Prince George's County Two-Year Information Technology (IT) Strategy & Roadmap

Fiscal Year 2022-2023

| Applications & Web | Asset Management | Cyber Security | Network | Project Management |

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Executive Summary

The Prince George's County 2-Year IT Strategic Plan, which is a continuation of activities that began in Fiscal Year 2021 and continued through Fiscal Year 2022, is an approach for communicating and implementing the technology vision that helps make measurable advances in progress towards our key initiatives and strategic goals over a two-year time frame. This document provides a transparent framework and methodology to support the County's "Proud Priorities" initiatives and achieve its vision.

In addition to achieving a long-term vision and future direction for Prince George's County Government, this framework outlines the corresponding operational, governance, and technology targets and metrics used to align goals and initiatives with the County's desired outcomes.

The Office of Information Technology recognizes its role as a strategic and tactical partner to County agencies for digital execution and has developed this plan with an integrated and adaptive approach. This approach ensures agile mission alignment with capacity for innovation through collaboration, ideation, and data-driven insights.

This plan also carefully considers enhancing our enterprise architecture for accelerating the delivery of resilient, secure, value-oriented digital services, against an evolving civil service that is decentralized, has a hybrid operating environment, and is augmented by automation, Artificial Intelligence (AI), robotics, and other emerging technologies.

We selected two years as the prescribed time frame for our roadmap, based on best practice, past experience and our ability to accurately forecast rapidly evolving needs and delivery of technology projects. This is intended to be a living document, meaning we plan to recalibrate as we manage demand and respond to digital disruption.

Introduction

Prince George's County's 2-Year IT Strategy and Roadmap offers a technologically functional and actionable response to these trends, and illustrates the current innovation and positive trajectory of Prince George's County Government's Office of Information Technology (OIT) and a vision for our citizens, businesses, employees and key stakeholders that is in full alignment with the progressive vision of County Executive, Angela Alsobrooks.

The OIT Office of the Chief Information Officer (CIO), under the leadership of CIO, Wanda M. Gibson, and support staff developed this Strategic Plan to provide Prince George's County Government with a two-year roadmap for technology deployment, support, services and organizational development. In this fast-paced, ever-changing world, the plan can be updated as often as necessary with input from County Elected Officials, administration, staff and industry partners. We will measure progress annually to ensure we remain in alignment with our commitments.

This plan was developed with broad involvement and guidance from Elected Officials, agency leadership, IT Coordinators and staff. Members of different agencies and branches of government collaborated in a process that included invaluable interviews, conversations, a review of the status of existing goals, objectives, and action items; the result of the work produced a refreshed Strategic Plan.

About Prince George's County

Prince George's County Government's core business is to deliver thoughtful and reliable services to its residents, businesses and visitors. Among the nation's most affluent minority counties, Prince George's County serves more than 900,000 residents over roughly 500 square miles.

World Class Service and Culture

Prince George's County's vision is to be among the top tier of counties in the nation. It pursues this excellence in a fluid environment of fluctuating complexity, advances in technology, increasing stakeholder expectations, unplanned natural events and tightening economics. Delivering high-quality services requires more than a reliance upon systems and technology. In addition to physical infrastructure, Prince George's County Government's future performance will also depend on its ability to provide first-

rate customer service, operate a modern and efficient service delivery organization, secure and optimize financial resources, employ a skilled workforce capable of delivering on future needs, and provide superior services to County residents, businesses and visitors.

The 21st century information and business technology function is increasingly recognized as a strategic asset, service and support function. This requires measured forethought, analysis, ongoing investment, quality assurance, and periodic renewal. Intelligently deployed IT-based systems, business processes and real-time data offer Prince George's County Government unprecedented opportunities to improve and even innovate the way it manages operations and serves its citizens, businesses and visitors. Congruent with this vision, Prince George's County Government will exploit opportunities where information technology can significantly contribute to the enterprise's business effectiveness and efficiency.

Top Digital County Trends

A recent *Center for Digital Government* inquiry on the future of the county governments produced a list of focus areas to monitor and consider over the next 5-10 years. The following list was validated by interviews, surveys, and discussions:

- Uncertain Economy, Financial Instability
- Pandemic Potential, Decreased Availability / Adequacy of Supplies
- Condition of Primary Datacenter
- Shifting Citizen Demands
- Scalable Information Security Strategies
- Replacing a Retiring Workforce / Succession

- Planning; Dynamic Talent Life-Cycle
- Increased Cloud, *aaS Adoption
- Mass / Social Media Explosion
- Increasing/Expanding Government Regulations
- Efficiency Drivers, Resource Optimization
- Administration Change Uncertainty

- Citizen Engagement & Community Relations
- Lack of Public Appreciation for the Complexity of Services
- Recovering Costs for Service / Investment
- Emergency Planning and Response
- Greater Reliance upon Data Analytics

Prince George's County Government Mission Statement

We are entrusted, by our residents and businesses, to provide reliable services, all in a secure, ethical, sustainable, and financially responsible manner.

Prince George's County OIT Mission Statement

The Prince George's County Office of Information Technology (OIT) is wholly dedicated to leading technology efforts to support the strategic goals of County Government. OIT will provide leadership, expertise, and resources in the ideation, development and deployment of innovative technologies and streamlined processes to improve efficiency, business interaction and customer access to Prince George's County Government information and services.

Prince George's County Government Vision Statement

To be consistently and widely recognized as a leading county, based on our quantifiable position as a great place to live, work and visit.

Prince George's County OIT Vision Statement

Under the direction of the Prince George's County Strategic Plan and through guidance from the County Executive, County Council and Judicial Branch, we will:

➢ Rise to a position of absolute leadership among county governments through the creative use and application of IT, and leverage this investment to dramatically improve customer service and organizational performance.

➢ Serve as a Change Agent to support redefinition of business processes, technology insertion and data analytics strategies to more effectively serve our customers.

➢ Apply innovative technology solutions to build a Smart County.

