DeKalb County
GEORGIA

Information Technology Strategic Plan

DeKalb County, GA
July 2016

CIIO's Vision

"DeKalb County will be a leader in transforming government services which improve economic development, social growth and efficiencies."

John Matelski, Chief Innovation and Information Officer

Chief Innovation and Information Officer's Message

This Information Technology Strategic Plan (ITSP) is focused on using IT as the enabler to collect, store, transport, display, analyze and disseminate information in support of DeKalb County's lines of business. Our customers, the employees of DeKalb County expect us to deliver timely, reliable, effective, and secure IT solutions, providing accurate and actionable information to those carrying out the mission of the County. I envision a vastly improved and agile IT environment that will better serve an increasingly proactive DeKalb County enterprise. With an enterprise perspective for improving strategic processes, tactical activities and logistical technologies, we will achieve increasing benefits to the mission owners, measured by desired outcomes. Through careful planning and cooperation with our many users and stakeholders we will meet our IT strategic goals outlined in this plan.

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1 Introduction

The goal of the Information Technology Strategic Plan (ITSP) is to provide a County-wide direction to facilitate and promote appropriate use of innovation, automation and technology to ensure the most effective and efficient delivery of services to internal stakeholders as well as all DeKalb County citizens and constituents. The ITSP will align DeKalb County's information technology services and support with County Departments/Agencies 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.

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.

2 Technology Assessment

Based on the noted findings and Gartner Group 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 in 2013 and again in early 2015 with the following tables summarizing the findings of the IT Assessment Report in the three major areas of organization, administration and technology. The two annual assessments identify that significant progress has been made in the last year; however, there is significant opportunities to enhance the County's technology position even further.

County-Wide Information Technology Assessment - Maturity Rating Summary by Topical Area (2013)

Organization Assessment	Maturity Rating
Governance	★★☆☆☆
Coordination	★★☆☆☆
IT Staff Competencies	★★☆☆☆
Administration Assessment	**Maturity Rating**
End-User Services	★★☆☆☆
IT Operations	★★★☆☆
IT Management Processes	★★★☆☆
Technology Assessment	**Maturity Rating**
Infrastructure	★★☆☆☆
Data Center Management	★★★☆☆
Enterprise Applications – Content Mgt	★☆☆☆☆
Enterprise Applications – Oracle	★★★★☆
Enterprise Applications – GIS	★★★★☆
Web Applications – Internet/Intranet	★★★☆☆

County-Wide Information Technology Assessment - Maturity Rating Summary by Topical Area (2016)

Organization Assessment	Maturity Rating
Governance	★★★☆☆
Coordination	★★★☆☆
IT Staff Competencies	★★☆☆☆
Administration Assessment	**Maturity Rating**
End-User Services	★★★☆☆
IT Operations	★★★☆☆
IT Management Processes	★★★☆☆
Technology Assessment	**Maturity Rating**
Infrastructure	★★★☆☆
Data Center Management	★★★☆☆
Enterprise Applications – Content Mgt	★☆☆☆☆
Enterprise Applications – Oracle	★★★★☆
Enterprise Applications – GIS	★★★★☆
Web Applications – Internet/Intranet	★★★☆☆

Opportunities Summary

Based on the assessment of topical areas selected for DeKalb County, opportunities were identified which will form the basis for many of the IT strategies in this plan. Additionally, this plan, at a high level, addresses the Matrix Efficiency study recommendations. 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., Infrastructure, Enterprise Content Management and Internet/Intranet).
- 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.
- 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 IT functions with business plans as defined by Departments/Agencies 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.
- Enhance Project Management capabilities to promote success.

- Invest in training across the County to ensure that ***ALL EMPLOYEES*** (not just Technology personnel) have the tools and knowledge needed to operate efficiently and effectively.

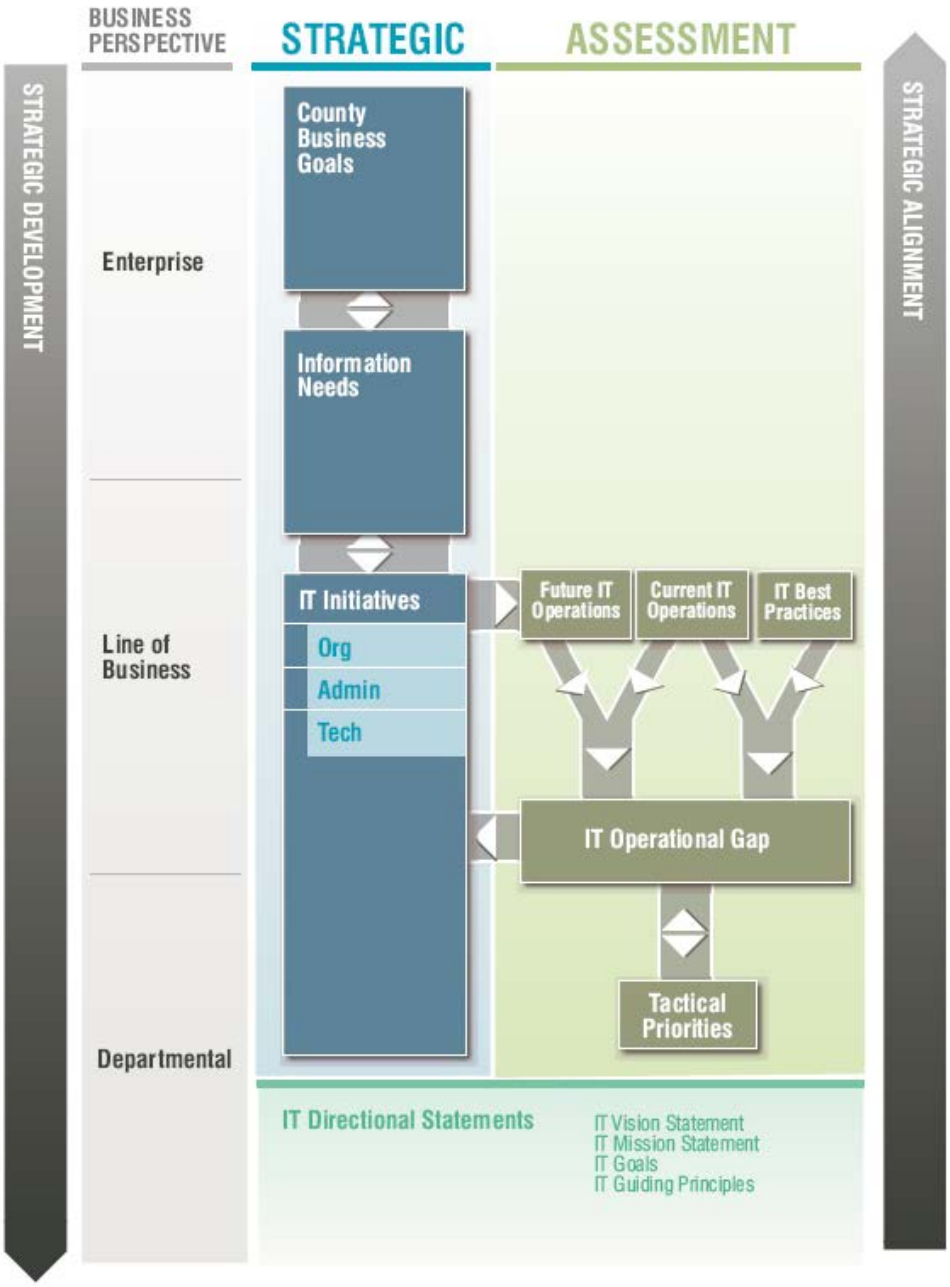
Continue to invest in IT infrastructure projects that will ensure the current and on-going performance, reliability, confidentiality and integrity of systems.

