

PRINCE WILLIAM

COUNTY

INFORMATION

TECHNOLOGY (IT)

STRATEGIC PLAN

IT DONE RIGHT



PRINCE WILLIAM
— Information Technology

PRINCE WILLIAM COUNTY IS A **COMMUNITY OF CHOICE** WHERE **INDIVIDUALS & FAMILIES** CHOOSE TO LIVE AND **BUSINESSES** CHOOSE TO LOCATE

OFFICE OF THE CIO

Letter from the CIO to County Constituents

A future minded enterprise, whether it be government or private industry, must have an IT department that is adaptive and agile. IT departments must be at the forefront of industry changes to offer modern technology services to benefit workforces, customers, and constituents alike. Today, IT departments who wish to deliver strategic value are focused on foundational reforms of their operational, governance, and technical capabilities.

In previous decades, IT Departments designed, built, deployed and managed their own competing facilities and infrastructure, using off the shelf and custom applications, and a wide variety of enterprise services. These often included telephone services, datacenter facilities and computing centers with an assortment of hardware and software solutions for mobile computing, virtual servers, compute and storage systems, business intelligence, network operating systems, enterprise applications, web services, localized geospatial services, cybersecurity, and a host of other technology solutions requiring a lot of IT staff to deploy and manage. This method of operation requires regular re-investment and re-deployment for enterprises who wish to keep pace with the rapid change in the IT industry.

As an older model of technology acquisition, deployment, replacement, and re-investment gives way to a new era of multi-tenant high availability Cloud Computing, the days of buy, build, deploy, and capital re-investment are numbered. The prior IT model tends to slow down enterprises and stifle agility and innovation. The IT industry now offers us a better way and a brighter future. The future is now.

Instead of building all technology solutions locally, in our own facility, on our own platforms using dated IT delivery models, we will position the enterprise for rapid adoption of Cloud Services and all the applicable service platforms that are offered from IT Industry leaders. These are services that are available in top-tier colocation centers (SAAS, PAAS, IAAS, etc.), such as those we have right here in Prince William County. In the next two years, DoIT will strategically lead and broker the adoption and regular use of Cloud computing and other services directly from the IT industry. In so doing, we will foster rapid technology advancement for Prince William County.

The IT industry continues to innovate and offer better ways of delivering technology solutions for business, government, and the consumer market. As a result, IT departments now have more opportunities to deliver strategic IT services to their enterprises in the form of various technologies “as a service.” For IT teams, the availability of these offerings also means that new skills, new thinking, new tools, new business skills, and new governance practices are required of us. By modernizing our IT operations in parallel with paradigm shifts in technical capabilities, government IT shops can now offer reliability and speed to market as never before. IT departments in the public sector can leverage industry platforms and facilities at the speed of private industry as we seek to fulfill the strategic roles expected of twenty-first century IT departments.

Prince William County Information Technology is changing rapidly to meet and capitalize on the technology industry’s new infrastructure and delivery frameworks with our renewed focus on Quality, Innovation, and Business Partnership, at speed.

IT Done Right

DoIT Vision

Our goal is to become a catalyst for high performance government services and to create a technology environment in which effective government service experiences from the Prince William County government are matched with superior outcomes for the residents, businesses, and visitors of Prince William County. We seek to make it easy for the Prince William County Government to deliver Outcomes and Experiences in ways that help our government work well for our community.

DoIT Mission

The mission of the Department of Information Technology (DoIT) is to direct the strategy, delivery, and management of Prince William County

government technology with an unwavering commitment to Information Technology excellence, efficiency, and value for our government, and the residents, businesses and visitors of Prince William County.

5-year plan

DoIT has embarked on a five-year journey to transform our methods for delivering new capabilities to the government workforce, constituents, and business partners of Prince William County. This journey will result in our ability to offer services in a manner that is easy, individualized, and secure. DoIT envisions five phases for this journey, each phase taking approximately one year. *Figure A* describes each phase of this journey and highlights the efforts that will be undertaken in each phase.