IT Strategic Planning Process

To craft the Prince George's County 2-Year IT Strategic Plan, the team initiated the following process:

- **Develop the IT Strategy**
  - ➤ Reviewed important internal and external strategies and plans
  - ➤ Engaged internal stakeholders and leveraged their feedback as a foundation for the Strategic Plan
  - ➤ Developed a holistic strategy statement in synch with OIT and Business goals
  - ➤ Baselined roadmap against available industry trends and county governments of a similar size and complexity

- **Translate the Strategy**
  - ➤ Translated that statement into specific objectives and initiatives for the IT Strategic Plan
  - ➤ Used the strategy statement as a guide to map and prioritize the operational plans and resources needed to achieve Prince George's County's IT's objectives

- **Plan Operations**
  - ➤ Manage spreadsheet of the ongoing Major IT Initiatives over the 2-Year Timeline
  - ➤ Identify and Follow Metrics

- **Execute Processes & Initiatives**
  - ➤ Implement Strategic Roadmap

- **Monitor & Learn**
  - ➤ Collect key metrics

- **Test & Adapt Strategy**
  - ➤ Evaluate outcomes, metrics and performance
  - ➤ Validate the Strategy
  - ➤ Refine and redefine critical metrics as needed

Prince George's County 2-Year IT Strategic Plan: Development

1) Develop the IT Strategy

2) Translate & Communicate the Strategy

3) Plan Operations

4) Execute Processes & Initiatives

5) Monitor & Learn

6) Test & Adapt Strategy
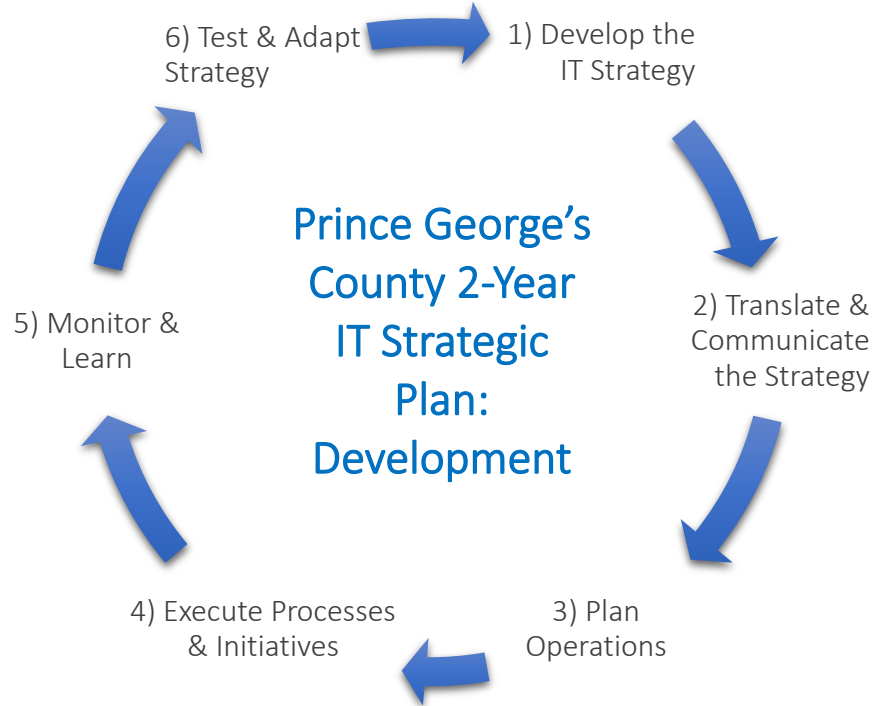
Developing the IT Strategy

The 2-Year IT Strategic Plan is the current iteration of Prince George's County Government's ongoing improvement and optimization process. The IT strategic planning team developed the strategy within the context of Prince George's County Government's Mission and Vision statements, and created an update to the previous IT Strategic Plans that also supports similar documents at the State level.

Individual and group consultations with Prince George's County Government staff, representing multiple levels from across the County, provided the critical data necessary to develop the strategic plan. The team analyzed Prince George's County's business needs, and then mapped them to the Prince George's County's three IT Goal Types: People, Process and Tool. This process identified and prioritized opportunities where technology solutions could best help address those needs against the following five government-wide goals:

1. Deliver Excellent Customer Service
2. Enhance Stakeholder Relationships
3. Improve Infrastructure
4. Achieve Process Excellence and Financial Stability
5. Achieve World Class Service and Culture

This strategy supports the Major IT Initiatives and Projects (detailed in subsequent sections), that apply solution approaches that are served and reinforced across Prince George's County Government's multiple Strategic Priorities. The Prince George's County 2-Year IT Strategic Plan highlights Prince George's County Government initiatives to improve overall operational, technical and agency-specific functions.

BUSINESS NEEDS

Goal Type		Prince George's County Initiative	Need	Goal
1	People Process	Public-Facing Relationships	Transform Public-Facing Services to Online	Deliver Excellent Customer Service
2	People Process	Communications Strategy	Develop and execute a proactive communications strategy	Enhance Stakeholder Relationships

3	People Process	Succession Planning	Implement a comprehensive succession planning program	Enhance Stakeholder Relationships
4	People Process	Accountability	Integrate an Environment of Accountability	Enhance Stakeholder Relationships
5	Tool	County Government Buildings	Refurbish aging facilities	Improve Infrastructure
6	Process Tool	Network Infrastructure	Optimize network infrastructure & security	Improve Infrastructure
7	Process Tool	Sustained Internet	Expand access to high-speed for internet County employees and contractors	Improve Infrastructure
8	People Process Tool	Process Digitization	Continued digitization of documents and processes to enhance efficiency	Achieve Process Excellence and Financial Stability
9	Process Tool	Supply Chain	Diversify and optimize supply chain	Achieve Process Excellence and Financial Stability
10	Process Tool	Cybersecurity Enhancements	Provide secure computing environments both on-prem and remotely	Achieve Process Excellence and Financial Stability
11	People Process Tool	World Class Culture	Streamline processes (IT and County-wide) to create a workplace where employees work, thrive and serve.	Achieve World Class Service and Culture

Translating the Strategy

The following IT Goals and Objectives map directly to Prince George's County's vision for IT and illustrate OIT's approach over the next 2 years to these important issues identified as part of the strategic planning process. Moreover, these goals support the roadmap to fulfil Prince George's County's strategic IT direction.

