits inefficiencies. While it may not be realistic to centralize the scanning of all incoming mail, Gwinnett County should examine the possibility of centralizing as much as possible. Departments would still retain the decentralized scanning functionality to facilitate ad-hoc business needs.

Best Practices include the use of multiple PO Boxes, logically split – perhaps by department – to assist in pre-sorting. A centralized mail room provides for a single, efficiency-driven batch preparation team, dedicated to high performance. Provided security concerns can be met, a minimal indexing dataset should be captured to permit routing to appropriate department queues or to individual users. This shifts costs from departments to a central area, following the existing shared services model for IBM FileNet. This also allows a central scanning team to leverage advanced capture functionality, such as OCR/ICR or forms recognition. The most logical department to centralize is the Tax Commissioner. This was a goal for the department a few years ago, and should be considered for reevaluation.

### **2. (2010) Process Confirmations.**

Currently users do not receive confirmation of a successful release of information/ documents to IBM FileNet. Providing a mechanism for users to validate that an image was correctly released into the repository will save on overhead effort where managers must manually check a user’s request or if a call is placed to DoITS, requiring someone there to validate. Options include a daily report, an ad-hoc report, or a search template available to the user.

### **3. (2010) Information Sharing.**

Users are becoming increasingly savvy with IBM FileNet and its potential. To facilitate this continued learning, Gwinnett County should organize educational groups to promote information sharing specific to IBM FileNet.

Information sharing could commence as a User Group – similar to the existing SAP User Group, where weekly meetings are held among users to share findings, experiences, etc. and quarterly meetings are held with department liaisons. Additionally, there is an annual IBM FileNet User Net, hosted free in Atlanta each year, where IBM FileNet, IBM FileNet Partners, and IBM FileNet Users attend and hold general sessions, classes, and other convention activities.

### **4. (2010) Eliminate “Print and Scan”.**

This tactical item should focus on three – four processes initially. There are numerous instances where end users create duplicate or triplicate copies of a document in order to print it from one location (local hard drive, network share, email,

etc.), file it in a physical file drawer, and scan a copy into IBM FileNet. Any activity that includes scanning a document should either remove the paper copy or have a clearly established – and enforced – retention policy to manage the paper after scanning is complete. Storing paper adds to costs and should be removed to the greatest extent possible. Duplication causes confusion and should be eliminated except where legally necessary.

There are a number of methods available to assist with the process required by users to avoid printing documents in order to scan them into the repository. Option may include, but are not limited to, the creation of a network folder that is automatically polled by IBM FileNet Capture Professional for ingestion, IBM FileNet Records Crawler configured to automatically ingest and classify documents, or to allow greater access to IBM FileNet Workplace, where users can add documents through Entry Templates.

For email attachments, another tool to consider is IBM FileNet Email Manager. This component can be configured to scan incoming email messages for attachments and automatically detach them into the repository, along with indexing data if available. If scanning each individual email account is not acceptable, consideration could be given to creating a central account (perhaps one per department) to which users may forward emails for ingestion into IBM FileNet.

## **5. Remove the Network Drive.**

Users are likely very accustomed to using the network shared drives available to them for information sharing. A typical user may say, “I put it on the K-Drive”. While this does provide for a fast and easy way to transfer files, it does nothing further to control or manage the content. Files are often appended with \_v1, \_v2, etc. and/or the name of each reviewer as content is modified. This often leads to duplication, confusion, and loss of work. By moving the Network Drive into FileNet (or even into SharePoint), much of the current issues would be eliminated. If the network share were to remain available, it would require “Top Down” support of management to enforce policies. If the network share were to be removed entirely, consideration given to the condensation and migration of current data stored on the drive would be warranted.

### **2.2.2.3 Technical Components**

#### **1. Upgrade IBM FileNet from version 3.5 to 4.5.**

Current consideration is being given by DoITS to upgrade the existing IBM FileNet 3.5 instances. These systems should bypass version 4.0 and upgrade directly to 4.5. IBM has a clearly defined upgrade path from 3.5 to 4.5 and can provide experience and guidance with the process.

- **Improved Architecture/Scalability.** Multiple advantages can be derived from upgrading to version 4.5. Content Engine is java-based, there is no domain requirement, the Global Configuration Database is moved to the database, a single LDAP interface is used, now horizontal and vertical scalable, active-active clustering, etc.
- **Upgrade Teams.** Successful upgrade projects often include IBM FileNet Lab Services to perform the infrastructure upgrade and a strong IBM FileNet partner to perform the application upgrades and data migrations. This split responsibility is beneficial due to the fact that an upgrade should be treated as two parallel projects, each interdependent of one other. A single upgrade/conversion/migration would increase risk, as the duration between milestones lengthens.

#### **2. Business Process Framework (BPF) and/or Mashups in 4.5.**

While BPF is being considered to assist with better, faster development of configured/customized applications, Gwinnett County should explore the option of using the Web 2.0 mashup functionality and extensible widgets provided by BPM 4.5. Unless the specific case-management functionality offered by BPF is required and repeated in multiple applications,



mashups may suffice. A thorough requirements assessment should be performed prior to determining which toolset to select.

### 3. (2010) Process Analyzer (PA).

Understanding that greater demand for DoITS staff time exists than capacity to execute, consideration should be given to providing the functionality available in IBM FileNet Process Analyzer to users. This is a read-only reporting application that allows users to see aggregate workflow data and to slice-and-dice the data to get to the desired reports. For example, using PA, users can ascertain the following information on their own, without issuing requests to DoITS:

- How many invoices are processed per day?
- How many Agenda items exist or were created?
- What is the average time processing an invoice?
- As an alternative, an external data warehouse could be created, and workflows modified to write data to the database at appropriate points in the workflow or custom processes. This would allow simple HTML reports or other data reporting tools to be used to provide end-user reporting.

### 4. Logical Configuration Management.

If hardware is unavailable, the logical separation of DEV into DEV/TEST is essential. Many of the lessons learned that are crucial to a seamless production deployment are encountered during the first migration of an application from the development environment into the test environment. Often times, development environments are more “open”, where users have greater permission levels necessary to configure environments. When applications are deployed into a properly configured test environment (duplicating production), issues can be discovered and resolved prior to risking any user or business impact.

Even the separate infrastructures (Sheriff's Office and Department of Water Resources) should consider creating additional environments on their single hardware instance to facilitate at least a development environment – in order to avoid experimenting with configurations in production.

### 5. (2010) Improved Capture Environment.

Document Capture is extremely prevalent throughout Gwinnett County. To that extent, users are still required to perform workarounds in some cases, and are performing extensive manual efforts in other cases. Consideration should be given to minor and major improvements to the capture environment.

- **(2010) Image Enhancement.** Software exists to improve the quality of incoming documents. Tools such as Kofax VirtualReScan (VRS) can be integrated into an IBM FileNet Capture Professional environment to easily handle colored paper, graphics, various fonts, etc. If the scanner is supported by Kofax, then VRS would not require new scanner hardware. A list of supported scanners is provided on Kofax's website at: <http://www.kofax.com/support/configurator/>
- **Advanced Capture.** Image enhancement solves some problems, while advanced capture, such as Optical Character Recognition (OCR), Intelligent Character Recognition (ICR), Forms Processing, and/or Barcode recognition all allow for greater speed and accuracy to document capture processes. Gwinnett County should consider evaluating options such as IBM FileNet's Capture ADR or products provided by other industry standard capture vendors to improve scanning efforts, given the large number of users involved that would be positively impacted by such updates.