IT Done Right

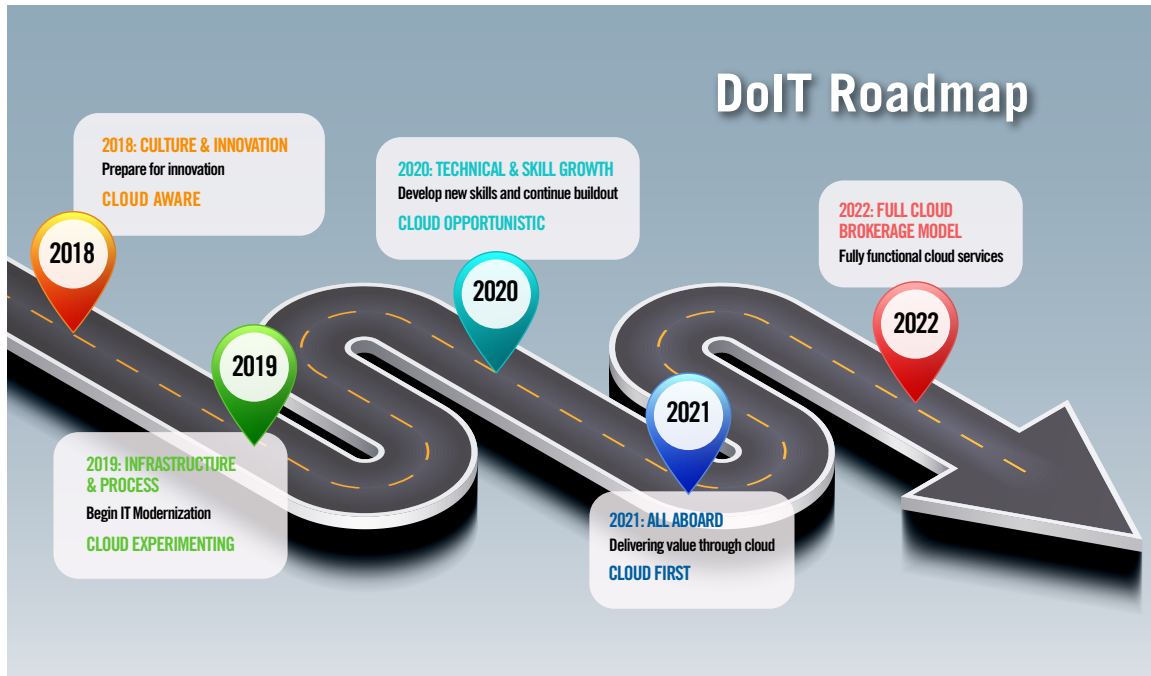


Figure A

In each phase, DoIT will not just focus on the technologies that will enable the new capabilities of DoIT 2.0, but will also evolve the skill and abilities of the DoIT staff and institute new processes to enable, empower, and support constituent services across the County. New technologies will be embedded within new processes that enable DoIT, and the rest of the Prince William County Government, to streamline services for our County's businesses, residents, and visitors. These services can range from tax payments, to permit applications, to public safety, emergency response, social services, and constituent services, to fun and leisure activities found in our plentiful array of parks, recreational facilities, and tourism offerings. Every interaction between businesses, individuals, and the County.

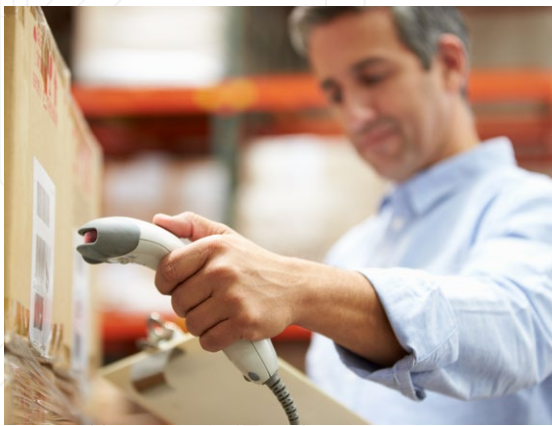
Workforce Ready

Our workforce will be prepared to meet this transformation with expanded skills, different modes of deploying innovative technologies, and the adoption of modern development and operating frameworks based on Agile methodologies, DevOps, Platform Ops, and other "As A Service" industry offerings. We will do this within a flexible and highly-available technology environment that enables DoIT to deliver maximum business value at minimal delay.

Adopting new IT services and operating models places a major focus on the capabilities and scalability of the County's technology infrastructure. Investments in a modern Cloud-ready, multi-tenant infrastructure were approved in FY2018 and will begin to show value for the County in FY2019 as we progress through a multi-year Infrastructure Modernization project.

Strategic Goals

In the Prince William County Strategic Plan, five goals are identified to which DoIT can direct active focus to empower and enable County goals to be realized. When goals require new technologies, processes, and skills for staff striving to achieve those goals, DoIT will be ready as a helpful business partner.



Robust Economy

In all actions of the Board, strong consideration should be given to make certain they foster a diverse local economy that creates a culture of innovation and achieves more quality jobs, economic opportunities and an expanded commercial tax base.