IT Goals and Objectives

Our objective is to rise to a position of absolute leadership among county governments through the creative use, application and measurement of IT, and leverage these investments to dramatically improve the customer service delivery and organizational performance.

Some of the most immediate strategic goals we have identified as dependencies for realizing these objectives are as follows:

➢ **Goal 1** – Leverage Technology to Offer More Public-Facing Services to the Citizens and Businesses in Prince George's County
➢ **Goal 2** – Provide Technology Leadership for Prince George's County Agencies and Branches of Government
➢ **Goal 3** – Enhance Cybersecurity Posture for all County Infrastructure and Environments
➢ **Goal 4** – Maintain Integrity, Reliability, Availability and Security of All Technical Infrastructure
➢ **Goal 5** – Partner with County Stakeholders to Prioritize Strategic Technology Investments
➢ **Goal 6** – Nurture Modernization and Digitization Initiatives for Existing Technologies and Processes
➢ **Goal 7** – Continue Development of OIT Workforce in Alignment with Strategic Objectives

In addition to the aforementioned goals, we have identified the following as goals for our People, Process & Tools:

People Goal: Further empower the OIT team to perform its job effectively through the provision of training and team building activities that increase morale.
- Deliver Excellent Customer Service
- Enhance Stakeholder Relationships
- Achieve Process Excellence and Financial Stability
- Achieve World Class Service and Culture

Objective 1.1	Increase the percentage of OIT employees that earn satisfactory (Meets Expectations) or higher on performance reviews.
Objective 1.2	Increase the percentage of OIT employees that rank Prince George's County Government as a great place to work.

Serve as a Change Agent to support redefinition of business processes to more effectively serve our customers.

Process Goal: Partner with Prince George's County agencies and branches of government to innovate, resolve problems, enhance efficiency and improve performance through process improvement.
- Deliver Excellent Customer Service
- Enhance Stakeholder Relationships
- Improve Cybersecurity Posture
- Achieve Process Excellence and Financial Stability

Objective 2.1	Increase the percentage of agencies and branches of government that rate OIT highly.
Objective 2.2	Increase the number of new requests that include OIT in project initiation phase.

Improve the reliability of systems and services that are necessary for building a Smart County.

Tools Goal: Partner with Prince George's County business units to use technology as an enabler in support of the delivery of innovative services to our residents and businesses.
- Improve Technical Infrastructure
- Achieve Process Excellence and Financial Stability
- Achieve World Class Service and Culture

Objective 3.1	Increase the percentage of time the Prince George's County's technical infrastructure is operating and available. ➤ Improve availability of Prince George's County services" -- Technical resources should be measured against the business purposes they serve not separate technical metrics.
Objective 3.2	Increase the percentage of tickets resolved during first contact by the service desk. ➤ Measure and improve customer satisfaction rates for ticket response and resolution. (Closed tickets can be "gamed")

Major OIT Initiatives and Projects

The OIT Initiatives and Projects are being implemented over the 2-year period and consider multiple factors, including: implementation intensity (and concomitant demands on management attention); expected benefits; and some additional portfolio and system-specific considerations.

OIT PROJECTS MAPPED TO Prince George's County STRATEGIC PRIORITIES AND INITIATIVES

Leadership

Prince George's County Mission

OIT Mission

Prince George's County Vision

OIT Vision

Strategic Priorities

Infrastructure Improvement

Financial Stability

Process Optimization

Workforce Management

Procurement

Public Engagement

Security and Safety

Communications and Stakeholder Relationships

Innovation

OIT Goals

People

Processes

Tools

Title	Project / Initiative Description	Impact / Benefit to Operations	Mapping to Prince George's County Strategic Priorities
Disaster Recovery (DR) & Business Continuity – Annual Exercise	This project has been designed to test team and infrastructure readiness at the designated Disaster Recovery site for Prince George's County Government technical operations. This is planned to be a tabletop exercise, which will test the ability to run systems outside the primary datacenter in the event of an incident making the primary datacenter non-accessible.	It is critical that Prince George's County Government has the ability to maintain critical operations with all systems that are necessary to maintain and deliver services. This test and a viable DR plan are one of the most critical components of this readiness.	Process Optimization
SAP Maturation	The goal of the project is to optimize business processes that rely upon SAP ERP. This will require that OIT assess the current functionality and identify opportunities for improvement. This includes a major effort to automate a portion of the existing processes to current business standards. This could result in implementation or optimization of additional SAP modules.	It is necessary to make continual improvement to back-office systems for improved efficiencies and for managing relationships with vendors and all entities with which Prince George's County Government conducts business.	Process Optimization, Procurement & Financial Stability
Robotic Process Automation (RPA)	This is the second phase of existing business process reengineering efforts that have been ongoing. The project will focus on systems such as E-Permitting to include upgrading both Test and Production environments to the latest release. It will include the migration of existing workflows to the functionality that exists within the respective platforms while recreating and enhancing existing custom integrations in parallel.	This tool is critical for continued improvement of planning and managing capital projects. This helps keep these projects on schedule and budget, which is important for both operational impacts and optics within the business community. This allows DPIE to deliver better service by reducing review time and eliminating the inefficiency of paper	Process Optimization & Innovation