### 6. (2010) Collaboration/Version Control.



Currently, only eForms permit end users to check-out and check-in documents/data. Gwinnett County would greatly benefit by allowing users access to a portion of IBM FileNet, possibly through Workplace, just for document collaboration purposes. This would provide the ability for users to have access to all historical versions of documents at all times. A shared repository can also enhance user experience by permitting security-based sharing. Gwinnett County users would also be able to identify who changed a document, when a document was changed, and what changes were made.

This sort of functionality is also provided through SharePoint, so the IBM FileNet team should address the topic with the Web Services team as soon as possible.

#### **7. Extended OPEX Utilization.**

Because the OPEX machines are not used 100% of every day, any excess capacity should be evaluated for the possibility of sharing the machines with other departments. Leveraging high-cost assets in this respect will help recover costs and/or provide added value to Gwinnett County.

Additionally, current users of the OPEX machines would appreciate the ability to upload remittance images into IBM FileNet for retrieval later. Integration should be explored if it provides improved efficiencies to users and/or IT staff.

#### **8. Additional IBM FileNet Components.**

The IBM FileNet P8 installation supported by DoITS contains eight available components. There are also a number of additional components that are not yet owned by Gwinnett County that would help meet outstanding business needs. Those missing/desired IBM FileNet components include:

##### **a. Records Manager (RM).**

This component comprehensively addresses Compliance and Retention needs throughout an enterprise. IBM FileNet Records Manager is certified to meet the requirements of DoD 5015.2 or Sarbanes-Oxley, thereby eliminating much of the risk of a non-compliant solution.

##### **b. Records Crawler (RC).**

This component is typically (but not required to be) used in conjunction with Records Manager for Data Collection and Classification purposes. It provides an automated “crawler” that scans the entire infrastructure to automatically capture, classify, and secure files.

##### **c. Email Manager (EM).**

This component provides rule-based email scanning, where content is captured, metadata applied, and the attachments and/or messages are securely added to the IBM FileNet repository. This is often implemented in conjunction with RM functionality to extend compliance to the email level.

##### **d. FileNet System Monitor (FSM).**

This component provides consolidated server monitoring. Currently, each group has a separate application used to monitor necessary applications. This tool would reduce redundancy and streamline support tasks.

##### **e. Business Process Framework (BPF).**

This component is designed to simplify development of case management applications. It provides case operations such as case split and merge, complex task management, and the ability to configure users on a role-based security structure.

##### **f. Business Activity Monitor (BAM).**

This component provides real-time event processing and alerting, allowing greater agility in responding to business changes. It aggregates and displays data from multiple sources, including IBM FileNet Process Engine (workflow) and other third party tools.

## 2.2.3 Organizational Alignment Tactical Plan

### 1. (2010) Formalize a Department Liaison Program

- a) Communicate roles and desired skill set for department liaison positions. This includes clearly defined responsibilities for supporting Department users while adhering to IT standards and best practices.
- b) Identify current non-IT staff as potential liaison and conduct IT skill assessments.
- c) Include liaisons in interactions with DoITS in order to propagate best practices and standards, as well as providing cross-training opportunities.
- d) Establish expectation that Department Liaisons will work directly with Business Analysts.
- e) Update job descriptions, as appropriate.

### 2. (2010) DoITS Support Reorganization

- a) Continue to consolidate non-DoITS staff into DoITS for County-wide IT network and desktop support.
- b) Incorporate field support staff into DoITS help desk function and provide training, as necessary. Retain alignment with Departments they traditionally support.
- c) Communicate help desk procedure to affected Departments.
- d) Revise job descriptions, as appropriate.
- e) Continue with the establishment of an IT Security Council. Model after best practices for HIPAA, etc. Consider identifying a Security Officer for the County.

### 3. (2010) Develop Business Analyst Role

- a) (2010) Identify new Business Analyst positions in DoITS that would interact with Departments through the software selection and implementation of applications.
- b) (2010) Develop job descriptions for Business Analyst position.
- c) Recruit and hire Business Analysts.
- d) Once analyst positions are hired, bring Application Support functions into DoITS so they may operate as a coordinated group.
- e) Assign an Analyst(s) to each Department so that analysts are familiar with a department's specific requirements and needs. This will also give the Departments a single point of contact.
- f) Work within the Project Portfolio Management Process to identify potential projects and complete the necessary requirements to propose an idea for a new project.
- g) Once a project is approved, adhere to the standards and policies established for the Project Portfolio Management Process.

### 4. Develop Research & Development Role

- a) Identify new Research & Development position within DoITS which would have primary responsibility to identify and quantify the benefits for new technologies to support the IT Strategies.
- b) Develop a job description and hire a qualified individual.
- c) Assign primary responsibility to advise the Departments on new technologies.

### 5. Develop Communication Plan

- a) Develop a County-wide IT Communication Plan containing the following elements:
  - Purpose. The purpose statement will articulate the need for a County-wide IT Communication Plan.
  - Communication item. The specific item(s) that is/are to be communicated (e.g., release notes for SAP upgrades, new web site feature deployment, new hires/transfers in IT, key performance indicators, security breaches, Information Technology Strategic Plan updates, emergency down-time, etc.)
  - Targets for communication. The intended target for the communication (e.g., Board of Commissioners, IT Leadership Team, Police Department, all staff, etc.)
  - Frequency of communication. The frequency (e.g., monthly, weekly, etc.)
  - Subject matter for communication. Describes the specific content and format for the communication.
  - Communication type. (e.g., Intranet, newsletter, e-mail, etc.)
  - Distributor. Identifies who from DoITS is to distribute the communication.
- b) Obtain approval for Communication Plan.
- c) Assign an owner within DoITS and execute the Communication Plan.

## 2.2.4 IT Governance Tactical Items

1. **(2010) Finalize the IT Governance Model.** Obtain buy-in from stakeholders including County Administrator's office, elected officials and Department heads.
2. **(2010) Formalize the IT Leadership Team** and participation.
3. **(2010) Establish a Governance Charter** for the IT Leadership Team which coincides with the overall IT Governance Model.
4. **(2010) Formalize the IT Standards Committee** and participation.
5. **(2010) Establish a Standards Charter** for the IT Standards Committee which coincides with the overall IT Governance Model.
6. Develop appropriate documentation (e.g., policies, procedures, standards, etc.) to formalize IT Governance.
7. **(2010) Define a set of parameters and protocols for setting up an Ad-Hoc Committee** (i.e., Line of Business). These committees will be synonymous with the current "Community of Interest" groups and should be modeled after those exhibiting best practices (i.e., GIS and CJIS). Expectations regarding roles and responsibilities should be clearly understood by all members as defined in the IT Governance Model.
8. **(2010) Communicate expectations regarding IT Governance** through the IT Communication Plan.
9. Create a link between the governance structure and the annual budget process. This will ensure that technology planning is conducted in an organized fashion
10. Establish a formal communication channel and process between all levels. This allows IT staff to provide feedback to the Management Team, and is critical to the success of the IT Governance Model.
11. Work with IT Staff and Management to develop and recommend County IT standards, for those areas that are deemed as core to the County IT function, these may include usage, records retention, system architecture, remote access, security, etc.
12. Maintain the IT standards repository for the County.
13. Develop and maintain IT standard deviation request process for items falling outside of an established standard.
14. Review Service-Level Agreements with Departments as established by DoITS. Modify, as appropriate.
15. Modify Leadership Team meetings/agendas to integrate the IT planning process with the business planning processes. This will help to facilitate the decision-making process in a manner that is consistent and clearly understood by all those involved.

## 2.2.5 Project Portfolio Management (PPM) Tactical Items

1. **(2010) Establish Project Criteria/Definitions.** Clearly establish criteria for the elements that define a formal project. Refer to Definitions in Appendix A.
2. **(2010) Finalize PPM Framework.** Finalize the standard framework to prioritize all County IT projects in order to generate a more complete and quantifiable analysis. Refer to the Appendix B - D for a sample process and tools.
3. **(2010) Establish DoITS Project Management Office** as having primary responsibility for maintaining the Project Portfolio Database and providing updates via the IT Communication Plan.