DoIT has a team focused specifically on the economic development goals of the County as a dedicated team for supporting all Community Development agencies and goals in the County. DoIT will leverage these resources to build upon our existing culture of strong support and innovation

for Community Development with new skills and processes to allow services like planning, zoning, transportation, libraries, public works, economic development, landfills, permitting, licensing, neighborhood services, parks, recreation and tourism to thrive using the best technologies available.

Mobility

In all actions of the Board, strong consideration and attention should be given to how those actions will provide an accessible, comprehensive, multi-modal network of transportation infrastructure that supports local and regional mobility.

DoIT's primary thrust in support of this strategic goal will be to focus on developing a backbone infrastructure and services platforms through which sensor data and other "Smart Counties" initiatives could enable our community to be just as mobile as we are multi-modal. The goals of this initiative will one day include a future where dynamic traffic management makes it easy to get around the county; predictive commute analytics, parking availability, partnerships with location-based entities like Waze allow a variety of data to be available to all travelers.

Working with broadband and wireless communications vendors, we will look for every opportunity to assist residents and businesses to acquire enhanced broadband infrastructure to enable County residents to enjoy a great experience with their government and to have capacity to work remotely.

Strategic Goals



Wellbeing

In all actions of the Board, strong consideration should be given to make certain the community supports vulnerable individuals and families to ensure the wellbeing of the entire community.

By providing standardized Project Management and Business Process Reengineering support to County Organizations, DoIT will help the county focus on families and vulnerable individuals in our community. DoIT will look for opportunities to contribute to a culture of community-based care in new and modern ways. From expanded data sharing and business intelligence tools that our social services and community services colleagues seek, to applying location-based service automations that help maximize response times, to supporting initiatives for homelessness; truancy reporting; services to families at risk, waiver processing; and substance abuse assistance, and related services. The Cloud platforms and services frameworks that DoIT is enabling can provide both the foundation and the platform for re-imagined services and processes, and access to the latest services and applications from the IT industry that could help streamline services in our Human Services agencies' drive for unified social services capabilities.

Safe and Secure Community

In all actions of the Board, strong consideration should be given to make certain Prince William County is a community where people are safe and secure.

When every second counts, communications, applications, facilities, data, and a variety of mobile technologies must come together seamlessly and securely for first responders. DoIT 2.0 will invest in innovative public safety solutions on a whole new level. At DoIT, we always look for opportunities to make force-multiplying product offerings easily available to our first responders. From new facilities that allow us to offer levels of resilience and redundancy from the most reliable facilities offered by the industry, DoIT is committed to leveraging state of the art platforms for public safety. DoIT will marry that with outstanding network performance and a technology architecture that is second to none. From body worn cameras to in-vehicle rugged mobile technology and mission critical location-based services, DoIT will have the best technologies at the county's fingertips. Our commitment is to help deliver services that are always-on, resilient, and flexible so that our first responders can build upon an already-outstanding record of Safe and Secure Communities.



Strategic Goals

Quality Education and Workforce Development

Inspiring and supporting our workforce with continuous learning opportunities and platforms that fit their learning needs is also part of DoIT's goal to transform learning in the workplace as we know it. Working with county leadership to support this county goal helps county staff and DoIT staff maintain an innovative edge. By lifting County capabilities to a readiness level with the latest that the IT industry offers, DoIT is well positioned to be a stronger partner with Prince William County Public Schools (PWCS), and to drive efficiencies, create more opportunities for shared innovations, and to allow government and education to design technology solutions that drive efficiency and best in class capabilities. New partnerships between the IT departments of both organizations have already



allowed government and schools to deliver seamless library integration for county students, enabling school students to receive county library services using only their school IDs at Prince William County Public Libraries.

Driving Business Transformation



With our new focus on People, Process, and Technology DoIT will enable a transformation of how services are delivered to County Constituents. Through a shared business services model which will encompass both governance and program management, DoIT will be a strategic partner in the initiatives of County organizations in all areas to leverage process improvement, advanced planning, cost containment, enhanced technologies, and unified project management.

By focusing on both an improved technical foundation combined with enhanced skills in our workforce, new business processes and structured engagement with all county departments, DoIT will transform the ways in which Prince William County government delivers services to residents, businesses, and visitors.

IT Initiatives



Over the next five years, DoIT will be embarking on a journey to remake itself as a strategic business partner to other departments. While we build an outstanding technology infrastructure to support the County's innovation goals, we are laying the foundation of next generation capabilities for Prince William County. These initiatives will span eight areas of focus, which are outlined below.