		movement and storage. The plan accelerates the permitting process by making it fast and easy to submit, review, and archive documents and drawings, process corrections, and monitor and improve the approval process. This upgrade will not only improve the performance of the current system but improve the overall efficiency by increasing search speed.	
Enhanced Budgeting & Reporting	This budgeting and reporting solution is a major improvement over the existing solution and aligned with Prince George's County Government's goals for accountability and fiscal responsibility.	This solution provides Prince George's County Government with a tool to manage the operating, salary, and capital multi-user budgeting system, which in turn allows for multi-year budgeting and unlimited what-if funding scenarios. In addition, it can seamlessly integrate with other financial systems.	Innovation, Fiscal Responsibility, & Process Optimization
Business Process Reengineering (BPR)	This effort is a multi-year Technology and Organizational Improvement Initiative that is centered around the automation of multiple redundant, paper-based processes. Through this effort Prince George's County Government will change the way that the business is supported and operated and will enable additional strategic initiatives throughout the agencies and branches of government.	This will result in cataloguing existing workflows and identification of solutions that provide fully integrated real-time process flows and visibility into the status of approvals, and performance analytics. Probably most important is the Prince George's County Government can shift from reactive to informed,	Process Optimization

		proactive decision making, enabling improved mobile workforce performance and customer service at a lower operating cost.	
Public Engagement Tools	Identification and implementation of improved public engagement tools is also a multi-year Technology and Organizational Improvement Initiative that is centered around the implementation of multiple technologies and applications. Through this effort, Prince George's County Government will change the way our citizens and businesses are supported online.	Prince George's County Government will partner with industry partners to identify and select new technologies that are aligned with industry trends and best practices. This will include automations that are critical to meet changing expectations from our citizens and business partners. Some of the key benefits to the Prince George's County are the following: a) Adoption of more mobile technologies b) Consolidated interfaces for data management c) Robust change management strategy d) Public engagement tools for value-add programs and services	Public Engagement, Communications and Stakeholder Relationships & Process Optimization
IT Service Management (ITSM) Migration	Implementation of a new ITSM tool that provides significant improvements in IT Support processes for the service catalog used across County Government	It is important for documenting the volume of service requests, SLA performance and the cost to deliver IT services.	Process Optimization
GIS Mapping & Deployment	Through the use of a microsite, this will provide citizens and businesses direct access to GIS maps that provide them with information about Prince George's County resources,	This solution will help with visibility into the use and availability of County resources, services and response to citizen and	Process Optimization, Public Engagement, & Communications and Stakeholder Relationships

	services and statistics. This project is the GIS effort to map all available data elements in a central repository.	business requests. It will also assist with the deployment of field personnel and improve effectiveness and response time.	
Electronic Content Management	This is a continuation of existing efforts to catalogue and store County records within a digital repository that makes associations based on the availability of meta tags within each record.	This solution provides the Prince George's County Government improved electronic document and record management capabilities. This will have a direct impact on our need to store paper-based records in County facilities.	Process Optimization
Broadband Access for All	This is a continuing effort to provide equal access to high-speed internet for all County residents and employees, including those currently in unserved or under-served communities that meet the density requirements in the Comcast and Verizon franchise agreements.	This effort will result in enhanced broadband coverage and internet access for school students, seniors, employees and other interested parties. It also provides for more consistent delivery of public-facing services.	Public Engagement
Data Center Redesign	This is a requirement as Prince George's County Government continues to move away from the mainframe environment and introduces more server-based applications.	As more systems are hosted on servers and in the cloud, the data center redesign will ensure greater reliability and cost savings.	Infrastructure Improvement
Health Systems Integration	In light of the recent COVID-19 pandemic and our rapid pivot to support the vaccine management rollout, it became clear that we need to put a renewed focus on ensuring reliable interfaces between the multiple systems used by the Health Department.	During major health events the Health Department must rely on multiple parties to make informed decisions on how to provide services to County residents. This project is critical to maintain the efficacy of data and improve the speed of	Innovation, Process Optimization, & Public Engagement

		decision making in the event of future outbreaks.	
Electronic Security System	The major objective of this program is to transform the existing reactive security system(s) into a proactive, centralized security system. In other words, Prince George's County Government is looking to ensure that it can detect, recognize and react on a threat, in any of its facilities, before it becomes a real situation.	This initiative will upgrade the security infrastructure to accommodate new advanced technology that includes a camera surveillance system, access control, situation management system and Visitor Management System. This will include the use of advanced analytics technology when detecting and analyzing situations and potential threats. To fully capitalize on advanced analytics capabilities, it is imperative to have operators and managers fully trained in the technology, processes and the responses to situations.	Security and Safety, Infrastructure Improvement & Process Optimization
Identity & Access Management	In today's business environment, threats to operations come in many ways. It is critical to have a robust Identity and Access management policy and solution infrastructure to provision user accounts and access to systems and data.	This solution will continue efforts to protect the logical assets of Prince George's County Government which are used to manage day-to-day operations. This will ensure proper credentials are maintained for personnel needing access. It will also help to maintain the integrity and security of production-level data.	Security and Safety, Process Optimization

Plan Operations - Prince George's County 2-Year Road Map

Below is a notational roadmap of Prince George's County Government's approved Major IT Initiatives and Projects (individual project charters / plans are available for review). Mapped to the Prince George's County Strategic Initiatives, the road map illustrates how each project will be implemented over the next 2 years and how they will affect Prince George's County Government.

While each project listed in the previous section addresses an important business need, implementation must be carried out in the context of finite human and financial resources. A phased approach is required that balances the implementation demands and risks of individual projects within the broader portfolio, while ensuring full continuity of our essential products and services.

The planning team employed a heuristic process to sequence the implementation of the priority IT systems, taking various system-specific and portfolio considerations into account. While most of these assessments are qualitative by nature, they provide a pragmatic framework for thinking through tradeoffs and balancing the project portfolio.

Projects were clustered according to their expected implementation intensity, including project duration and complexity, yielding three broad categories:

1. Multi-Year projects are complex and intensive, with expected implementation of two years. These carry greater risks and require greater stakeholder engagement.
2. Short-term projects are less complex and narrower in scope, with expected implementation of less than two years.
3. Platform projects provide for the development and maintenance of technology platforms upon which vertical solutions are constructed. These are low intensity, multi-year projects, often implemented in modules. They are dynamic and open-ended by nature.