3 Strategic Planning Process and Components

The Department of Innovation and Technology coordinates the strategic planning process by gathering input from a variety of sources. DoIT gathers stakeholder input from the Board of Commissioners, Chief Executive Office, Chief Operating Office, Information Technology Advisory Council (ITAC) and many other department/agency representatives through the Business Relationship Management (BRM) process. Business drivers are identified through this process and considered as additional input. Lastly, business and technology trends are gathered as additional inputs to the planning process.

All of the inputs are used to develop the strategy and update the DoIT vision, strategies, guiding principles, and goals. DoIT then executes the plan throughout the year. The process is started over again using knowledge obtained during the execution of the plan and new inputs gathered as part of the new planning cycle.

The diagram below depicts the key components that are included in this process.



The entire strategic plan is also predicated on the fact that there is an imperative to provide IT services within the most effective and efficient model. 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 DeKalb 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 two years, the County has embraced and enhanced a Business Planning Process (BPP) which further demonstrates the County's commitment to excellence. This commitment to excellence transcends the County, based

on our observations. 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 budget development timeline, we recommend that the IT Strategic Plan, including the Information Technology Tactical Plan be updated in May/June of each year and finalized in August.

County Strategic Priorities

The Board of Commissioners and the County Administration (Chief Executive Office & Chief Operating Office) have formally and or informally outlined high level priorities that are congruent to each other, and that provide direction by which all government services are designed to be in alignment with. The County Administration has outlined the following six priorities:

- Enhance Public Safety
- Facilitate Jobs and Economic Development
- Develop and Maintain Sustainable Neighborhoods and Communities
- Ensure Efficient Operations
- Ensure Fiscal Integrity
- Invest in Employees

In discussions that were conducted to prepare this plan, the Board of Commissioners also provided some priorities that are summarized and aggregated here. This is by no means meant to be an all-inclusive list, but rather items that were consistent across all discussions:

- Safe Communities
- Government Transparency
- Enhanced Constituent Services
- Fiscal Accountability & Responsibility
- Enhanced/Secure Mobility & Civic Infrastructure
- Attract & Retain Best in Class Workforce

IT Directional Statements

Representatives from various Departments throughout the County along with outside consultants 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.

IT Vision

DeKalb County will be a leader in transforming government services which improve economic development, social growth and efficiencies.

IT Mission

The Department of Innovation and Technology will deliver world class solutions to provide citizens, the business community and County staff with convenient access to appropriate technology and services.

IT Goals

1. **Service Excellence.** Provide and sustain excellence in service delivery whereby we are actively listening and interpreting the voice of the customer through personal connections, data collection and analysis.
2. **Solution Delivery.** Enhance constituent interaction by providing solutions that will improve the quality and efficiency of services using technology, where appropriate.

3. **Enterprise Architecture.** Provide and support a current, stable, secure, flexible and supportable standards-based technology infrastructure.
4. **Centralized Technology Funding.** Maintain a centralized IT funding model, enabling timely strategic investments.
5. **Governance.** Provide enabling IT policies and procedures that encourage collaboration and guide County organizations in planning, deployment and maintenance of IT solutions.
6. **Privacy and Security.** Provide centralized technology security oversight and direction.
7. **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.

IT Strategic Priorities

County technology priorities have been identified based on citizen/constituent input, agency/department business requirements, and in alignment with BOC and County Administration strategic priorities. The IT strategic priorities, as well as core mission goals and objectives provide an integrated framework for understanding how DeKalb County will address the 21st-Century needs of our citizens and constituents. DeKalb County will implement these technology priorities through a planning framework set forth in this document, and will integrate them into the annual budget priority setting and formulation process. The IT strategic priorities for this planning cycle are:

- Architecting and Leading Technology Innovation
- Enabling Government, Citizens and Businesses
- Ensuring Reliable, Secure and Cost Effective Infrastructure
- Improving Analysis, Collaboration and Information Sharing
- Exploiting Technology to Enable and Empower the County's Workforce

External Shaping Factors

When it comes to providing citizen and constituent services in the most effective and efficient manner, irrespective to the level of innovation and technology that may be leveraged, there are several external factors that shape of frame the level of success than can be achieved. This ITSP has been developed with a recognition that the following factors will have an impact on the present and future DeKalb County:

- Annexations
- New City Incorporations
- Legislative Agenda
- Other Government Organization Requirements
- New CJIS Requirements
- EPA Consent Decree
- Economic & Revenue Flux

4 Strategic Guiding Principles

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.

Guiding Principles
1. Enhance Business Value
2. Solution and Cost Optimization
3. Promote "One County" Partnership
4. Simplify and Reduce Complexity
5. Provide Secure and Available Business Solutions
6. Prefer COTS/GOTS Over Custom Development (reuse, buy, then build)

ENHANCE BUSINESS VALUE

RATIONALE:

- Everything DoIT does should be tied back to the business and provide business value by either solving a business problem or enhancing a business process.
- Through Business Relationship Management (BRM) DoIT must proactively identify opportunities to add business value.
- DoIT shouldn't have to be asked for solutions.

IMPLICATIONS:

- Projects and initiatives should be communicated in business terms.
- Functionality and requirements should be related back to business outcomes.
- BRM's should become a resource for gathering future business opportunities.

SOLUTION AND COST OPTIMIZATION

RATIONALE:

- DoIT will gain credibility by always optimizing solutions to meet the requirements the most cost effective manner.
- The County and DoIT budget will benefit in the long run when optimum solutions are

selected.

- Requirements must be gathered and used to determine the optimum solution for particular business need.

IMPLICATIONS:

- DoIT will partner with the customer to understand the business value of all solutions.
- All solutions should be selected based on business value and cost.
- The County will collaborate to select the right solution, the right size, at the right cost for the business need.