4. **(2010) Develop a Project Portfolio Database.** Refer to the Appendix E for a sample format for the database. At a minimum, the database should track, by project:
  - Project #. Auto-generated four digit number assigned by the County to identify a specific project. Referenced in other project documents and reports.
  - Request. Short description of project or project title.
  - Status. Status of project (Desired, Planned or In Progress).
  - Funded. Indicates whether or not the project is funded.
  - Classification. Indicates whether the project is Infrastructure, Enterprise, Departmental or Line of Business.
  - Requesting Customer. Name of department or person that has made the request.
  - Citizen / Customer Perspective. Indicates to what degree the project impacts the Citizen / Customer Perspective area of the balanced scorecard.
  - Internal Process Perspective. Indicates to what degree the project impacts the Internal Process Perspective area of the balanced scorecard.
  - Financial Perspective. Indicates to what degree the project impacts the Financial Perspective area of the balanced scorecard.
  - Learning/Growth Perspective. Indicates to what degree the project impacts the Learning/Growth Perspective area of the balanced scorecard.
  - Risk. Indicates the level of risk associated with the project.
  - Description/Goal. Paragraph (2-3 sentences) describing the project scope and the primary goal(s).
  - Timing. Approximate timeframe for project initiation.
  - Estimated Capital Cost. If estimated cost is known, the estimated \$ amount will be included.
  - Estimated Operating Cost. If estimated cost is known, the estimated \$ amount will be included.
  - Additional Resources-Initial. The degree to which additional resources are required to implement the project.
  - Additional Resources-ongoing. The degree to which additional resources are required to support the project on an on-going basis.
5. **(2010) Apply Prioritization Methodology to Existing Projects.** Apply the framework and definition to the existing project backlog list within the Project Portfolio Database.
6. **(2010) Establish Request/Approval Process and Communicate.** Utilize the same project approval template for end users to formally recommend a project for approval. This should identify specific milestones. Each project request should support and be aligned with the business plans.
7. **(2010) Integrate IT Planning with Business Planning.** Establish a structure to integrate the IT planning process with the business planning processes within the departments. This will help to facilitate the process of making decisions in a manner that is consistent and understood.
8. **(2010) Conclude on Priorities.** Conclude on priorities, based on the Project Portfolio Management tactical plan. Provide direction to IT Management on the implementation of technology.
9. Define expectations for calculating Return on Investment (ROI).

## 2.2.6 Solution Optimization Tactical Items

1. **(2010) Engage IT Leadership Team.** The IT Leadership Team should be engaged to oversee this process to

ensure the solutions are chosen which best meet the County's needs, as a whole. Support from the County Administrator and elected officials should be retained.

2. **(2010) Establish an Ad Hoc Committee for SAP** to drive organizational change and results relative to SAP within the County. Representation should be from across the County; however, membership should be limited to allow for more productive and focused meetings. This committee should have the support of the IT Leadership Team through the IT Governance Structure. One of the key goals for this committee will be to determine the County's position relative to robustness of SAP implementation (i.e., the solution is scale-able such that more robust features require more investment to implement). Use SAP resources to develop a scale against which evaluation of projects can be conducted.
3. **(2010) Conduct High-Level BPA.** Conduct a high-level business process assessment to determine the organizational areas that have the greatest need in terms of process improvement opportunity (i.e., which business processes have the greatest impact on the four primary areas of the BSC and have the greatest anticipated need relative to SAP). Consider outsourcing this task.
4. **(2010) Identify Line of Business Processes.** Create a listing of these business processes and identify the following for each:
  - Name of business process
  - Key inputs / outputs of business process
  - Description of major processing systems (e.g., approval of invoices, capture of customer request, etc.)
  - Identification of "pain points" (i.e., high-level issues and opportunities)
  - Primary technologies used to support the business process (i.e., list specific SAP module(s)).
  - Business impact of maintaining status quo. (i.e., organizational, customer, business drivers, etc.)
5. **(2010) Establish Process Analysis Teams.** Establish teams using the new Business Analyst role and Project Sponsor role.
6. **(2010) Conduct Process Mapping/Issues Identification.** Beginning with the business process that has the greatest need, map the existing process and determine the major issues/opportunities for improvement and list them out. Identify two to three processes initially.
7. **(2010) Conduct Fit-Gap Analysis.** Conduct a fit-gap analysis for the business process to determine if the County is currently using features of SAP to satisfy the issue / opportunity defined above. Consider outsourcing this task. For each item, determine if:
  - a. Current version of SAP will satisfy the requirement
  - b. New version of SAP is needed to satisfy the requirement
  - c. A configuration to SAP is needed to satisfy the requirement
  - d. A report needs to be written to satisfy the requirement
8. **Implement/Re-Configure Functions of SAP.** Implement features/functions of SAP to satisfy gaps using the current version of SAP, where applicable / feasible for items identified in (7a), above.
9. **Conduct Value Engineering Analysis.** Examine the list of configurations to SAP identified in (7c) and determine if the County should move forward with them (depending on the extent, difficulty and cost) or wait until after the upgrade.
10. **(2010) Establish Upgrade/Update Standards.** Establish a standard to implement enhancements and service

packs of SAP on a semi-annual basis. Establish the expectation that with enhancement packs little/no regression testing is required and that with service packs more regression testing is required (resulting in more time consuming updates).

11. **Prepare Strategy and Migration Plan for SAP.** Prepare a strategy and migration plan for upgrading SAP to the new version (i.e., 4.7 to ECC 6). Depending on the outcome of contract negotiations with SAP, this upgrade may be delayed by up to two years to allow the County time to re-configure SAP.
12. **Investigate Business Intelligence Needs.** Investigate the feasibility of migrating to more advanced report writing / querying tools from SAP/other vendors to allow more timely development of ad-hoc and other reports. Determine if all of the capabilities of SAP BW are being utilized to their potential. Avoid the continued use of ABAP for creating reports against the SAP database.
13. **(2010) Identify SAP Best Practices.** Interview the Human Resources SAP team to determine any best practices for deployment and maintenance of SAP solution. Document these best practices and use them in subsequent implementations.
14. **Update SAP Support Structure.** Re-visit the SAP support structure within DoITS and model after the “Center of Excellence” as defined by SAP. The model should include:
  - a. BASIS. Technical administrators.
  - b. Functional. Use Business Analyst – those who understands the business requirements as well as capabilities of SAP.
  - c. Development. For customizations and reports. Avoid custom programming where other methods (i.e., configuration via SAP tools, etc.) are available.
  - d. Security. Security administrators. Should be member of IT Security Council at the County or have representation thereof.
  - e. Quality assurance and testing. This should be a collaborative effort between Development, BASIS, Functional and IT Liaisons.
  - f. Project Management. Use the DoITS Project Management Office representatives.
15. **SAP Benchmarking.** Consider benchmarking against other SAP sites (e.g., Commonwealth of Pennsylvania).

## 2.2.7 Cost Containment Tactical Items

1. **(2010) Convert Contractor Positions.** Continue conversion of contractor positions.
2. **(2010) Centralize IT Resources.** Continue centralization of IT resources across the County based on defined criteria (i.e., if the majority of skill sets and competency of an individual match what is present in DoITS and opportunities exist to further leverage the resource and expand the IT knowledge-base).
3. **(2010) Server Consolidation.** Continue server consolidation and move toward “Green IT”.
4. **(2010) Conversion to VoIP.** Continue conversion to Voice over IP (VoIP) phone system.
5. **Selective IT Outsourcing.** Establish criteria for and investigate outsourcing of select IT functions. For example, desktop support in terms of break/fix could potentially be outsourced given that it is a fairly commoditized service. Talk to at least three desktop/network support service providers to evaluate the pros/cons of outsourcing various functions.