Multi-year projects took additional considerations into account given the high cost, complexity and risk associated with implementing these systems. System vulnerability, including age and availability of system support, was a particularly important consideration, as some of these critical systems were legacy systems or homegrown solutions with dwindling trained support personnel. Additional portfolio and system-specific implementation considerations included:

- ➢ **Systems dependencies:** any natural projects linkages (e.g., when one system is a prerequisite for or can harness positive spillover effects from another).
- ➢ **Staff bandwidth:** implementation bandwidth of OIT and the respective functional units.
- ➢ **Organizational readiness:** capacity of OIT and the respective functional units to support implementation.
- ➢ **Technical constraints:** technical considerations, such as level of project complexity and maturity of technology.
- ➢ **Reputational constraints:** risk of breeding negative perceptions of Prince George's County Government by external stakeholders, primarily an issue for externally-facing technologies.
- ➢ **Bridge solutions:** any short-term solutions that can address users' urgent needs while waiting for system replacement

Agency	Project Name	Strategic Category	Status
Board of License Commissioners	BOLC Digitization	Innovation/Digitization/Process Optimization	Active
Board of Elections	BOE Equipment Inventory System	Innovation/Digitization/Process Optimization	Active
County Council	County Council CRM/Constituent Tracking	Innovation/Digitization/Public Engagement	Active
County Executive	Comcast Franchise Agreement	Broadband/Public Engagement	Active
County Executive	County Executive's Office Automation	Innovation/Digitization/Process Optimization/eSignature	Active
Department of the Environment	MS4 - Stormwater Inspections Management	Innovation/Digitization/Process Optimization/Analytics	Active
Department of the Environment	Bus Recycling Application	Innovation/Public Engagement	Active
Department of Permitting, Inspections, and Enforcement	Momentum	Innovation/Public Engagement (Permits)	Active
Department of Permitting, Inspections, and Enforcement	Momentum Light	Innovation/Public Engagement (Individuals/Small Biz)	Active
Fire Department	Fire Department Digitization	Innovation/Digitization/Process Optimization	Active
Fire Department	Length of Service Awards Program (LOSAP)	Innovation/Workforce Management	Active
Finance Department	Finance Treasury Replacement	Modernization/Process Optimization	Active
Health Department	Health Information Network Enhancements	Innovation/Digitization/Process Optimization	Active
Health Department	Electronic Medical Records Workflow Enhancement	Innovation/Digitization/Process Optimization	Active
Health Department	Health Internal Ticketing Solution	Innovation/Digitization/Process Optimization	Active
Office of Central Services	OCS eProcurement eBid - Procure to Pay	Innovation/Digitization/Public Engagement	Active
Office of Central Services	OCS Work Order Management	Modernization/Process Optimization/Analytics/Cloud	Active
Office of Central Services	Health and Human Services New Site - Baseline IT Build	Modernization/Public Engagement	Active
Office of Central Services	OCS Asset Management Modernization	Digitization/Process Optimization/Analytics/Cloud	Active
Office of Central Services	Facility Force Aims	Modernization/Analytics (Facility management)	Active
Office of Human Resource Management	Language Access System	Innovation/Public Engagement	Active
Office of Human Resource Management	LMS Enhancements	Innovation/Digitization/Process Optimization/Cloud	Active
Office of Information Technology	Website Redesign - Phase 1	Innovation/Public Engagement	Active
Office of Information Technology	Digital Signage Enhancements - Touchscreen/Kiosks	Innovation/Analytics/Public Engagement	Active
Office of Information Technology	Enterprise Conference Rooms Video/Telecom Refresh	Modernization/Network Infrastructure	Active
Office of Information Technology	SAN Upgrade (PGPD-BWC)	Modernization/Enterprise Infrastructure/On-prem/Cloud	Active
Office of Information Technology	Enterprise Backup and Recovery	Modernization/Enterprise Infrastructure/On-prem/Cloud/Resiliency	Active
Office of Information Technology	Network Refresh	Modernization/Network Infrastructure/On-Prem	Active
Office of Information Technology	Upgrade ArcGIS	Innovation/Analytics	Active
Office of Information Technology	Vulnerability Management Program (VMP) Policy	Governance/Cybersecurity	Active
Office of Information Technology	Cybersecurity Assessment	Governance/Process Optimization/Analytics	Active
Office of Information Technology	New Data Center Host - ERP Transformation	Enterprise Infrastructure/On-Prem	Active
Office of Information Technology	Vulnerability Management System Dashboard	Innovation/Analytics/Cybersecurity	Active
Office of Information Technology	Elevated Access PowerApp	Innovation/Process Optimization	Active
State's Attorney's Office	SAO IT Strategic Plan Development	Innovation/Enterprise Infrastructure/Process Optimization/Digitization	Active
State's Attorney's Office	SAO Digitization	Innovation/Digitization/Process Optimization	Active
State's Attorney's Office	SAO Secure Evidence Platform	Innovation/Digitization/Process Optimization	Active
Police Department	PGPD Secondary Employment Management System	Innovation/Workforce Management/Analytics/Cloud	Active
Police Department	PGPD Marketing Cloud	Innovation/Workforce Management/Citizen Engagement/Cloud	Active
Police Department	Police Training and Education Virtual LMS	Innovation/Workforce Management/Cloud	Active
Police Department	IAPro Case Management Integration	Innovation/Process Optimization/Cloud	Active
Sheriff Department	Sheriff's Office Digitization	Innovation/Digitization/Process Optimization	Active
Sheriff Department	Sheriff Personnel IAD-Policy Compliance	Innovation/Digitization/Process Optimization	Active

Execute Processes & Initiatives

This section focuses on the processes, initiatives and operations needed to implement the planned vision.

The process follows standard project management methodologies to execute each project's system development lifecycle (SDLC).