PROMOTE A "ONE COUNTY" PARTNERSHIP PHILOSOPHY

RATIONALE:

- DoIT is committed to the success of others and promotes this philosophy for all.
- Promote a "One County" holistic approach to service provision while respecting the autonomy of Constitutionals, Agencies, and the Courts.
- Autonomy at the local and state levels is necessary to facilitate the unique purpose of an Agency, Constitutional Officer or the Courts.
- A holistic approach promotes trust, collaboration and cooperation throughout the enterprise.
- This approach minimizes redundancy and complexity and simplifies citizen interaction with government.
- Be common when you can … be different ONLY when you need to be.

IMPLICATIONS:

- It is essential that Constitutionals, Agencies and the Courts collaborate, participate and commit to the discipline and guiding principles of a Federated Governance Model.
- Regulatory compliance is a top priority.
- A holistic approach requires open and constant communication that may result in longer decision-making cycles that extend the implementation time for solutions.
- Consistency and commonality will allow for agility, minimizing integration complexity.
- Trust, communication and credibility are critical to success.
- Commit to the success of others.

ALL DECISIONS MUST BE FISCALLY RESPONSIBLE

RATIONALE:

- Cost Recovery discipline must be applied to all technology efforts and projects.
- Transparency of the cost of all investments and services provided is imperative.
- When stakeholders can clearly see the cost of services they can take a more active role in cost savings and make informed choices.
- All initiatives should be supported by a business case and if the solution or service is not

aligned to the business, it should not be done.

- Negotiations around costs, efforts to reduce costs wherever possible, and the lowest prices for the best solutions are expected.

IMPLICATIONS:

- All technology staff must diligently and accurately track all costs for investments and services provided.
- All technology staff must be actively involved in budget, finance, and cost recovery processes with a focus on cost reduction and best pricing.
- Based on long-term viability and fiscal responsibility, specific projects may not be eligible to begin or continue to completion based on financial analysis.
- Business sponsorship involvement is required to identify and justify business value of new and ongoing investments and services.
- The expense of ongoing maintenance and technology refresh costs will be incorporated into the cost recovery model to guarantee budgetary funds are available.
- Combine and collaborate whenever possible to realize economy of scale savings.
- Legacy solutions and technology will be replaced when financially viable equivalents that may reduce total cost of ownership are available.

BALANCE QUALITY AND SUSTAINABILITY

RATIONALE:

- Excellence is expected in everything we do.
- Excellence does not mean perfect.
- In the face of competition, DoIT desires to distinguish itself and to be recognized by our customers as the Service Provider of Choice.
- Quality of workmanship in products and services is the distinguishing factor in business.
- The public expects more efficient and responsive government with quality services.
- Agencies demand quality, customer-centric service and business solutions.
- Quality encourages a favorable public image.

IMPLICATIONS:

- Accountability for excellence to ourselves and to our customers must be entrenched in our culture.
- Establish a culture of quality and continuous process improvement.
- Commit to the success of others.
- Internal and external cultural changes are required.
- The pursuit of excellence and the desire to be progressive comes with a price. All personnel must be responsible for effectively using resources and leveraging assets for achieving appropriate levels of competency.

SIMPLIFY AND REDUCE COMPLEXITY

RATIONALE:

- Reduction of unnecessary complexity or duplicity may make solutions easier to use, maintain, and support, while likely reducing costs.
- Easier to understand and communicate.
- Allows focus on core competencies.
- Provides consistency, stability, and helps improve continuity.
- Reduces unnecessary redundancy.

IMPLICATIONS:

- Combine what should be combined, separate what should be separated, and eliminate what can be eliminated.
- Simplicity requires the reduction or elimination of the unessential.
- Simplifying solutions must be balanced against purpose, goals, and functionality to ensure we deliver usability.
- Reduce abstract language, jargon, or wordiness internally and especially with customers.
- Internal and external cultural changes may be required.
- Focus on what is probable or likely, not all possibilities.
- Customize ONLY as a last resort.
- Retire legacy solutions when outdated or overly complex.
- Re-engineer and challenge the 'status quo' to reduce complexity and duplication of effort wherever it occurs throughout the County.

PROVIDE SECURE AND AVAILABLE BUSINESS SOLUTIONS

RATIONALE:

- Confidentiality, Integrity, and Availability (CIA) of information assets are vital security issues for the enterprise.
- Availability, responsiveness, and protection of mission-critical systems are to be embedded in all solutions.
- Continuity of business services and timely recovery of services are expected for all solutions.
- Customers expect more efficient and responsive government that is there when called upon for service - building trust through responsiveness, reliability and agility.

IMPLICATIONS:

- A combination of processes and tools are needed.
- Internal and external collaboration is required.
- Continuity and disaster recovery discipline must be embedded in all solutions as a

forethought.

- Accurate and detailed Risk Management is required, with a comprehensive inventory of our assets.
- Disaster Recovery plans need to be fully developed, communicated, and funded.
- Business Continuity plans need to be defined and funded for all solutions.
- Operational redundancy needs to be in place and funded where required.
- All hardware and software systems require a defined "Maintenance Window".
- Change Management maturity is required to mitigate unnecessary risk to the production environment.

PREFERENCE FOR COTS OVER CUSTOM

RATIONALE:

- When planning a project or defining a solution: analyze reuse, then buy, then build.
- Analysis before reusing solutions or components must ensure that reuse is the best option, especially when options for reuse involve technologies or processes that no longer align with future state plans.
- This approach should minimize duplicity and complexity, enabling enterprise transparency and agility.
- Leverage commercial off the shelf (COTS) or government off the shelf (GOTS) packages that incorporate industry standards and best practices.

IMPLICATIONS:

- Customize as a last resort.
- The Reuse option should be based upon sound analysis and require minimal customization. Plan for reuse as a forethought, not an afterthought.
- Reusing existing solutions or components should be considered for technologies or processes that are aligned with future state architectures, but reuse should not occur for solutions or components that are identified as outdated or costly to continue maintaining.
- Retire legacy solutions when outdated.
- This approach will exercise efficiencies, shorter time to market and fiscal responsibility.
- Preparation of a detailed business case will be provided as justification for an intended solution.
- Technology staff must become integration specialists, creating middleware options for connecting disparate systems.
- COTS/GOTS applications must have API, web service, and/or other service-oriented architectures to allow interoperability and integration.
- The analysis required for building a solution is pre-empted if reuse or the buy options are viable.

5 Strategic Projects Summary

Each year, DoIT works with County Departments, Constitutional Offices, and the Courts to determine the business drivers, industry trends & best practices, and environmental trends that will affect them over the coming 1-3 years. The results of this analysis is a set of common requirements that DoIT considers when planning its strategic response to what the County Agencies, Constitutionals, Courts, and DoIT will need over that time frame. DoIT has created the table below which is an attempt to provide an overview of this year's strategic projects, business strategies, and technology strategies.