Where appropriate, outsource project management and/or business analysis on large, complex projects such as SAP



upgrade – especially in those areas where the County lacks the needed expertise.

6. **(2010) Software License Inventory.** Conduct a County-wide inventory of software installations and licenses and match these to the County's needs. Look for ways to combine and/or reduce licenses to save costs. Examples include Oracle (database), Crystal Reports and FileNet. Re-negotiate license and support fees where possible. Eliminate any non-licensed software.
7. **(2010) Re-Negotiate SAP Support Agreement.** Look for creative ways to reduce support costs for SAP (current version) in the near term. For example, use negotiations for upgrade of SAP as leverage to help reduce (versus raise) on-going costs to maintain current version. Incidentally, the County will stop receiving enhancement and service packs for the current version.
8. **(2010) Investigate Thin Client Devices.** Investigate the use of thin client devices to reduce desktop and related support costs.
9. **(2010) Maintain County IT Standards.** Avoid technology decisions which deviate from the County standards as these will likely be more costly to maintain in the long-run. Instill this as part of IT Governance.
10. **Open Source Investigation.** Investigate the use of Open Source for some applications. Strongly consider availability of resources to support, long-term costs and potential conflict with County standards. Consider the downside risk/cost of open source: development and retention of unique IT skill set.
11. **Shared Services Provision.** For new technologies being considered by the County, consider shared services arrangements with other organizations to help defray costs. Consider hosting/deployment of CJIS for other Counties/Cities in the State of Georgia.

## 2.2.8 Collaboration Tactical Items

1. **Shared Services Collaboration.** Establish criteria for shared services and identify potential partners for shared services arrangements. These could be other local governments or commercial organizations. Ensure a win-win agreement is negotiated once discussions have been completed and opportunities identified. Potential shared service arrangements could include:
  - Information technology leadership (i.e., Director / CIO)
  - Sharing of enterprise resource planning/other system(s) and/or expertise
  - Joint preparation of disaster recovery plans
  - Conducting network security assessments
  - Disaster recovery / backup site
  - Technical provisions (e.g., network security, web development, etc.)
  - Technology (e.g., fiber, etc.)
2. **(2010) SharePoint Implementation Approach.** The County should plan to implement SharePoint in stages to allow for an appropriate level of planning, design and testing at each stage. A typical approach would include the following stages:
  - Content management and publishing
  - Collaboration
  - Advanced features and customization
  - Integration
  - Business intelligence
3. **Advanced SharePoint Customization.** Advanced SharePoint customization - including developing highly customized master pages/page layouts and web part development - will require SharePoint specific



design and development skills and will complicate the SharePoint environment to some extent. Carefully evaluate these opportunities to be sure that they are worth the level of effort and costs they require, both for up-front costs and ongoing maintenance. The County may want to consider implementing an out-of-the-box solution first and customizing later.

4. **(2010 Implement SharePoint “Out of the Box” Improvements.** There are many SharePoint features that could be implemented by the County out-of-the-box for quick improvements which require no programming. However, each feature should be carefully considered to ensure it is addressing a specific business need or issue the County is experiencing. Features include:
  - (2010) Blogs, with comments
  - Calendars, surveys, discussions and e-mail integration
  - Two-way synchronization capabilities and offline capabilities using Outlook
  - Browser-based forms and centralized forms management and control
  - Real-time presence and communication
  - Wikis
  - (2010) People and groups lists
  - (2010) Calendars
  - Surveys
  - PowerPoint "Slide Library"
  - Enhanced email alerts
  - (2010) Content and document management
  - (2010) Integrated facilities for document, records and content management
  - (2010) Document collaboration
  - (2010) Major and minor versioning, with enforced checkout
  - Targeting with Active Directory existing groups
  - Use of SharePoint sites for email archiving
  - Rendering of spreadsheets as HTML
  - Easy, no-coding creation of dashboards from Excel spreadsheets
  - Metadata-based archiving of email to records repository from Outlook
5. **(2010) Update Hosting and Support Plans.** Update the hosting and support plans to include SharePoint-specific requirements and information. This includes standards, setup and configuration documentation, change control procedures, maintenance requirements, backup processes, disaster recovery plan and monitoring.
6. **Office 2007 and SharePoint Optimization.** Use the Office 2007 client if possible for an optimal SharePoint document management experience. Office 2007 is better integrated with Microsoft Office SharePoint Server 2007 than all previous versions of Office.
7. **(2010) SharePoint Remote Access.** Consider limiting intranet access to a secure VPN connection, depending on the confidentiality of content being published in SharePoint. At a minimum, require SSL for all intranet browsing.
8. **(2010) Instant Messaging.** Investigate the use of an instant messaging (IM) application and establish key criteria for evaluation within the County. Consider features such as user-directed status, automatic login, internal only versus internal external connections, policy, etc. Deploy this technology in a pilot (e.g., within DoITS) first.

## 3 Implementation Approach

### 3.1.1 Plan Implementation

To implement the Information Technology Strategic Plan (ITSP or the Plan), the following approach is recommended:

1. ***Develop an Understanding of the Plan:*** The plan should be reviewed in its entirety to gain an understanding of what is being presented and to elicit discussion and feedback on elements of the plan.
2. ***Support for the Plan:*** Within the Plan, there are numerous recommendations that will change how technology is managed and administered within the County. Support will be essential from leadership of the County including elected officials, department heads and Board of Commissioner members.
3. ***Develop a Communication Plan:*** Create and execute a Communication Plan with consideration for what the messages will be, who the targets will be, frequency of communication and method of communication.
4. ***Establish a Governance Structure:*** Going forward, a number of the recommendations are dependent upon a formal IT governance structure in which different committees will have varying roles and responsibilities.
5. ***Prioritize Initiatives within the Plan:*** Decisions on prioritizing items in the Tactical Plan, projects and initiatives to be implemented should be based on agreed upon criteria.
6. ***Obtain Funding for the Initiatives:*** As part of the initial deployment of the plan and on an on-going basis, funding will need to be obtained to implement elements of the plan.
7. ***Execute the Plan and Initiatives:*** Once funding and approval for projects has been obtained, implementation of the plan components will occur.
8. ***Maintain the Plan:*** Continually review and update the plan through the IT Governance structure. It is anticipated that the Plan will be reviewed/updated on semi-annual basis.

### 3.1.2 Implementation Process

As part of the implementation process for the ITSP, supporting processes related to the Plan should be implemented. Each of the following items is explained in further detail following this introduction:

- **Information Technology Planning Process.** This process identifies the specific tactical items to be undertaken over the next year and, specifically, how these projects align with elements of the Information Technology Strategic Plan. This process is aligned with the IT Governance Strategy defined earlier. This process should be conducted on an annual basis.
- **Information Technology Plan Maintenance Process.** This process is intended to provide a review of the Plan to ensure that the strategies and priority initiatives within it are consistent with current business goals of the County. This process will also measure progress related to the ITSP and areas identified for improvement. Additionally, relevant factors will be considered that may necessitate modifications to major elements of the ITSP. This process should be conducted on at least a quarterly basis.
- **Information Technology Project Review Process.** This process addresses the need for the County to review and prioritize appropriate technology projects for implementation. The review process offers a consistent framework for the County to develop and evaluate project requests consistent with the Project Portfolio Management Strategy defined earlier. This process should be conducted on an on-going basis with timely feedback being communicated to the project requestor.