These methodologies help manage project delivery, budget and risk throughout the process. They also utilize checkpoints to ensure delivery of the expected solution for the client department or Prince George's County Government-wide usage.

SDLC Process

1. Program Management:

Our Iterative Approach is comprised of the following activities that are described below (see accompanying SDLC Process wheel).

✷ **Initiation**

✷ **System Concept Development**

✷ **Planning.** The Development Manager will work to plan for successful application releases through assistance with scope and task definitions, resource planning, and estimation for each phase of work, technology selection, and scheduling.

✷ **Requirements Analysis.** Our business analysts will work with all appropriate assigned staff to elicit requirements for the system and document those into a Functional Requirements Document (FRD) that contains software and architecture specific, clear, and testable requirements to guide the subsequent phases.

✷ **Design.** In this phase the application architect and technical team extend the requirements document into detailed design for the proposed release. To that end, a System Design Document is created in support of development and operational activities.

✷ **Development.** During this phase the development team builds the release, performs unit testing and code review, updates the Design and Requirements documents as needed, and coordinates activities with testers and operations. Our design and development capability includes the software expected for this project (i.e., SAP). It is also during this time that the Test team begins to develop test scripts for the next phase and training development begins for instructional design, development, and end users.

✷ **Integration and Test.** Our knowledgeable testing team finalizes test scripts and executes system integration and regression testing to ensure that all requirements are implemented correctly and without negative impact to the overall system. We will support, maintain, and use a testing environment that replicates the production environment for all testing activities prior to deploying to the production environment. Our implementation of the tested applications into the production environment will be seamless with minimal interruption of the production system. Once our internal testing is complete, the application is submitted for User Acceptance Testing (UAT). If the production

implementation requires data migration, we will use a set of test data to test the data migration approach.

* **Implementation.** Developers work closely with the operations team to ensure a smooth transition into our Production environments. Our team will perform the software implementation tasks and provide support for data migration. Our implementation of the tested applications into the production environment will be seamless with minimal interruption of the production system.

* **Operations and Maintenance.** Our operations and maintenance support will include system administration and security support. As a technology-focused company, we will maintain a team capable of managing and executing against a variety of SDLCs. It is important to understand the nuances of each client's unique implementation in order to best execute to the objectives of the organization.

2. Personnel

The ambitious nature of this plan will require Prince George's County Government to optimally mobilize staff and external consultants and vendors. The accountability and oversight responsibility for project success relies on OIT leadership. Realizing this vision will require close cooperation and sustained commitment from OIT and business units, a streamlined delivery process, and an uncompromising focus on performance. The level of effort will be determined for each effort and staff assigned accordingly. The staff requirement will be identified to minimize impact on all business areas but sufficient to complete the project on schedule. As required, external experts will be employed to facilitate missing gaps.

Realistic and credible commitments: To meet, and hopefully exceed, expectations, OIT and the user community need to develop and align around realistic commitments. At the project outset, OIT and business units must continue to work together to hone in on the expected value of the project (recognizing that in most cases, IT systems are only part of the solution and require new skills and behaviors) and develop realistic implementation timelines that consider competing demands on implementation partners.

Given the intensity of project implementation activities, it will be critical for Prince George's County Government internal staff to have ownership and control over the exercise of the project delivery process. Prince George's County Government must be opportunistic in choosing between turnkey implementation by an integrator or utilizing an internal integration team that leverages external resources for key project components. The latter alternative will also allow Prince George's County Government to unbundle large initiatives into smaller subprojects for closer oversight. Unbundling large projects into smaller contracts will also enable hiring of the most qualified consulting support for each project phase and greater Small,

Local, and Minority Business Enterprise (SLMBE) and County Located Business (CLB) participation in the engagements.

Focus on end-to-end performance: Each project presents an opportunity to significantly improve the performance of the business activity. OIT and the business units will redesign relevant business processes to rationalize process steps, establish accountability through process metrics, and eliminate unnecessary complexity.

A more rigorous approach to performance management that goes beyond timely delivery of systems should be developed to complement informal user feedback. At the project outset, OIT and the business unit should agree on a few simple performance metrics that can signal whether the system is enhancing users' effectiveness and / or efficiency. Some metrics might be straightforward to measure, such as call time or records digitized. For metrics that measure changes in the way users do business, OIT will consider periodic brief user surveys using simple e-survey tools.

Monitor & Learn

During the Monitor & Learn stage, Prince George's County Government will periodically review the key metrics supporting the OIT Goals and Initiatives for adherence to or progress toward established targets. Personnel recommend process changes for management approval that will ensure metric targets are achieved and sustained. Management also evaluates personnel performance and makes staffing adjustments to accommodate anticipated changes in service demand.

Inputs

- Objectives (From Goals)
- Metrics
- Targets & Trends
- Initiatives / Projects Schedules

Process

- Weekly & Monthly, Quarterly Collection & Review of Metrics
- Trend monitoring

Outputs

- Process changes to improve
- Demonstrated compliance with policy
- Inputs for future policy / strategy decisions

With a focus on improvement toward the OIT Objectives that ultimately fulfill the IT Goals, the Monitor & Learn stage continuously adjusts the day-to-day processes. This stage also demonstrates compliance with Strategic Priorities and the ultimate mission and vision of the organization. The ability of the organization to meet objectives will be used to determine the effectiveness of the goals and objectives at meeting the organization's vision.

The emphasis during the Monitor & Learn stage is also on improving the accuracy and ease of metric collection. Equally important is the effort to identify those metrics with the highest value so that management ensures they are given higher priority. The team must also carefully screen metrics that demonstrate little or no correlation toward the achievement of the organization's goals and initiatives as well as give preference to causal over correlation.