<table>
<tr><th colspan="2">2015 DoIT Strategic Summary</th></tr>
<tr><td>Strategic Projects</td><td>➢ Enterprise Asset Management
➢ Enterprise Content Management Expansion
➢ Case Management System Enhancements
➢ Business Process Evaluation/Re-engineering
➢ Permitting System Upgrade/Enhancements
➢ Application Portfolio Modernization
➢ Web Site Modernization</td></tr>
<tr><th>Business Strategies</th><th>Technology Strategies</th></tr>
<tr><td>➢ Citizen Engagement
➢ Business Value (TCO)
➢ Business Relationship Management
➢ Rapid Application Delivery
➢ End-User-Experience
➢ Platform Agnostic Application Delivery
➢ Application Portfolio Management
➢ Enhance Security Oversight & Awareness
➢ IT Governance
➢ Invest in Talent and High Performance Organization</td><td>➢ Cloud Computing and Private Cloud
➢ Application Portfolio Modernization
➢ Mobility and Wireless Connectivity
➢ Business Intelligence and Dashboards
➢ Replace Aging Network Infrastructure
➢ Collaboration (UC, IM, Video, WebEx…)
➢ Virtualization (Server, VDI, Applications)
➢ Tapeless Backups
➢ Security Technologies</td></tr>
</table>

6 Business Strategies

DeKalb County is constantly evolving its business strategies to improve service delivery and improve internal processes. The following are the significant business strategies DeKalb County has adopted to enhance our ability to deliver quality services to our customers.

CITIZEN ENGAGEMENT

The terms eGovernment, digital government or connected government have been used for several years to represent the shift from operating government in a traditional way to operating government in the information age, interacting with the citizens in a more collaborative and efficient manner. To keep pace with citizen expectations and the latest technology trends, counties are evolving and enhancing the constituent's experience. DeKalb County is focusing on four key areas to increase citizen engagement: Transparency, Collaboration, Communications and Online Services.

Providing county constituents access to more information and financial data promotes transparency of government which builds trust in the county leadership. By moving to cloud-based tools, we will be better able to gather valuable information from citizens about problems within the county infrastructure, which will help the county improve service via improved dialog, transparency, partnerships and maintenance of infrastructure. By providing valuable communication vehicles such as an enhanced web site and social media presence, citizens can more effectively connect with county leadership on important topics via interactive technology.

Lastly, through online services across county government, citizens will be able to get better, faster, and more cost effective services online. As a result of current efforts, DeKalb County has already achieved a transparency grade of A+ as officially designated by Ballotpedia (http://ballotpedia.org/DeKalb_County,_Georgia), however we will continue to enhance and expand on these initiatives.

BUSINESS VALUE

DeKalb County is always seeking to provide business value by providing cost effective and innovative technology solutions that solve business problems or enhance business processes. The County recognizes that business value has many forms such as financial value, citizen or constituent value, employee value, or societal value. All projects or initiatives should be supported by a business case that factors in the forms of business value and provides a Total Cost of Ownership (TCO) analysis. When performing TCO analysis it is important that technology projects are evaluated in business terms and relate functionality in terms of business outcomes. All investments in technology enhanced services should be transparent to the stakeholders. When stakeholders can clearly see the cost of services they can take a more active role in cost savings and make informed choices.

BUSINESS RELATIONSHIP MANAGEMENT

Business Relationship Management (BRM) is a widely used strategy to enhance partnerships between service providers and customers. Over the last two years, DoIT has developed a BRM strategy and process to enhance customer partnerships. This has primarily been through the use of the leadership team operating as part-time relationship managers while balancing the demands of their primary role. DoIT recognizes the importance of establishing and maintaining a business relationship with our customers. To meet the business objective, DoIT has reorganized and created a dedicated BRM group that will focus solely on establishing business relationships with customers to ensure DoIT understands our customers and their business needs. DoIT will partner with customers to ensure high levels of customer satisfaction, establish a constructive relationship, identify changes to the customer environment that could impact services, and ensure that DoIT services meet the demands of all stakeholders.

RAPID APPLICATION DELIVERY

DeKalb County recognizes the growing requirements and accelerated need for technology solutions from the business and has dedicated a team to focus on rapid delivery of technology solutions. Many agencies and departments are striving to deliver their services more effectively and efficiently by leveraging technology solutions. The creation of this team allows DoIT to add value to the business by delivering small to medium solutions in a shorter timeframe. Creating a rapid application delivery team within the DoIT allows for two streams of work, traditional and fast. The traditional stream will focus on long-term COTS implementations that typically last for more than 6 months and require a more robust project management and development process. The fast stream (the rapid application delivery team) will focus on small to medium projects that can be completed using a more streamlined development process and completed in a much shorter timeframe than projects that the traditional stream of work would be handling.

END USER EXPERIENCE

Evolving the end user experience in a way that enhances productivity and overall user satisfaction is a key strategy for DeKalb County. The end user experience includes things such as; the office experience with workstations and applications, the mobile experience and applications, video and audio conferencing, the remote access experience and just as important the experience provided to citizens and constituents through our public and self-service offerings. A technology professional will be assigned to lead this effort, ensuring appropriate quality on all solutions and with a focus on improving the end user experience.

PLATFORM AGNOSTIC DELIVERY

Web application technologies have diversified in recent years, and there is no longer a strong market leader for web browsers, web frameworks, and other associated technologies. In addition, mobile technologies have matured, with modern phone and tablet devices able to access web functionality in virtually the same way as traditional desktop PCs. Users now expect that the web-based applications that they use and rely on will continue to function and provide value regardless of web browser, operating system, or device. This is an important factor for internal applications due to initiatives such as BYOD (Bring Your Own Device) as well as to help minimize application modernization efforts, and even more important for external applications, in which DeKalb County has little control over how citizens and external agencies choose to access web applications.

To meet this new landscape, delivered solutions will be as platform agnostic as possible, so that these solutions can function identically regardless of the technologies used to access them. Developed solutions will focus on platform agnostic technologies, such as increased usage of HTML5 and Service- Oriented Architecture techniques, as well as decreased usage of technologies that require specific platforms or configurations, such as browser plug-ins (Flex, Silverlight), software frameworks (Applets, ActiveX), or specific browsers or browser versions. In addition, procured solutions should use this strategy as a guiding factor in making technology decisions to ensure that the solution will be durable regardless of future technology trends.