#### 3.1.2.1 Information Technology Planning Process

Gwinnett County should correlate its annual Information Technology Planning Process with the County's Business Planning Process (BPP). The IT Leadership Team should participate in this process to provide a County-wide

perspective in terms of relevance to current County strategic and business plans and relative priorities of IT initiatives.

Per the BPP, depicted below, the IT Planning Process should be conducted during August and September of each year in order to benefit from results of the Business Plan Development and Department Retreat, allowing for ample time to prepare a budget during September and October of each year.

### Gwinnett County - Business Planning Process



It is anticipated that the planning process will be initiated as an activity of the IT Leadership Team who will guide and direct the specific needs of the review that will likely include the following activities:

- Assess progress on current projects / initiatives that are part of the IT Tactical Plan.
- Assess progress towards the advancement on each of the eight IT Strategies defined in the ITSP.
- Identify and assess IT trends relevant to the ITSP and assess their level of impact on the Plan.
- Assess measurable progress toward the achievement of IT specific goals as defined by the balanced scorecard.
- Obtain benchmark data to assess what other Counties are doing relative to IT.
- Identify factors, both internal and external, that may impact the need to revise elements of the ITSP through interviews with County staff and Departments.
- Initiate an abbreviated end-user survey focused on specific areas of improvement required and modify the Plan accordingly.
- Review all projects in the Project Portfolio to determine if there have been any scope or budget changes. All projects that are identified to have significant changes in either of these areas could result in a different prioritization.

### 3.1.2.2 Technology Plan Maintenance Process

Once annual Information Technology Planning is completed, the ITSP must be updated. It is expected that the CIO will have primary responsibility for updating the plan, garnering input through the planning process.

It is recommended that a review involve an independent third-party to gain an unbiased perspective on how the County is progressing in its implementation of the Plan as well as alignment with overall County business plans and strategies. The Plan Maintenance Process is noted as follows:

| Activity  | Responsible Party         | Timing              |
|---|---------------------------|---------------------|
| 1. Engage third party to conduct an independent review and proposed updates to the Plan.  | IT Leadership Team        | August - September  |
| 2. Third party conducts an independent review of the Strategic Technology Plan and formulates recommendations for updating the Plan that becomes noted as a Plan Addendum.                | Independent Consultant    | September – October |
| 3. A review of the Plan Addendum is conducted with a major outcome to determine what, if any, changes should be made to the Information Technology Strategic Plan directional statements. | IT Leadership Team        | October             |
| 4. Appropriate updates are made to the ITSP document as an addendum to the Plan.  | ITS Director (CIO) Office | November            |
| 5. Updates, if any, to project prioritization criteria are made.  | ITS Director (CIO) Office | November            |

### 3.1.2.3 Technology Review Process

#### 3.1.2.3.1 Purpose

To establish a process to evaluate the impacts of applying technology that extend, expand, or improve the services available to Gwinnett County’s employees, residents, businesses, civic groups, or other interested parties.

The Technology Review process addresses the need for the County to review and prioritize appropriate technology projects and related initiatives for implementation. The review process offers a consistent framework for the County to develop and evaluate project requests. The review process is a method of identifying technical and organizational impacts related to technology projects and aligning them with the County’s business plans. This process will not deal with detailed project design, engineering, coding, or implementation specifics.

#### 3.1.2.3.2 Roles and Responsibilities

##### 1. IT Leadership Team

The purpose of the IT Leadership Team is to receive and evaluate completed project requests. The IT Leadership Team is also responsible for providing technology review and project priority recommendations for the County review process. The IT Leadership Team is comprised of various department heads and elected officials.

##### 2. Business Analysts

IT Business Analysts are the main contact point between County Departments and DoITS. The role of the Business Analyst in the Technology Request process is to work closely with the Project Sponsor and DoITS to build the overall Business Case for the Technology Request, seek Subject Matter expertise when and where required, and to guide the request through the entire process. As a group, the Business Analysts will establish the criteria and weighting scores for the submitted project(s). The Business Analysts will have an understanding of the function and business processes of the Departments they support and will reside in DoITS.

### **3. Information Technology Services Director**

DoITS Director has many roles in this process. The Director is responsible for the overall coordination and oversight of the Technology Review Process, and will determine if the project can be accomplished within the current timeframe and within budget, or if it will impact other projects. The Director will also assign the unique project tracking number and review all technology requests with other IT management to ensure that all aspects of the project are addressed. Other responsibilities include reviewing all Technology Requests with the County Administrator, working with the Budget Division on the development of the budget and acting as the liaison with the Technology Advisory Committee during project review and prioritization. In addition, the Director will post the annual Project Portfolio and ensure that published information is current and accurate.

### **4. Department Liaisons**

The purpose of the Department Liaisons is to assist the Business Analyst and the Project Sponsor in the development of the business, functional and technical requirements for a Technology Project. If requested, they are to review projects for clarity and completeness prior to forwarding project requests to the County Technology Advisory Committee. These Department Liaisons are typically the Subject Matter Experts and reside within the Departments.

#### **3.1.2.3.3 Technology Review Process Activities**

##### **1. Conceptual Development**

When a department decides that it would like to embark on a technology project, the Project Sponsor (PS) will complete a Technology Request Form (TRF) (See Appendix for Sample), with the assistance of a Business Analyst. The Business Analyst, Project Sponsor and DoITS Director will determine the initial scope of the project. That estimate will determine the next steps. The project will be defined as a Level 1, Level 2, or a Level 3. If the ongoing operational impact is significant, it can raise the level of the request.

If the project is considered a Level 1 project, it will not progress through the Technology Review Process. DoITS Director will determine if the project can be accomplished within the current timeframe and within budget, or if it will impact other projects. If DoITS Director determines that it can be handled within the current portfolio, it would be assigned a project tracking number and scheduled. If it cannot be accommodated, it will be deferred to a later date unless deemed an emergency. If the Project Sponsor deems the request an emergency and the County Administrator agrees, and has approved immediate attention, a Technology Advisory Committee meeting will be called to determine which projects will be re-prioritized to accommodate the emergency effort.

##### **2. Review Process**

Based on the business and technology assumptions that are contained in the TRF, the Business Analyst and Information Technology staff will determine whether the technical assumptions are appropriate for the existing technology architecture. If not, alternatives may be suggested and reviewed by the Project Sponsor. If no other alternative is appropriate, the TRF is updated with the associated risks and impact statements on County and Information Technology budgets.

### 3. Completing the Request

Accounting for all recommendations and adjustments made through the review process, the technology request is completed by the Business Analyst and the Project Sponsor. This includes a thorough development of a Return on Investment statement that is developed in conjunction with budget and accounting staff. The completed form is forwarded to DoITS Director for technical evaluation.

### 4. Completed Business Case is submitted to IT for technical review and specifications

DoITS Director routes the TRF to the appropriate areas within DoITS, where a full review of the project and the associated effort to complete is evaluated and preliminary technical specifications are associated to the TRF. Once the technical review is completed, it is returned to DoITS Director for final review and summarization. DoITS Director now schedules a project review with the County Administrator.

### 5. County Administrator/Assistant County Administrator Approval

At the scheduled meeting, the Project Sponsor, assigned Budget Analyst, and DoITS Director will present the request and associated TRF to the County Administrator. The purpose of this meeting is to allow the County Administrator to determine whether the request fits within the Strategic Plan for the County. If disapproved by the County Administrator, the technology request is returned to the requesting department, with explanation by DoITS Director, and no further action will be taken on the request. Projects approved by the County Administrator are to be reviewed and prioritized by the Leadership Team. Approval by the County Administrator for fit within the County's IT Strategic Plan does not imply approval for work or for budget at this point in the process.