Initiative Metrics:

A defined set of metrics tied to objectives accompany each initiative or project. This is critical for measuring progress of the project and ensuring successful implementation. We will also be able to manage risk (as seen in the graphic below) to the project as we track the progress through the metrics.
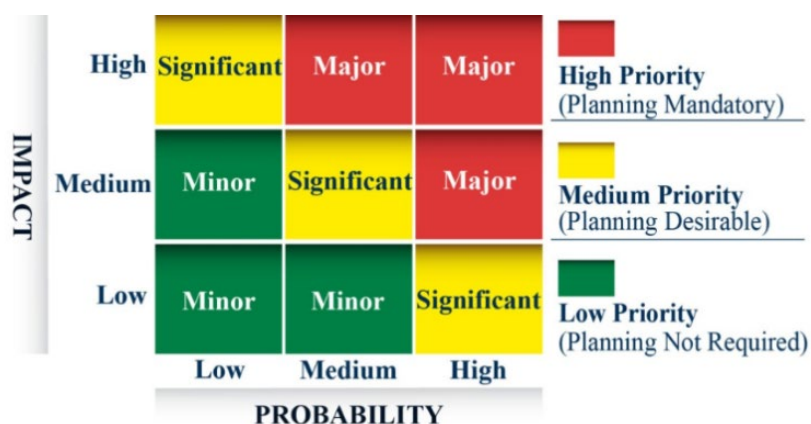
Risk Management Framework

Below is a sample of the type of metrics dashboard that is developed for projects. This enables the OIT Governance team to track activities and assignments, take necessary actions as required and track responsiveness from the team.
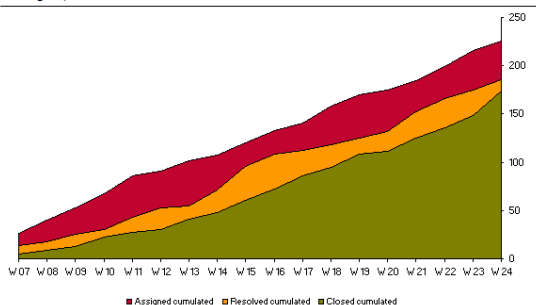
Software Development - Defect Dashboard   from Mo, 06/08/09 to So, 06/14/09   Week 24

Defects actual week by type and severity

	Cosmetical	Minor	Major	Critical	Total
assigned	1	19	17	3	40
resolved	0	4	7	1	12
closed	9	68	83	14	174
Total	10	91	107	18	226

Defect assigned, fix pending
Defect assigned, fix delivered, not yet retested
Defect assigned, fix delivered and successfully retested

Cosmetical ▪ Minor ▪ Major ▪ Critical

Assigned, resolved and closed defects cumulated over the last 18 weeks

▪ Assigned cumulated ▪ Resolved cumulated ▪ Closed cumulated

New defects assigned, resolved and closed last 18 weeks - week on week

Assigned — Resolved — Closed
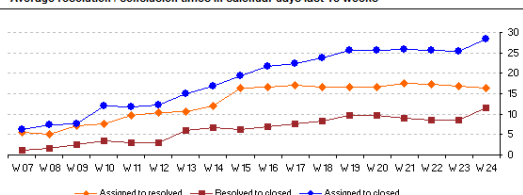
Average resolution / conclusion times in calendar days

	Cosmetical	Minor	Major	Critical	Total
Assigned to resolved	10,8	16,6	18,2	9,1	16,5
Resolved to closed	6,7	14,1	11,0	5,2	11,5
Assigned to closed	17,4	30,7	30,0	14,3	28,4
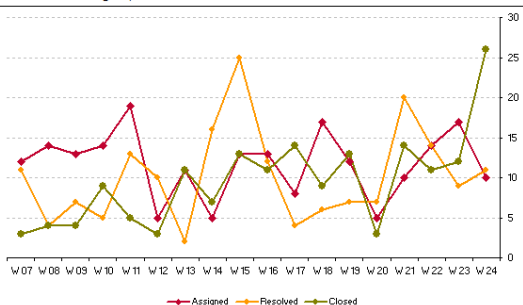
Average resolution / conclusion times in calendar days last 18 weeks

Assigned to resolved — Resolved to closed — Assigned to closed

Sample Metrics Project Dashboard

Additional metrics include:

➢ Ongoing IT Coordinator satisfaction scores

➢ Implementation time for new features / functionality

➢ Delay time to implement new features / functionality

➢ System availability (MTBE / (MTTR + MTBE))

➢ System response time

➢ System throughput (Tx / sec, Bytes/sec)

➢ Data accuracy

➢ Incident rate, average Incident resolution time and 90% resolution time

Test & Adapt Strategy

This section illustrates how Prince George's County OIT Leadership can continuously refine and improve the processes for IT initiatives and projects as they are being implemented. The Prince George's County 2-Year IT Strategic Plan must be tested, and the strategy adapted to evaluate outcomes, metrics and performance as they develop.

Ongoing testing and Continuous Process Improvements (CPI) provides a systematic approach to make incremental and breakthrough improvements in processes. The development of the Prince George's County 2-Year IT Strategic Plan and subsequent process improvement are not a "stand-alone" event, or focused on "WHO" executes a process. They are intended to refine and improve Prince George's County Government IT performance, focusing on "HOW" and "WHY" a process, project and / or initiative is being performed.

By validating the strategy and redefining critical metrics as needed, OIT Leadership and IT Coordinators can determine how well the current plan works, and what changes needs to be implemented to make it better, such as identifying the new objectives and goals.

As OIT, in partnership with IT Coordinators, examines the strategy and processes going forward, with the objective of creating efficiencies that optimize value and customer experience, Prince George's County Government will gain faster, better, more efficient and cost-effective delivery of services, and support to customers (internal and external) gaining the following:

> ➢ An approach focused on identifying and eliminating activities that add cost without adding value, thereby improving the flow of work processes
> ➢ Ongoing IT innovation to support Prince George's County Government's core business

While the strategic planning process endeavors to capture the most critical IT-relevant needs across the enterprise, these needs evolve and new needs emerge. Furthermore, IT itself is a dynamic field, with evolving best practices, and new and improved technology solutions entering the market. The OIT Governance Team oversees the overall progress of the plan and reviews proposed projects and sequencing and makes necessary adjustments. Decisions taken by the OIT Governance Team, along with their underlying rationale, will be communicated to the senior management team to ensure that all principals understand and share the commitment to implement.