APPLICATION PORTFOLIO MANAGEMENT

Enabling the County to advance to new platforms such as tablet PCs, mobile devices, and faster operating systems is imperative now and through the next three years. Every application has a lifecycle and creating a roadmap that includes an end of supportability/life date and a strategy must be in place to either migrate or eliminate that

application from the portfolio. The entirety of the DeKalb County -supported application portfolio must be analyzed and plans developed for transitioning to modern, sustainable technologies. A repeatable methodology has been developed to analyze the County's application portfolio each year to assess what actions will be needed to manage the technical quality and total cost of ownership versus business value of each application. Emphasis must be placed on this initiative to assure stakeholders are not held back from taking advantage of newer efficiencies and technology platforms.

The Application Portfolio Management process assesses key factors such as operational performance, security risk analysis, and impact to business processes to determine the business value and technical quality for each application in the portfolio. This analysis also provides a visual mechanism to identify clusters of similar applications for future consolidation and migration to common, enterprise-wide products. Ultimately, the process categorizes each application into one of four groups to determine a high-level strategy for each application in the portfolio:

- Invest: applications that provide high business value and have good technical quality. These applications will remain an active part of the portfolio, and should be actively enhanced to increase their value and usage.
- Migrate: applications that provide high business value, however the technical quality is low which makes them difficult and more expensive to maintain. These applications should be modernized and migrated to another technology or platform.
- Tolerate: applications with relatively low value to the business, but cause few technical concerns or problems. These applications will remain in the environment for usage but have no emphasis on future investment or enhancement.
- Eliminate: applications which no longer provide sufficient business value and have low technical quality, and should be evaluated for retirement.

ENHANCE SECURITY OVERSIGHT AND AWARENESS

Protection of the County's critical systems and sensitive data is paramount. DoIT is the custodian of much of the County's systems and information assets. As such, it is imperative that DoIT strive to protect and maintain the confidentiality, integrity and availability of these important assets. DoIT has increased dedicated security staff to four full time equivalents (FTEs). With these resources in place, DoIT continues to enhance security oversight and overall security awareness. The following is a list of some of the initial areas of focus.

- Create information asset inventory and data classification with agreed upon risk scoring to assist in prioritization of protection efforts.
- Increase the capability to provide baselines, trends and benchmarks to enable better decision making.
- Provide better reporting for data owners.
- Integrate security into projects by partnering on the solutions development life cycle (SDLC).
- Determine the policy standards that are consistent with local government and adopt as the framework.
- Seek solutions to create segregation of duties which will reduce the potential for fraud and misuse.

IT GOVERNANCE

DeKalb County leverages a series of best practice disciplines for leading and managing the County's business technology investments. The combinations of these best practices is the foundation for enabling us to be agile, and cost-effective. Enhanced emphasis will be put toward Service Strategy, Service Design, Continual Service

Improvement, and Organizational Change Management practices to support Cost Recovery on the ongoing evolution of the delivery on innovative technology solutions and services. These practices include:

- Information Technology Infrastructure Library (ITIL)
- Project Management Body of Knowledge (PMBOK)
- Enterprise Planning and Architecture Strategies (EPAS)
- Solution Development Life Cycle (SDLC)
- Enterprise Security Policy
- Service Level Agreements (SLA)
- Performance Management / Goals & Objectives
- Organizational Change Management (OCM)

INVESTING IN TALENT AND HIGH PERFORMANCE ORGANIZATION

DeKalb County values the contribution of our employees as a core competency, and we are committed to recruit, develop, reward, and retain personnel of exceptional ability, character, and dedication. We are a continually learning organization, continually evolving and staying apprised and ahead of business and technology trends. Our people are our service and to keep pace with constant changes in technology and the high level of expertise required, continual investment in education is imperative. Additionally, as the next wave of mobility and cloud technologies emerges, stakeholders and customers will require training to assure they get the maximum benefits from new business processes and efficiencies. Attracting and retaining new talent will continue to be a focus.

7 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 DeKalb 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. DeKalb 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 through discussions that were conducted across the County enterprise. They were developed with a strong consideration of the six County wide Strategic Priorities which are to: Enhance Public Safety, Facilitate Jobs and Economic Development, Develop and Maintain Sustainable Neighborhoods and Communities, Ensure Fiscal Integrity, Ensure Efficient Operations and Invest in Employees. 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, DoIT 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 BPP it is likely to have the greatest impact on, such that it supports the overall business plan.

PRIVATE CLOUD

As public and private cloud offerings continue to grow, DeKalb County will begin implementing and brokering contracts for cloud services as a strategy to reduce costs while increasing capabilities. The need to develop competency in cloud services brokerage is imperative to negotiate cloud service level agreements and protect the confidentiality, integrity, and availability of this method of delivering technology. The County is investigating potential opportunities to leverage the Cloud. An immediate opportunity where cloud technologies may be able to improve service delivery and reduce costs is Interactive Voice Response (IVR).

In-house private cloud tools and streamlined service delivery should also be invested in to provide customers with secure multi-customer and single-customer environments. Investing in and leveraging robust engineered systems as well as other best of breed technologies will help create a “County Cloud” providing software as a service (SaaS) and platform as a service (PaaS) capabilities to current and potentially new customers.

APPLICATION PORTFOLIO MODERNIZATION

Applications will be identified for modernization through the Application Portfolio Management process. These legacy applications will include applications that provide high business value but have low technical quality as well as applications relying on technologies which have been targeted for retirement.

Legacy applications will be modernized using one of these general approaches, while considering high- level guiding principles such as "COTS Over Custom" and "Simplify and Reduce Complexity":

- COTS: Identify and purchase a modern commercial system which meets the same or similar requirements as the legacy application.
- Custom: Utilize modern rapid application development technologies and processes, such as Oracle Application Development Framework, to develop a new custom application which meets the same requirements as the legacy application.
- Consolidation: If the County already supports a modern COTS or Custom solution whose requirements are similar to the legacy application, the legacy users may be transitioned to the modern solution to meet their requirements. This may also require enhancing the modern solution via vendor engagement or custom development so that it can meet all necessary requirements.

MOBILITY AND WIRELESS CONNECTIVITY

Business trends with “bring your own device” (BYOD) and cloud-based services will continue to heavily influence the trend away from laptop and PC productivity to a “work from any device, anywhere” culture in the next generation of workforce. A BYOD usage and security policy must be developed that enables this new style of working while still maintaining the security and protection of the County’s information assets. Based on the policy, the ability to centrally

manage devices may need to be put in place to ensure security for the network and County data assets are not compromised. An investment in a Mobile Device Management (MDM) technology will need to be made over the next year. DeKalb County will continue to focus on technologies that secure delivery and storage of data and applications rather than the traditional MDM technologies that focus on managing the endpoint.

