



Information Technology (IT) Strategic Plan

Introduction

The Washington State Department of Natural Resources (“DNR” or the “Agency”) is a complex agency that manages approximately 5.6 million acres, including navigable waters and commercial lands, to meet its mission, which is to *manage, sustain, and protect the health and productivity of Washington’s lands and waters to meet the needs of present and future generations*. DNR’s management generates about \$200 million in revenue and directly benefits public schools, state institutions, and county services. DNR has also been recognized for its conservation efforts, including a Sustainable Forestry Initiative (SFI) Leadership in Conservation Award.

To meet its mission goals, the Agency has been increasingly leveraging technology, such as informatics, LiDAR (Light Detection and Ranging), and GIS (Geographic Information Systems) to oversee, analyze, and make decisions on how to best manage the State of Washington’s vast land assets. Recognizing that it needed to start thinking about its IT projects and goals more strategically, DNR engaged Plante Moran to perform an IT assessment and develop a strategic plan.

This IT Strategic Plan will provide a roadmap for DNR to plan and manage the people, process and technology in an efficient and effective manner to maximize the existing and future IT investment.

Critical Success Factors

The following critical success factors will support the success of this IT Strategic Plan, including:

Take action. It is critical that DNR takes action on the strategies in this report to become more efficient and effective in planning, deploying, and managing its IT investment.

Enhance IT governance and processes. Establishing formal IT governance and processes at the outset will ensure that leadership has the ability to provide direction to and oversight of IT decision-making.

Set an IT foundation. Ensuring the Agency has the right staff and the right security will set a foundation upon which to build its IT organization. Leveraging the IT staff it has throughout the Agency will ensure DNR can meet the ever-changing needs of the Agency. Building up DNR’s cybersecurity framework will guarantee the Agency can protect itself from security threats, both internal and external.

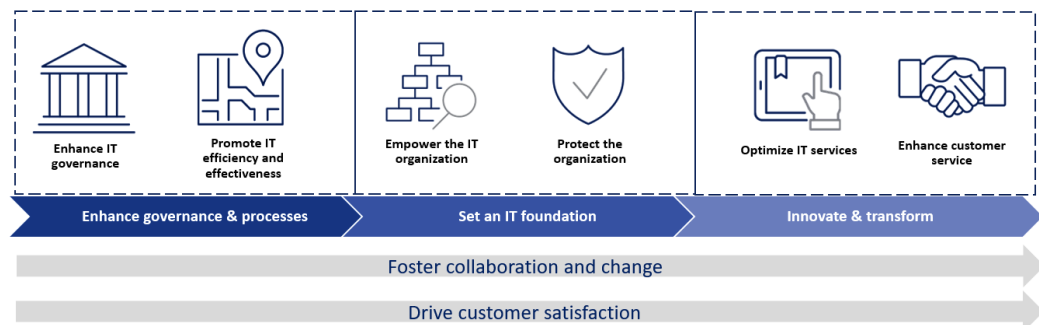
Innovate and transform. Optimizing DNR’s IT services and enhancing its customer service approach will create an environment where the Agency’s IT staff can proactively address customer needs.

Foster collaboration and change. A key objective of this IT strategic plan is to improve workforce efficiency. Implementing new systems and processes requires significant change management. We recommend that DNR adopt a structured approach to change management for every project. Staff should be involved early in defining the change, assessing its impact, and designing new work processes in order to increase the probability of user acceptance.

Drive customer satisfaction. Ultimately, the majority of technology is procured and implemented to meet customer needs. The strategic plan enables the Agency to do so in a transparent manner while eliciting customer feedback to drive improvements throughout the entire process.

GOALS AND STRATEGIES FOR INFORMATION TECHNOLOGY

The following goals and strategies resulted from the planning process. For each goal, there are a set of strategies and related action plans necessary to implement and manage the IT strategic plan.



Goal 1: Enhance IT Governance

The information technology division (ITD) is a support organization for DNR. ITD has the responsibility to maintain the current infrastructure and ensure DNR operations continue with minimal interruption. The divisions and regions also have IT staff and perform IT functions. Both ITD and the decentralized IT in the divisions and regions are referred to throughout this report as the *IT organization*. It is important for ITD to lead IT operations across DNR by becoming a visionary for what is required to operate efficiently in the future. In order for DNR to maximize the current and future IT investment, a strong IT governance structure must be established. The specific strategies to meet this goal include:

- Formalize the IT governance structure
- Develop IT vision, mission, and principles
- Create an IT Steering Committee

- Develop an IT Liaison Program

Goal 2: Promote IT Efficiency and Effectiveness

DNR's IT organization will use specific policies, procedures, and strategies to create a clear set of measurable operational expectations. When results are measured, actions are identified that will continually improve performance, which promotes efficiency and effectiveness. The specific strategies to meet this goal include:

- Complete the Agency-wide IT strategic planning process
- Maintain central technology project portfolio
- Enhance current budgeting and technology procurement practices
- Formalize and regularly update key IT policies

Goal 3: Empower the IT Organization

To prepare for inevitable change within the IT organization, DNR must maintain continuity in its service delivery. Planning to leverage resources within and external to the Agency will empower the IT organization to support the agency. The specific strategies to meet this goal include:

- Foster a collaborative culture
- Evaluate IT staff levels
- Improve IT knowledge sharing and cross-training
- Develop formal training and succession plans
- Strategically leverage external vendors

Goal 4: Protect the Organization

Cybersecurity and all processes related to protecting the Agency's information assets from unauthorized access, use, fraud, and theft will continue to be imperative for the Agency. Steps have already been taken to ensure the Agency is protected, but additional steps have been recommended to establish a more robust cybersecurity program. The specific strategies to meet this goal include:

- Enforce the use of the identity access management solution
- Enforce compliance with cyber policies
- Create a dedicated cybersecurity role
- Address remaining gaps identified in the cyber audit
- Conduct routine vulnerability assessments and penetration testing
- Centralize management of network infrastructure
- Optimize architecture and maintain documentation
- Create a formal approach to network performance monitoring and capacity planning

- Complete the migration to WaTech’s data center
- Standardize and enhance the data backup architecture
- Consolidate enterprise data storage
- Align planning with disaster recovery needs

Goal 5: Optimize IT Services

By developing consistent, technology-enabled delivery processes, the IT organization will be able to respond quickly to incidents and changing business needs, establish and meet service-level targets, and enable stakeholders to perform their work more efficiently and effectively while improving its cost to deliver these services in these budget-constrained times. The specific strategies to meet this goal include:

- Adopt formal IT project planning methodology
- Allocate resources to support project-based work
- Evaluate using additional services from WaTech
- Use Office 365 for collaboration and information sharing
- Plan for the new ERP through OneWa
- Address gaps with financial, payroll, and time entry applications
- Formalize the software development life cycle process
- Develop Agency-wide GIS strategy
- Identify and develop GIS business leads
- Standardize hardware and software approach
- Develop and enforce a metadata standard

Goal 6: Enhance Customer Services

The customer service experience should be scalable, sustainable, predictable and consistent. The specific strategies to meet this goal include:

- Communicate and enforce Agency device standards
- Enforce an Agency mobile device management (MDM) solution
- Implement tools to automate end-user device deployment and management
- Implement robust IT service management solution
- Improve helpdesk processes
- Improve communication with end users
- Create IT service catalog
- Develop key performance indicators (KPIs) and service level agreements (SLAs)
- Conduct regular satisfaction surveys