### 6. IT Leadership Team

DoITS Director informs the Leadership Team Chair that there are technology request(s) that are in need of prioritization. The ideal timeframe for this prioritization meeting is quarterly, but will depend on the number of requests that have been submitted for their review. The meeting is scheduled and at that meeting, DoITS Director will present the new technology request(s) for consideration. The TRF will be made available for review. DoITS Director will summarize the requests and impact. The Leadership Team will vote on the prioritization of the requests into the overall County Project Portfolio. A multi-year technology project plan will be developed and updated annually (known as the Project Portfolio) based on the priority of projects established by the Leadership Team. DoITS Director will adjust the workload, if needed, and if budget is available.

### 7. Operating Impact Assessment

The project sponsor needs to work with staff in the Budget Division to prepare an Operating Impact Assessment from the ROI information for all technology requests. Budget Division management will determine whether the project request is appropriate for inclusion in the Operating Budget or the Capital Plan.

These projects will be advanced if there is budget funding available and approved by the County Administrator. If the request is an approved emergency project that needs immediate action, it will be forwarded, by DoITS Director, to the Budget Manager for preparation with Project Sponsor for ordinance or fund transfer request for Board of Supervisor approval if necessary. If it is not an emergency, the projects are held for the next Budget Cycle.

## **8. Capital Plan and Operating Budget**

For preparation of the coming year's Capital Plan and Budget Cycle, all Technology Review Process efforts that are to be considered by the County Administrator and the Board of Commissioners. Departments will have to submit Capital Project Request documentation or incorporate the project into their Operating Budget for consideration of available project funding.

Based on the prioritized Project Portfolio and appropriation levels or tax levy target set for the upcoming budget, the Budget Division and DoITS Director will prepare the capital plan and operating budget for DoITS. The operating budget projects requested by sponsoring department will have to be included as part of their upcoming operating budget. The capital and operating Budget is presented to the County Administrator for his consideration and inclusion or exclusion in the upcoming year's budget proposal. The Project Portfolio costs and the funding sources will be listed in the Budget and identify whether the project is part of the capital plan or in the operating budget. The County Administrator will review this and a decision will be made as to which projects will be forwarded or postponed to a later year. This Project Portfolio is approved by County Administrator and submitted to Council as part of the next year budget.

## **9. Budget Approval**

The proposed budget, which will include the IT Project Portfolio is reviewed and submitted to the Board of Commissioners for full approval. DoITS Director, as part of planning process, then addresses those projects approved.

## **10. Project Portfolio Updated**

DoITS Director, and IT staff, will then updates the Project Portfolio for the approved projects for the coming year(s) and communicates to departments by publishing the new Project Portfolio Calendar on the Intranet.

Projects are assigned based on the Project Portfolio, and a Return-On-Investment audit date is established. At the appropriate time, DoITS Director moves approved projects into the active status.

## **11. Project Portfolio Review**

For all projects in the Project Portfolio, a detailed review will be conducted to determine if there has been any significant scope or budget changes for the project. All projects that are identified to have significant changes in either of these areas could result in a different prioritization.

## **12. Post Project Review**

At the completion of all projects (when the project work is completed and the system is considered in production), a post-project review will commence at 30, 60, or 90 days after completion, depending on the level of the project. This intent is to document "Lessons Learned", determine action to be taken on all deferred work, and to ensure that all documentation for the project is complete. Based on the Return on Investment statement, the post-project audit date is assigned. This is the date at which the project results will be reviewed to determine whether the anticipated Return-on-Investment has been achieved. Participating in the Return on Investment review will be the Business Analyst, Budget representative, Accounting representative, and requesting department representatives.

## **13. Post Project Findings Document**

With the completion of the Return-on-Investment audit, the Post-project Findings document will be published and forwarded to all interested parties.



### 3.1.2.4 Project Selection Criteria

The following criteria are established for prioritizing IT projects. These criteria should be re-visited on a regular basis to ensure on-going alignment with the County's IT Strategies.

- Alignment with Business Plans (i.e., balanced scorecard items)
- Availability of sponsorship
- Leverages existing investments
- Ease of implementation
- Supportability
- Resource requirements
- Satisfies mandated requirements
- Availability of funding
- Number of departments benefiting
- Time to implement
- Risk level of project
- IT Resource Availability

### 3.1.3 Implementing Organizational Changes

In addition to clearly defining areas of responsibility, several strategic recommendations for effectively implementing organizational changes and alignment are as follows:

- Appropriately and judiciously distribute available funds for training and skill development amongst staff with skill development needs.
- Tie skill development to the Performance Management process at the County.
- Tie skill development plans to the technology planning and budget development process.
- Focus on the following specific training programs for the appropriate staff: business process analysis and project management.
- Continue to seek and use no / low cost options for skill development, including cross training, Internet research, periodicals / materials review.
- Explore other opportunities for no/low cost skill development such as: Association involvement and links to staff's personal education initiatives.
- Collaborate with end user departments to develop plans for participating in relevant industry associations memberships that will allow participants to gain the maximum level of awareness on technology issues and best practices at peer organizations / agencies.

### 3.1.4 Performance Metrics

The following factors have been identified as objectives that are critical to the successful implementation of the Information Technology Strategic Plan and should be incorporated into the balanced scorecard, including key performance indicators:

1. Future funding sources are identified and secured.
2. County Administrator commitment and leadership to implementing the plan.
3. Department senior management commitment, leadership and support for projects.
4. Cross department cooperation and coordination regarding projects.
5. Ownership on the part of the business units when implementing new technologies and business applications.
6. Departmental participation in setting information technology direction.



7. Strong leadership in DoITS as well as a clear vision for the future that is clearly communicated and understood by County staff.
8. Compliance/adherence to information technology architecture and standards.
9. Managed expectations for information technology initiatives.
10. User satisfaction with results of information technology initiatives.
11. Education/training of information technology staff and departmental staff involved in the deployment and maintenance of information technology assets.
12. Achievement of service level agreement goals and objectives.

## 4 Appendices

### 4.1 Appendix A: Definitions

#### 1. Technology Project

A technology project is defined as an initiative with a start/end date that involves computerization and/or web technologies involving informational or financial transactions that introduce new or changed business processes. Projects will include departmental, multi-departmental and enterprise-wide initiatives. All projects will be approved through the Technology Review Process (see Appendix B - D).

#### 2. Technology Project Levels

**Level 1** – Project Sponsor and Information Technology agree that the project will require less than 200 hours of Information Technology resource time and cost less than \$25,000 to implement.

**Level 2** – Project Sponsor and Information Technology agree that the project will require less than 1,000 hours of Information Technology resource time and cost less than \$100,000 to implement.

**Level 3** – Project Sponsor and Information Technology agree that the project will cost more than \$100,000 to implement. At this level, the project is considered a Capital Project requiring Capital Budget funding.

#### 3. Project Sponsor

Individual from the Department or Division submitting the request for the consideration of a technology project. This person will work with Information Technology to build the Business Case Portfolio and assist in the implementation of the project, on approved and activated. Their responsibility will be to assure that department personnel are available, as required, for project related work, analyze and approve change requests and champion the project to completion.

#### 4. Business Analyst

Information Technology individual, assigned from Business Services, to act as the liaison between Information Technology and the business departments of the County. Their responsibility is to the business issues related to a request and recommend both functional and technical improvements. If a technical solution is determined to be the best solution, the Business Analyst will work with the Project sponsor and technical personnel to develop the solution that addresses the business issue most effectively.

#### 5. Project Portfolio

The Project Portfolio will represent the master schedule of all technology initiatives within the County. This includes all on-going service and support efforts required to keep systems functioning, current projects on which work is underway, all approved projects that have been scheduled for attention in a continuous twelve month cycle and all prioritized projects that have not yet been initiated. This will include unscheduled projects needing further review and all known mandated projects (i.e., based on Federal and State requirements). Projects and initiatives are classified as follows:

- *Departmental Projects:* A project that is specific to a particular department and is not dependent on other projects outside of the department.
- *Line of Business Projects:* A project that is specific to a particular line of business and is not dependent on other projects outside of the line of business.
- *Enterprise Projects:* A project that will impact either multiple departments or the entire enterprise (e.g., implementation of an enterprise resource planning system).