Operational Excellence

DoIT will operate at the speed of private industry. DoIT will design and operate a centralized technology architecture which will provide enhanced and modern capabilities to Prince William County departments so that our government can continuously improve our services to our residents, businesses and visitors. But this is not technology for technologies' sake. We will manage county resources with best practices in operations. It is also about DoIT's people and processes, and evolving our business

skills along with our technical skills in ways that you expect from private industry. We are adopting modern methodologies along with our new technologies. DoIT will leverage operational and design/development/deployment frameworks (such as Agile, DevOps, PlatformOps, SecurityOps, ITIL, PMP, Six Sigma) to foster excellence in IT while we adopt new platforms for innovation.

Technical Excellence

To achieve technical excellence, DoIT will focus on people as well as processes and technologies, and will enhance the capabilities of the DoIT workforce to bring new strategic technical capabilities to all of our County departments. In addition, DoIT will manage to a centralized Enterprise Architecture which will provide the technical foundation for all technology initiatives. Through a keen focus on Business Process Reengineering, DoIT will support other County organizations in their efforts to address

IT Initiatives

the County's strategic goals by providing solutions to meet the technical, business, operational, and project management needs of our government organizations.

Connectivity

DoIT will leverage emerging technology trends to deliver high speed communications to government and our constituents. DoIT is building an infrastructure through which the county can acquire modern IT services. By establishing a worthy infrastructure and private peering relationships with the national cloud infrastructure, we will provide high speed and high capacity technology services. In conjunction with ubiquitous wireless network access across the County, our communications network will provide the necessary foundation to enable the County to support device, sensors and Smart County capabilities commonly referred to as the *Internet of Things (IoT)*. In addition to IoT readiness, mobile device management solutions will provide both staff and the public the chance to exercise their preference for how they wish to access county services. This capability is commonly known as Bring Your Own Device (BYOD). We call it *Your County, Your Way*.



Cybersecurity

In everything we do, DoIT will spend significant time, energy, and attention to ensure that all technology assets are secure. This means designing security into the infrastructure, into all processes, applications, and continuous cyber learning. The security posture for Prince William County will focus on protecting technology assets, detecting security related anomalies, and remediating potential threats. As we enable a mobile workforce, DoIT will apply specialized mobility solutions that provide the freedom for our workforce to serve the County and deliver services effectively from anywhere in the world.

Cloud and Compute

Of primary concern to DoIT, is the need to transform our technology environment from an on-premise legacy services model to an on-demand computing environment that includes modern cloud services. Not only will DoIT leverage cloud computing, we will ensure that Prince William County has the technical capability that we need, now and in the future. This is our long-term commitment to IT transformation and continuous government innovation.

IT Initiatives



Collaboration

Collaboration among County staff, service providers, and businesses requires a reimagining of the business processes that are available to our workforce today. Unified communication technologies and platforms, including voice, video, presence, teleconferencing, videoconferencing, shared work spaces, and cloud enabled tools provide many new opportunities for governments and their constituents to engage in real-time collaboration. Prince William County will enable constituents to interact with their government in new and exciting ways that allow service requests, payments, information requests, etc. to be done online, through new platforms, on your terms, and securely.

Data Services

We understand the importance and value of data. DoIT will develop a data architecture to define the variety, veracity, and volume of data that will be required to support the strategic goals of the County. This will enable the County to leverage data with the appropriate level of security and protection and

to use data to drive better outcomes and experiences. Through data warehousing and enhanced business intelligence and analytics capabilities Prince William County will take advantage of data driven decision making.

Digital Inclusion

To ensure that all of the potential benefits of modern technology are available and accessible by all constituents of Prince William County, DoIT will focus resources at our disposal to make a difference in communities. Through broadband adoption efforts, partnerships with private industry, as well as partnerships with the small business community, DoIT will seek to increase technology availability and access in areas of the county where access and adoption are challenged.

DoIT welcomes the opportunity to deliver value directly to communities in ways that we have not done before.

We will look for opportunities to provide education and technology meet-ups for small businesses in an effort to help support business success. From ubiquitous public WiFi in government buildings to broadband advocacy and adoption, DoIT welcomes the opportunity to deliver value directly to communities in ways that we have not done before.

Moving Prince William County Forward



By now, it should be clear that The Department of IT in Prince William County is dedicated to modernizing the IT Infrastructure of the County to transform the way constituents, businesses, and Government organizations consume, interact with, and deliver services.

This Strategic Information Technology Plan is intended to be a game changer for Prince William County. The plan will result in a sea change of available services and capabilities, all of which are focused on providing online access to every constituent in Prince William County, whether they be businesses, visitors, or residents. From leveraging the Library System as Centers of Innovation to enabling the Internet of Things, DoIT will lead the way for Prince William County to dramatically improve services and capabilities across the County. This journey will begin with connecting communities across the County and will culminate with every constituent having secure access to all services offered by and through the County.

This is IT Done Right. This is DoIT.



PRINCE WILLIAM
Information Technology