In the final phase of Strategic Plan, IT Governance is integrated as a decision-making tool and discipline to continually adjust and direct the improvement efforts of the business. Not only does the approach compel organization-wide improvement that is linked to achieving strategic priorities, but it fosters a high-involvement, high performance culture that can become self-sustaining.

IT Governance can vary greatly in terms of complexity and organizational scope. While the effort and resources required to develop variously sized systems can be significant, there are some fundamental aspects that are common to all IT Governance models. It is these fundamental components that should be addressed using a standardized approach to assure that the right people are involved in answering the right questions at the right time. It also serves as a framework for the project plan that will effectively manage the many contributions by organization leadership and members.

Some of the activities associated with the operate phase include:

➢ Conduct process and process-based performance management systems per design
➢ Evaluate process performance and prioritize improvement opportunities
➢ Determine appropriate methodologies for addressing improvement opportunities
➢ Train, engage and dedicate appropriate personnel in process improvement efforts
➢ Assess changes in legislation (e.g., federal, state, local or regulatory) and reflect in process management system.

Conclusion

Implementing the Vision

Prince George's County's 2-Year IT Strategic Plan is intended to act as the new comprehensive and living IT roadmap for Prince George's County. Its purpose is to guide, advance and affirm Prince George's County Government's continued commitment to investing substantially in its IT infrastructure. Further, it seeks to develop an actionable strategy for leveraging innovative technology for administrative and internal systems. The Strategic Plan establishes a process to vet, assess, prioritize, and intake innovative ideas and tools. This includes running pilots to baseline results to determine the scale across Prince George's County Government.

Sustained management commitment from OIT, IT Coordinators and business units: While the plan is intended to be a living document that can be adapted to changing contexts, it is important to avoid false starts to projects based on changing management priorities, which ultimately diminishes OIT's credibility and frustrates users. In fact, the IT strategic planning process was designed to build commitment to a shared long-term vision around Prince George's County Government Strategic Priorities. By taking an enterprise approach to system modernization, OIT seeks to break through agency and branch-specific silos and build commitment to enterprise objectives. Unlike previous efforts, this plan was developed based on extensive consultations with the business units across the enterprise, and key components have been endorsed by the County's cabinet and Elected Officials. Moreover, the implementation of this plan will be overseen by the OIT Governance Team.

This 2-year IT Strategic Plan represents a shift in the way County Government views its IT function, evaluates and plans its IT investments in the near future. Successful delivery of this plan will solidify OIT's role as a valuable strategic partner, as well as a reliable service provider. Its implementation, however, depends on the close cooperation between OIT, their functional counterparts, and Prince George's County Government's commitment to mobilize the best-available internal and external expertise.

Designed to be responsive to Prince George's County Government's critical business, this 2-year IT Strategic Plan leverages technology-enabled solutions to advance the County's pressing business challenges. This plan is intended to support the County's transformation into a high performing, customer-responsive, cost-effective and environmentally responsible local government leader.

It is important to reiterate that this plan is intended as a living IT strategy and roadmap. While the County's leadership is confident in the strategic direction proposed in this plan, it also recognizes that this plan is not being implemented in a vacuum. As external factors and Prince George's County's business needs change, as well as the County's ability to leverage new and better technology solutions, so too must this plan be revisited within OIT regularly to recalibrate and optimize performance.

Appendix A: Prince George's County Government Strategic IT Priorities

Strategic Priority	Details of Strategy
Infrastructure Improvement	Plan, renew, and sustain our infrastructure to meet customer expectations through innovative, cost-effective technology and world class asset management practices.
Fiscal Responsibility	Practice sound financial stewardship that ensures delivery of the highest quality services to our residents and businesses while remaining on budget.
Process Optimization	Reengineer business processes, procedures and workflows to leverage greater efficiencies through the use of automation and alignment with industry best practices.
Workforce Management	Sustain a high-performing workplace that attracts and retains diverse, flexible, and knowledgeable employees focused on service excellence.
Procurement	Ensure operational efficiency and reliable service to customers and all stakeholders through transparent, equitable, and responsible procurement practices which enhance the community we serve.
Public Engagement	Ensure increased confidence through the online delivery of timely, high-quality products and services to residents, businesses and visitors of Prince George's County.
Security and Safety	Protect our people, our facilities, and our community through proactive planning, emergency preparedness, and utilization of effective cybersecurity practices and risk management.
Communications and Stakeholder Relationships	Proactively communicate and maintain strategic partnerships and community relationships with key stakeholders and jurisdictions in support of our mission.
Innovation	Promote creativity by encouraging the submission and cultivation of ideas and technologies that increase the efficiency and effectiveness of day-to-day operations.

Appendix B: Looking Ahead: Technical Innovation in the Public Sector

Below is a list of technologies and engagement methodologies that are being adopted in the US counties and around the world. These examples provide a glimpse into where innovations are being made to streamline the delivery of services to become more efficient in many ways while improving the image of Prince George's County Government at the same time.

For County Government

- ➢ Robotic Process Automation
- ➢ Cloud Adoption
- ➢ Data Analytics & Business Intelligence
- ➢ Artificial Intelligence/Machine Learning
- ➢ Citizen Engagement
- ➢ Broadband Expansion
- ➢ Internet of Things (IoT)

For County Residents

- ➢ Enhanced Mobile Applications
- ➢ Improved Service Portals
- ➢ Civic Engagement
- ➢ Digital Experience Platform
- ➢ Online Permitting
- ➢ Digital Equity and Inclusion
- ➢ Internet of Things (IoT)

For County Businesses

- ➢ eProcurement
- ➢ Online Permitting and Licensing
- ➢ Online Strategic Sourcing and Contracting
- ➢ Innovation Station Business Incubator
- ➢ Networking and Marketing