Each technology initiative, whether approved or in the planning stages, shares the same consistent attributes as shown in Appendix E.

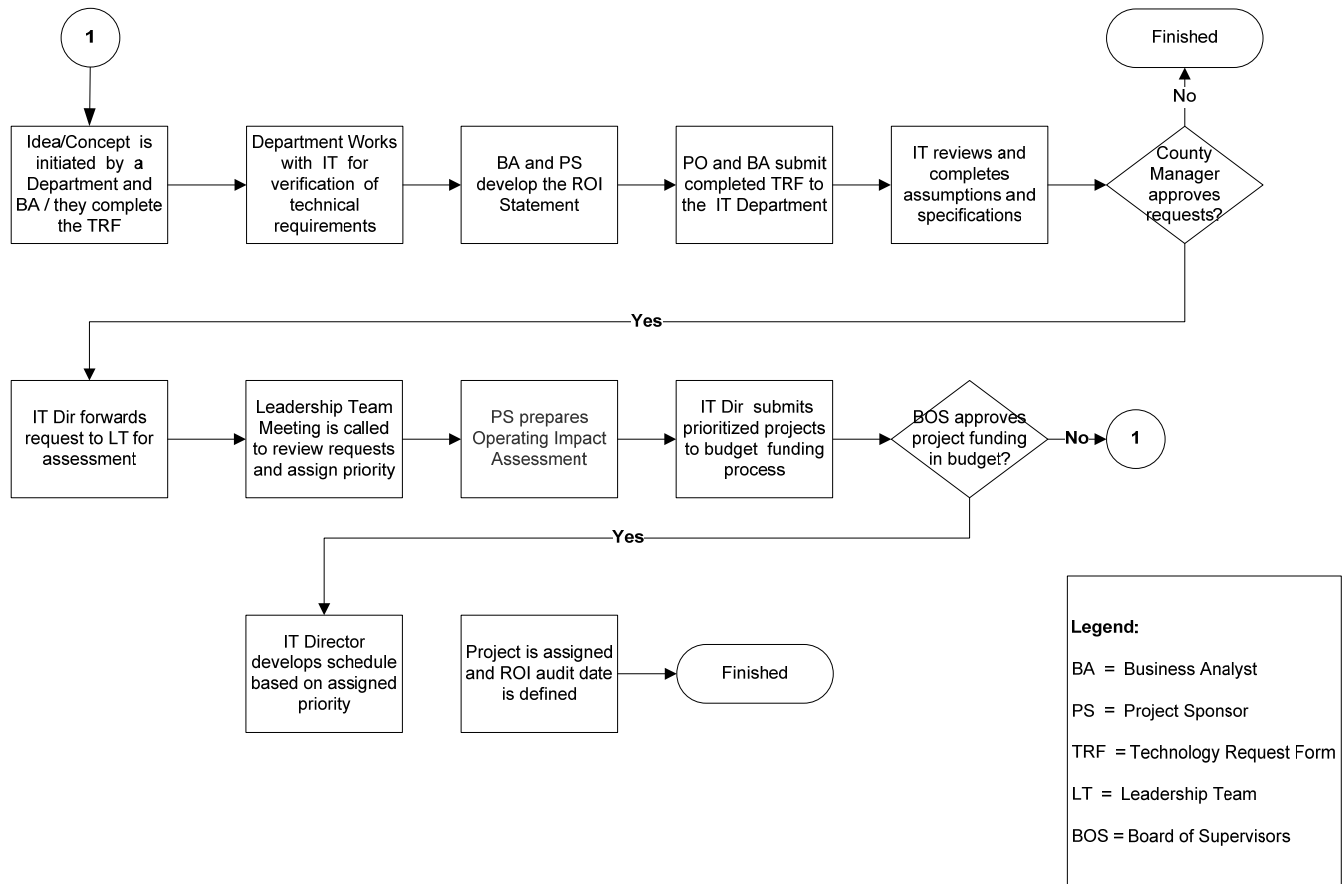
## **6. Return On Investment (ROI)**

Calculated time frame in which the investment required to deliver a technology project to production will achieve its break-even point. This is typically presented in terms of number of months. Negative Return on Investment will also be presented along with intangible benefits.

## **7. Project Manager**

A Project Manager will oversee the successful completion of a Technology Project by using best practices associated with the Project Management Institute's Project Management Body of Knowledge (PMBOK). A Project Manager will be assigned to all Level 3 projects. Level 2 projects will be assigned a Project Manager at the discretion of the Project Sponsor and DoITS.

## 4.2 Appendix B: Sample Technology Review Process Flow Chart



## 4.3 Appendix C: Sample Technology Request Form

PROJECT SPONSOR:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Phone

**PROJECT NAME**

Project Name Here

**INITIATION DATE**

REQUESTING CUSTOMER:

The person submitting the request.

CLASSIFICATION:

ALIGNMENT WITH PLAN:

PROJECT TIMING:

PRIORITY:

Enterprise, Line of Business, or Department

1, 2, or 3

Immediate, Medium, Near, Long

1, 2, or 3

PROJECT MANAGER:

PROJECT SPONSOR:

PROJECT CUSTOMER:

The person responsible for managing the work.

The person or group paying for the project.

The person(s) for which the project is undertaken.

PROJECT DESCRIPTION:

**Description**

*Describe, in general terms, what execution of this project is to accomplish. This may include creation and delivery of new or higher quality products or services. Do not justify the business reason in this section.*

PROJECT SCOPE:

**Project Scope**

*Describe the project goals and objectives using the SMART (Specific, Measurable, Agreed to, Realistic, Time Bound) criteria. These goals will be used to measure and determine the project's success at its conclusion.*

**In Scope**

1. Work Statement 1

**Not in Scope**

TBD

PROJECT BUDGET:

| <b>Project Budget</b> <i>Move the number of human resource hours required from the "Project Human Resources" table above to the Qty column on the left, enter the cost/hour for the resource(s) and compute the extended cost in the last column. Also add a line in the table below and transfer the total cost or "Project Other Resources" to this table and total up all costs. This is the total project budgeted cost.</i> |                                     |           |                  |
|--|-------------------------------------|-----------|------------------|
| Qty<br>(item or<br>hours)  | Description                         | Unit Cost | Extended<br>Cost |
|  |                                     |           | \$ 0             |
|  |                                     |           | \$ 0             |
|  | <b>ESTIMATED PROJECT COST</b>       |           | <b>\$ 0</b>      |
|  | Project Contingency                 |           |                  |
|  | <b>TOTAL ESTIMATED PROJECT COST</b> |           | <b>\$ 0</b>      |

PROJECT OUTCOMES (SMART<sup>6</sup>):

|   |  |
|---|--|
| <b>Comprehensive List of Project Outcomes</b> | <i>These are the products or services that must be produced in order to fulfill the goals of the project. Deliverables should have measurable, verifiable results and outcomes. Identify critical success factors.</i> |
|   |  |

PROJECT STAKEHOLDERS:

| <b>Stakeholders</b>   | <i>Identify, preferably by name, any persons affected by this project. Be sure to include the project sponsor, the project manager (you), the customer, the end-users, the support personnel, etc.</i> |
|-----------------------|--|
| Individual/Group Name | Function   |
|                       |  |
|                       |  |
|                       |  |
|                       |  |
|                       |  |
|                       |  |