BUSINESS INTELLIGENCE AND DASHBOARDS

Business Intelligence (BI) is a set of business practices and technologies that aim to support data-driven decision making. DeKalb County has invested in a market-leading business intelligence and performance measurement platform for the enterprise: Oracle Business Intelligence Enterprise Edition (OBIEE). Fully engaging the capabilities of this tool will be transformational in improving the information readily available to decision makers. A unique capability of this tool is the ability to federate data across multiple data sources, enabling it to be used across the enterprise as an ad-hoc reporting and dash boarding tool. This creates the ability to create reports and dashboards that include data from multiple sources which in the past would have had to be reported on separately or manually combined. In addition, BI tools empower the users to create their own reports and be more proactive in their decision making process, with the help of KPI's, Scorecard and Dashboard boards.

REPLACE AGING INFRASTRUCTURE

A County wide inventory has been conducted to determine the type, age and quantity of all network gear. Many facilities have equipment that was installed over 10 years ago and will soon not support the speed and throughput of newer technologies such as video-conferencing, distance learning, and mass collaboration. This coupled with a continuing increase of 'connected' devices across the enterprise will lead us to exceed current capacities. Preparing to update and replace the network infrastructure will become increasingly imperative over the next 1-3 years.

COLLABORATION TOOLS

County agencies are commonly looking for more ways to easily and seamlessly share information within agencies, inter-agency, externally with other counties, and interacting with citizens. Agencies are asking for more ways to engage with each other and citizens via the Internet. In addition, many agencies are looking to avoid travel and yield efficiencies by leveraging video conferencing and technologies. Analysis is underway to determine the most cost effective method of enabling capabilities and the development of a business case will need to be completed.

VIRTUALIZATION (SERVER, VDI, APPS)

Virtualization and consolidation will continue to be key strategies to increase efficiencies and reduce costs. An effort will be underway to evaluate tools that will be able to quickly provision and deploy systems and lay the foundation for Platform as a Service (PaaS). In addition, increased virtualization will make Disaster Recovery for those systems more efficient and cost effective.

New trends in mobility will also make Desktop Virtualization (VDI) and Application Virtualization a top priority to deliver applications with less dependency on device compatibility and help support a "work from anywhere" culture.

Current VDI and Application Virtualization products will be evaluated for what best fits the County's needs going forward.

TAPELESS BACKUP

Having efficient electronic access to data is becoming a need due to the increasing Business demand to backup and restore larger quantities of data. Speed, reliability, and security have become major factors to consider. Technologies such as snapshots, de-duplication, and replication are making backups to a Co-location or the Cloud a more feasible option when compared to the labor intensive tape backup solutions. DeKalb County is currently evaluating implementing a Microsoft cloud backup strategy. This includes an on premise appliance that includes advanced compression, deduplication, network acceleration and encryption features.

SECURITY TECHNOLOGIES

Complementing the business strategy of "Enhancing Security Oversight & Awareness" is the need to invest in security technologies that will reduce risk and guarantee confidentially, integrity and availability. DeKalb County will continue investing in vulnerability management software to capture and quantify risk from a vulnerability standpoint. Additionally, increasing the visibility of malicious activity is a primary strategy that is being focused on. Investment in host based and network based intrusion detection as well as centralized logging and correlation is needed over the next year to provide the County with the ability to see the threats in real time and respond. The mobility, coloration, and "bring your own technology" trends create additional need to security tools such as Mobile Device Management that will allow the secure delivery of information and applications to various devices both County and non-County without increasing exposure and risk. Reducing potential risk and exposure internally by investing in data masking technologies is another solution that will be evaluated.

Also due to the fact that some technology resources are not under the complete auspices of the Innovation and Technology Department, it is important that the County develops a strategy to segment the network to create access control boundaries between County agencies. This strategy reduces impact when or if a security breach occurs by limiting the effect of the breach to a single agency. Investment in powerful firewalls capable of providing this access control without unreasonably increasing the management burden is key to the success of this strategy.

8 Common Trends and Current/Future State

Another imperative of the ITSP is to understand current industry trends, and be able to identify where the organization is related to that trend, and more importantly, the direction it should be heading. With this in mind, this section will identify the following trends, and provide a current and future state for each:

- Mobile, Virtual and Remote Productivity
- Collaboration, Sharing and Data Integration
- Cost Reduction
- Enterprise Content Management (ECM): Imaging, Document Management, Paperless Office
- eGovernment/Customer Self-Service
- Data Mining, Data Analysis and Performance Measurement
- Automation, Workflow and Business Process Optimization

Trend	Description
Mobile, Virtual, and Remote Productivity	As part of their efforts to reduce operational costs and improve service efficiency, County agencies have identified the need to enable employees to easily and cost effectively work from remote, field-based and mobile locations with a variety of devices and platforms. Agencies also wish to reduce transportation, training, and meeting costs by using video, telephone, online meetings and other collaboration & communication tools.
Current State	**Future State**
➢ VPN (Virtual Private Networking) ➢ Mobile Internet/Email/Calendar ➢ Network Connectivity Services ➢ Telephone ➢ Internet ➢ Wireless Network ➢ Wireless and Broadband Connectivity ➢ Fixed Location Video Conferencing ➢ Telephone Conferencing Bridge ➢ Software-based and IP Telephony ➢ Virtualized Application ➢ Web-based Virtual Education and Training	➢ Expanded Video Conferencing Service and Electronic Meeting Service ➢ Expanded Web-based Virtual Education and Training ➢ Bring Your Own Device policy ➢ Handheld, Mobile Computing ➢ External Chat ➢ Expanded Thin Client and Web Client (web enabled applications) ➢ Portal Services ➢ Expanded Collaboration Software ➢ Expanded Telecommuting ➢ Location Aware Services ➢ Mobile Device Management ➢ Mobile applications including Data Collection ➢ HTML5 Applications ➢ Unified Communications

Trend	Description
Collaboration, Sharing, and Data Integration	County agencies are commonly looking for more ways to easily and seamlessly share information – within agencies, inter-agency, externally with other counties, and interacting with citizens. Agencies are asking for more ways to engage with each other and citizens via the Internet. Sharing information is called out as one of the most prolific trends across all agencies. Additionally, social networking is a common, worldwide trend where more citizens are interacting with each other via technology with an expectation that governments will follow suit.
Current State	**Future State**
➢ Email/Calendaring ➢ Website Hosting ➢ Network Connectivity ➢ Telephone ➢ Internet ➢ Wireless Network ➢ File and Print ➢ Extranet ➢ Web-based Survey Tools ➢ Telephone Conferencing Bridge ➢ Software-based and IP Telephony	➢ Expanded Video Conferencing ➢ Web-based Virtual Education and Electronic Meeting ➢ Enhanced Web-based Surveys ➢ Bring Your Own Device policy ➢ Unified Citizen Portal ➢ Application Integration ➢ Data Integration ➢ Enhanced mobile computing ➢ Web 2.0 Initiatives ➢ Online Community Subscribed Services (forums, newsgroups, mailing lists, wiki, blog, Twitter, social networking mash-ups) ➢ RSS/Atom Feeds ➢ Mash-up Application Services ➢ Portal Services ➢ Expanded Collaboration Software ➢ Location Aware Services ➢ Constituent Relationship Management ➢ Unified Communications ➢ Upgrade Office Productivity Suites