<sup>6</sup> Specific, Measurable, Realistic, Attainable, Time Based

BUSINESS JUSTIFICATION:

|                      |  |
|----------------------|--|
| <b>Justification</b> | <i>Identify and quantify any savings that can be realized. You may use a cost-benefit analysis. Justify reason(s) why this project should be undertaken; include the association of this project to the mission statement or priorities of the organization paying for this project.</i> |
|                      |  |

RISK MANAGEMENT:

|                           |   |   |
|---------------------------|---|---|
| <b>Risk/Opportunities</b> | <i>Identify any risks that can derail the project, or affect the scope, schedule, budget or quality of the deliverables and/or processes.</i> |   |
| <b>RISK/Opportunity</b>   | <b>Description &amp; Mitigation</b>   | <b>RISK LEVEL<br/>(1/2/3)<br/>Level=Prob*Impact</b> |
| Risk –                    | <b>Description:</b><br><b>Mitigation Plan:</b>  |   |
| Risk –                    | <b>Description:</b><br><b>Mitigation Plan:</b>  |   |
| Risk –                    | <b>Description:</b><br><b>Mitigation Plan:</b>  |   |
| Opportunity -             | <b>Description:</b>   |   |

SUMMARY MILESTONES:

|                           |  |  |
|---------------------------|--|--|
| <b>Summary Milestones</b> | <i>Milestones are dates on which significant project events occur or significant project deliverables are completed and presented to the customer.</i> |  |
| <b>MILESTONE</b>          | <b>DATE</b>  |  |
| Milestone 1               |  |  |
| Milestone 2               |  |  |
| Milestone 3               |  |  |
| Milestone 4               |  |  |

## 4.4 Appendix D: Use of the Technology Request Form

A Technology Request Form is the initial document in the workflow. The form consists of the following sections:

### 1. Section A - Project Description

With the assigned Business Analyst, the Project Sponsor will develop the Business Case Statement of Work, which will include an overview of the functional and technical efforts required to successfully complete the project.

### 2. Section B - Project Scope

Identify the project's function and business and system requirements. Include the following: an outline of major project phases, the name of the department's project sponsor, and estimate timelines for completion. Critical success factors should also be identified. Initial cost estimates may need to be obtained through the County's Information Technology Division staff or from an outside vendor

### 3. Section C - Project Budget

This section must include a list of all known estimated costs and the total amount of funding being requested for the project. Identify "one time" versus "on-going" cost estimates.

### 4. Section D - Project Outcomes

This section includes the products or services that must be produced in order to fulfill the goals of the project. Deliverables should have measurable, verifiable results and outcomes. Identify critical success factors.

### 5. Section E - Project Stakeholders

Identify, preferably by name, any persons affected by this project. Be sure to include the project sponsor, the project manager, the customer, the end-users, the support personnel, etc.

### 6. Section F - Business Justification

Include a summary of the project. Summarize reasons for implementing the project, goals, needs met by the project, anticipated costs/benefits, and basic functionality. List year project should begin and year expected to be complete. Note and justify any project urgency. Identify the departments and/or divisions impacted/benefiting from the project. Also, include an explanation of how the project fits into the County and department's Strategic Plan and how the project ties into the Information Technology Strategic Plans and goals for the County.

### 7. Section G - Risk Management

Identify any risks that can derail the project, or affect the scope, schedule, budget or quality of the deliverables and/or processes.

### 8. Section H - Summary Milestones

This section contains any dates on which significant project events occur or significant project deliverables are completed and presented to the customer.



## 4.5 Appendix E: Project Portfolio Attributes

| Column                         | Value                           | Description   | Further Definition  |
|--------------------------------|---------------------------------|---|---|
| Project #                      | xxxx                            | Autogenerated four digit number assigned by the County to identify a specific project. Referenced in other project documents and reports. |   |
| Request                        | text                            | Short description of project or project title.  |   |
| Status                         | Desired, Planned or In Progress | Status of project.  |   |
| Funded                         | Yes or No                       | Indicates whether or not the project is funded.   |   |
| Classification                 | Departmental                    | The project primarily benefits a specific department.   |   |
|                                | Enterprise                      | The project directly benefits the majority of or all departments.   |   |
|                                | Line of Business                | The project directly benefits a particular line of business.  |   |
|                                | Infrastructure                  | The project is related to IT infrastructure needed to support other projects.   |   |
| Requesting Customer            | name                            | Name of department or person that has made the request.   |   |
| Citizen / Customer Perspective | ↑                               | Project directly impacts BSC item   | Provides measurable improvement in citizen/customer service.  |
|                                | →                               | Project indirectly impacts BSC item   |   |
|                                | ↓                               | Project has little/no impact on BSC item  |   |
| Internal Process Perspective   | ↑                               | Project directly impacts BSC item   | Provides measurable improvement in internal business processes in terms of process efficiency gains and/or risk |
|                                | →                               | Project indirectly impacts BSC item   |   |
|                                | ↓                               | Project has little/no impact on BSC item  |   |
| Financial Perspective          | ↑                               | Project directly impacts BSC item   | Provides measurable cost savings / revenue gains.   |
|                                | →                               | Project indirectly impacts BSC item   |   |
|                                | ↓                               | Project has little/no impact on BSC item  |   |
| Learning / Growth Perspective  | ↑                               | Project directly impacts BSC item   | Provides measurable improvement in knowledge-gain/skill development.  |
|                                | →                               | Project indirectly impacts BSC item   |   |
|                                | ↓                               | Project has little/no impact on BSC item  |   |
| Risk                           | ●                               | Project has little or no risk.  |   |
|                                | ●                               | Project has risk factors which may impact the project scope and/or schedule but the ability to manage the risk appears reasonable.        |   |
|                                | ●                               | Project has risk factors which may impact the project scope and/or schedule but the ability to manage the risk appears uncertain.         |   |
| Description/Goal               | text                            | Paragraph (2-3 sentences) describing the project scope and the primary goal(s).   |   |
| Timing                         | Year 1                          | Project will be initiated in Year 1 of the current Plan Year  |   |
|                                | Year 2                          | Project will be initiated in Year 2 of the current Plan Year  |   |
|                                | Beyond Year 2                   | Project will be initiated beyond Year 2 of the current Plan Year  |   |
| Estimated Capital Cost         | \$                              | Total cost estimated at less than \$50,000  |   |
|                                | \$\$                            | Total cost estimated at less than \$250,000 but greater than \$50,000   |   |
|                                | \$\$\$                          | Total cost estimated at less than \$500,000 but greater than \$250,000  |   |
|                                | \$\$\$\$                        | Total cost estimated at greater than \$500,000  |   |
|                                |                                 | (If estimated cost is known, the estimated \$ amount will be included)  |   |
| Estimated Operating Cost       | \$                              | Total cost estimated at less than \$10,000  |   |
|                                | \$\$                            | Total cost estimated at less than \$50,000 but greater than \$10,000  |   |
|                                | \$\$\$                          | Total cost estimated at less than \$100,000 but greater than \$50,000   |   |
|                                | \$\$\$\$                        | Total cost estimated at greater than \$100,000  |   |
|                                |                                 | (If estimated cost is known, the estimated \$ amount will be included)  |   |
| Additional Resources-Initial   | ●                               | High level of resources   |   |
|                                | ●                               | Moderate - High level of resources  |   |
|                                | ●                               | Moderate level of resources   |   |
|                                | ●                               | Low - Moderate level of resources   |   |
|                                | ○                               | Low level of resources  |   |
| Additional Resources-ongoing   | ●                               | High level of resources   |   |
|                                | ●                               | Moderate - High level of resources  |   |
|                                | ●                               | Moderate level of resources   |   |
|                                | ●                               | Low - Moderate level of resources   |   |
|                                | ○                               | Low level of resources  |   |



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