Trend	Description
Fiscal Responsibility	Fiscal responsibility is a common priority and agencies need to balance budget constraints with the ability to deliver new services and maintain sustainability of existing services.
Current State	**Future State**
➢ Technology Consolidation ➢ Server Virtualization ➢ Service Management ➢ Strategic Planning and Consulting ➢ Enterprise Architecture ➢ Identity Management ➢ In-house PC Services, Remote Desktop Support ➢ IP Telephony ➢ Application Virtualization ➢ Telephone Conferencing Bridge ➢ Fixed Location Video Conferencing	➢ Cloud Services ➢ Expanded Video Conferencing (Internal/External) ➢ Web-based Virtual Education and Electronic Meeting Service ➢ Web-based Training ➢ Bring Your Own Device policy ➢ Rapid Application Development Tools ➢ Release Management ➢ Software License Compliance Management – Enterprise Service ➢ Technology Asset Management – Enterprise Service ➢ Identity-driven workflow and provisioning ➢ Service-Oriented Architecture ➢ Reusable/Modular/Object-Oriented Design and Development ➢ Expanded Utilization of Web ➢ Paperless initiative ➢ Technology Standardization ➢ Automated Vehicle Dispatch Routing

Trend	Description
Enterprise Content Management (ECM): Imaging, Document Management, Paperless Office	County agencies and departments wish to replace traditional paper-driven processes with electronic equivalents. Electronic storage and retrieval may eliminate the need for expensive physical warehousing, record retention, and disposal.
Current State	**Future State**
➢ Document Imaging ➢ Document Workflow ➢ Electronic/Desktop-based Fax ➢ Electronic Timesheets and Payroll Remittance Advice ➢ Electronic/Desktop-based Fax	➢ Expanded Document Imaging ➢ Expanded Document Workflow ➢ Image Human Resources files ➢ Document Storage and Retention Policies Documentation Needed ➢ Electronic Availability of County Records to Citizens ➢ Enterprise Workflow Solutions and Business Process Management Tools ➢ Stored docs central repository ➢ Expanded Collaboration Software ➢ Digital Signatures

Trend	Description
eGovernment/Customer Self-Service	County agencies are asking for additional options to allow internal and external customers to help themselves to County services. Emphasis is on more citizen engagement mechanisms and transparency of all County services. Self-service web-based portals and new, expanded data access methods will allow anyone requiring services or information new ways to access those services. This may further reduce costs and aligns with pending legislation mandating electronic access to County information sources.
Current State	**Future State**
➢ Internet Web Sites ➢ Public Records ➢ Self Service Payment Websites ➢ Interactive Voice Response Systems ➢ Payment kiosks ➢ Third-party Payment Providers ➢ Internet Web Sites with minimal self- service capabilities for transactions, reservations, subscription services, video on-demand, mapping on- demand, automated request/feedback forms, access to data deeds, etc. ➢ Civic Issue Tracking\311	➢ Unified County Citizen Web Portal Integrating All Agencies' Services ➢ Expanded Outward-facing Web Services for Self-service Functionality for 3rd Party Usage ➢ Web 2.0 Initiatives and Online Community Services (forums, newsgroups, mailing lists, wiki, blog, Twitter, social networking mash- ups) ➢ Mash-up Applications ➢ Electronic Availability of County Records to Citizens ➢ Service Catalog ➢ Expanded Public Record View/Print ➢ Common Point-Of-Sale and Online Shopping Cart Services, PCI requirements, and ePay overhaul ➢ Constituent Relationship Management ➢ Expanded Civic Issue Tracking\311 ➢ Dynamic User Experience

Trend	Description
Data Mining, Data Analysis, and Performance Measurement	Information is our most valuable asset. Business Intelligence provides the tools and systems that play a key role in the strategic planning processes of an organization. New and better ways to interrogate and report information is required for better, faster business decisions.
Current State	**Future State**
➢ Data Marts ➢ Data Warehouse ➢ Data Analysis Tools ➢ Report Writing ➢ Localized and Ad Hoc Web-based Analytics ➢ Localized and Ad Hoc Web-based Reporting (Application Specific)	➢ Business Intelligence & Dashboards ➢ Predictive Analysis Tools ➢ Increased Utilization of Web Analytics to Support/Validate Paperless and Self-service Initiatives ➢ Expanded Ad-hoc Reporting Capabilities ➢ Data Catalog ➢ Expanded Dashboards ➢ Unstructured\Semi-structured Data Analysis Tools ➢ Data Collection and Aggregation ➢ Big Data

Trend	Description
Automation, Workflow, and Business Process Optimization	County agencies need new, better ways to improve work processes and increase efficiency. Business process analysis and automation of key processes are required.
Current State	**Future State**
➢ Identity Management ➢ Process Improvement Program ➢ Workflow Solutions and Business Process Management Tools	➢ Business Process Analysis/Reengineering ➢ Business Process Management Systems ➢ Business Process Modeling ➢ Continual Service and Process Improvement Program ➢ Identity-driven workflow and provisioning of services ➢ Expand Workflow Solutions and Business Process Management Tools ➢ Improved Process Metrics-gathering and Reporting ➢ Digital Signatures ➢ Service Catalog

9 Strategic Plan Implementation Approach

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.

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.

Information Technology Planning Process

DeKalb 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.

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.

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 (budget permitting) 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.	IT Director (CIO) Office	November
5. Updates, if any, to project prioritization criteria are made.	IT Director (CIO) Office	November

Technology Review Process

Purpose

To establish a process to evaluate the impacts of applying technology that extend, expand, or improve the services available to DeKalb 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.

Roles and Responsibilities

- **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.

- **Business Analysts**

  IT Business Analysts are the main contact point between County Departments and DoIT. The role of the Business Analyst in the Technology Request process is to work closely with the Project Sponsor and DoIT 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 DoIT.

- **Chief Innovation and Information Officer (CIO)**

  The DoIT Director/CIO has many roles in this process. The Director/CIO 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/CIO 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/CIO will post the annual Project Portfolio and ensure that published information is current and accurate.

- **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.

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 DoIT 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. DoIT Director will determine if the project can be accomplished within the current timeframe and within budget, or if it will impact other projects. If DoIT 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, an Information 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 DoIT Director for technical evaluation.

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

DoIT Director routes the TRF to the appropriate areas within DoIT, 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 DoIT Director for final review and summarization. DoIT Director now schedules a project review with the County Administrator.

5. County Administration Approval (CEO/COO)

At the scheduled meeting, the Project Sponsor, assigned Budget Analyst, and DoIT Director/CIO will present the request and associated TRF to the County Administration. The purpose of this meeting is to allow the Administration to determine whether the request fits within the Strategic Plan for the County. If disapproved by the Administration, the technology request is returned to the requesting department, with explanation by DoIT Director/CIO, and no further action will be taken on the request. Projects approved by the Administration are to be reviewed and prioritized by the Leadership Team. Approval by the County Administration 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

The DoIT Director/CIO 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, DoIT Director/CIO will present the new technology request(s) for consideration. The TRF will be made available for review. DoIT Director/CIO 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. DoIT Director/CIO 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 DoIT Director/CIO, 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 DoIT Director will prepare the capital plan and operating budget for DoIT. 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 Administration and submitted to the Board of Commissioners 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. The DoIT Director/CIO, as part of planning process, then addresses those projects approved.

10. Project Portfolio Updated

The DoIT Director/CIO, and IT staff, will then update the Project Portfolio for the approved projects for the coming year(s) and communicate 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, the DoIT Director/CIO 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.

10 Appendices

10.1 Appendix A: Definitions

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).

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.

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.

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.

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.

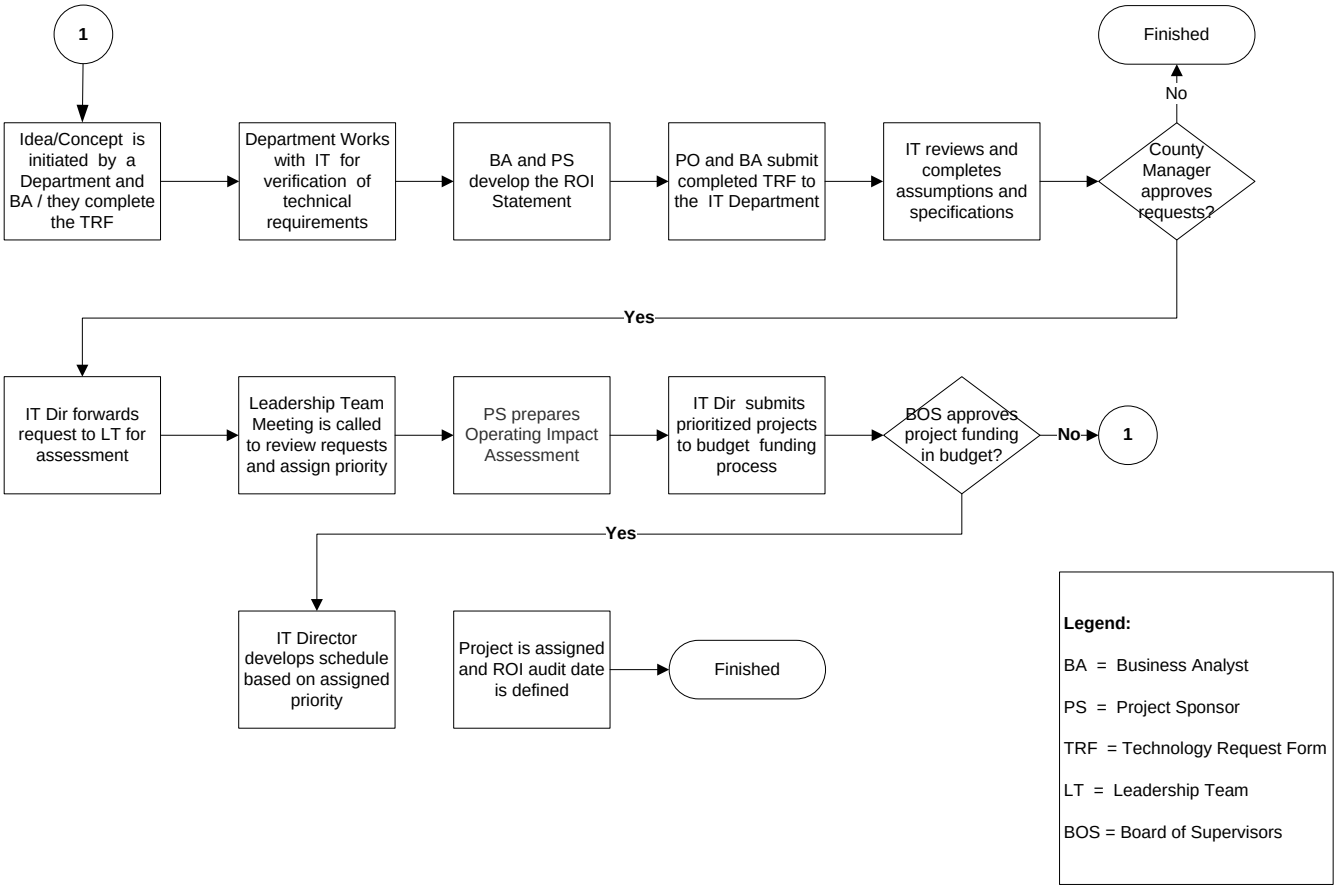
Return On Investment (ROI)

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.

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 DoIT.

10.2 Appendix B: Sample Technology Review Process Flow Chart



10.3 Appendix C: Sample Technology Request Form

PROJECT SPONSOR: _____ _____
Name Phone

PROJECT NAME	INITIATION DATE
Project Name Here	

REQUESTING CUSTOMER:	The person submitting the request.
CLASSIFICATION:	Enterprise, Line of Business, or Department
ALIGNMENT WITH PLAN:	1, 2, or 3
PROJECT TIMING:	Immediate, Medium, Near, Long
PRIORITY:	1, 2, or 3
PROJECT MANAGER:	The person responsible for managing the work.
PROJECT SPONSOR:	The person or group paying for the project.
PROJECT CUSTOMER:	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:

Project Budget		*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.*	
Qty (item or hours)	**Description**	**Unit Cost**	**Extended Cost**
			$ 0
			$ 0
	ESTIMATED PROJECT COST		**$ 0**
	Project Contingency		
	TOTAL ESTIMATED PROJECT COST		**$ 0**

PROJECT OUTCOMES (SMART[1]):

Comprehensive List of Project Outcomes	*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*.

PROJECT STAKEHOLDERS:

Stakeholders	*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.*
Individual/Group Name	Function

[1] Specific, Measurable, Realistic, Attainable, Time Based

BUSINESS JUSTIFICATION:

Justification	*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.*

RISK MANAGEMENT:

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

SUMMARY MILESTONES:

Summary Milestones	*Milestones are dates on which significant project events occur or significant project deliverables are completed and presented to the customer.*
MILESTONE	**DATE**
Milestone 1	
Milestone 2	
Milestone 3	
Milestone 4	

10.4 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.

10.5 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 abilty to manage the risk appears reasonable.	
	🔴	Project has risk factors which may impact the project scope and/or schedule but the abilty 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	