

Agency IT Strategic Plan (Form) / **199 DCR FY14-16 ITSP** (

IT SUMMARY

General Information		
Item Name:	199 DCR FY14-16 ITSP	<i>Choose the CTP-prepared Agency ITSP item for the appropriate biennium</i>
Home Portfolio:	199 DCR IT Strategic Plans	<i>Choose your Agency Portfolio for ITSP</i>
ITSP Biennium:	FY14-16	
Proponent Secretary:	183 Secretary of Natural Resources	
Proponent Agency:	199 Department of Conservation and Recreation	
Submitted by:	Administrator, System	
Agency has BRTs or Investments:	Yes	
Has CETR been updated?	Yes	
Date Submitted:		
For additional CETR information, secure link address or CETR access request go to the following VITA website:		
http://www.vita.virginia.gov/oversight/default.aspx?id=349		

About the IT Summary

The purpose of the agency IT Strategic Plan is to establish an agency-wide vision and priorities for agency investments in IT and IT operations so that they promote the achievement of agency’s mission and business outcomes. The IT Plan Summary describes how agency IT strategies, goals, and objectives align with the mission, vision, values, and daily operations identified in the Agency Strategic Plan. This IT Plan Summary identifies the implications outlined in the Agency Strategic Plan and integrates them into implementable objectives and directives.

Current Operational IT Investments

In this section, describe the high-level strategy the agency will use to manage existing operational IT investments over the next year to 6 years. This section should align with identified Business Requirements for Existing Technology (BReTs). At minimum, please address the following questions in your description of your agency’s strategy for managing existing operational IT investments:

- *Are there existing IT investments that will require additional funding over the next year to 6 years, such as license renewals, re-competition of current IT contracts, or system enhancements required by the Agency Strategic Plan?*
- *If there are systems that will no longer support the agency’s business needs, either through poor performance or excessive cost, how does IT leadership in the agency plan to address the issues?*
- *If the agency does not have the staff or funding to meet increasing demand for IT services, how will IT leadership fulfill the requests?*

DCR utilizes Information Technology (IT) in a number of diverse and complex ways. In the area of Stormwater Management, DCR employs IT for modeling related to land use practices that is used to determine whether Virginia is meeting its commitments to the clean-up of the Chesapeake Bay; agricultural planning and support to Virginia’s 47 Soil and Water Conservation Districts in areas such as best management practices (BMPs) and resource management plans (RMPs); and general support within the agency and to external stakeholders. In the area of Dam Safety, IT resources are utilized to track all identified dams in Virginia, determine hazard status and assess level of compliance to ensure public safety. In the area of Natural Heritage a system called Biotics is supported for data management that utilizes Geographic Information Systems (GIS) software and database functionality. This Biotics system is used by natural heritage programs throughout the U.S., Canada, and Central/South America to maintain and propagate data on rare species and natural communities. Biotics enables DCR and other state agencies to collaborate on projects and proposed actions in Virginia and to assure that Natural Heritage resources are minimally impacted by their work. In the State Parks and Planning and Recreation divisions, GIS data is used for planning improvements to State Parks and Natural Areas that include road access. The phone system and electronic reservation system employed by DCR’s State Parks reservation center is a utilization of IT to provide a seamless avenue for the public to access State Parks services throughout the Commonwealth and provides a cost-effective way for DCR to ensure recreational facilities access to Virginia citizens in a user-friendly, up-to-

date manner that enhances visitorship to the State Parks and Natural Area system.

DCR also relies heavily on IT for central operations that serve all divisions and consequently, affects services being provided efficiently and effectively to citizens and stakeholders. Several of the above IT functions are provided and supported by third parties, however, DCR maintains IT systems that: identify the hazard status of dams, support GIS, automate the reservation systems, track payments to Virginia's 47 Soil and Water Conservation Districts for cost-share, and provide operational support needs to districts and farmers to control and reduce nonpoint source pollution. Central office operations include, but are not limited to, financial reporting and data management; Human Resource data management and reporting; Enterprise Resource Planning (ERP) application; telecommunications; and applications development; etc.

Factors Impacting the Current IT

In this section, the agency will describe the changes in their business environment that will require or mandate changes to the agency's current IT investments. These are requirements and mandates from external sources, such as other agencies or business partners, the agency's customer base, product and service providers, or new federal or state legislation or regulations. Each requirement or mandate from an external source must have a corresponding Business Requirement for New Technology (BRnT) or Business Requirement for Existing Technology (BReT) entered into the CTP. The agency must identify the business value of the change, any important deadlines that must be met, and the consequences if the deadlines are not met. In your discussion, be sure to note whether the proposed enhancements are funded or not.

If the agency's existing current IT investments will not need enhancement due to requirements or mandates from external sources in the foreseeable future, the agency should enter the following text rather than leave the Factors Impacting the Current IT section blank.

• For each mandated change, summarize your agency's response from your Agency Strategic Plan, and is it the opinion of agency IT leadership that the IT portion of the response is adequately funded?

• Do the mandated changes effect IT in other Commonwealth agencies, or in other states? If so, how?

DCR has recognized that its entire IT infrastructure needed to be assessed to determine whether the existing infrastructure is efficient and up-to-date and whether it is serving customer needs. In 2013, DCR completed a third party IT assessment that recommended some internal restructuring and process redesign to better provide services externally and internally. The process redesign has begun within the scope of existing resources but cannot be fully realized without additional resources that must be examined in the 2014-2016 biennium.

- 1) Financial System Replacement: DCR's financial system (IDSS), used to interface with state systems, currently CARS, is outdated and has been so for a number of years. This biennium the current state system, CARS, will be replaced by CARDINAL. Analysis has begun to understand what changes are required to interface with CARDINAL. In addition, DCR is currently evaluating what changes are needed to update this system so data can be provided to stakeholders in a more efficient manner.
- 2) Dam Safety: DCR's current inventory of dams is maintained in an electronic database that is outdated, which results in a greater amount of time needed to extract data used to contact dam owners regarding compliance issues.
- 3) Remote Access: DCR's thirty-five state parks are able to connect to email, the reservations system and DCR's internal systems but speeds vary with the type of connection available. Parks rely on internet access for the Reservation Center software and retail sales and inventory control at each State Park. These technological limitations have placed strains on parks that only have dial up or satellite connections.
- 4) GIS Demands: DCR conducts a large amount of geospatial analysis using GIS software. Web based geospatial map services to support interstate and regional projects as well as supplementing DCR programs. While there is a growing demand for GIS services internal and external to DCR and a high public receptivity to GIS products, these services have been reduced due to the higher hardware costs. For instance, there is a need for DCR to establish a state trails inventory and partner with Virginia Tourism Corporation (VTC) to both promote these trails on VTC's website and evaluate their economic impacts. The project will likely be the largest statewide GIS database and application project dedicated to bicycle routes and pedestrian trails in the United States. This project is unique because it does not distinguish "recreation" and "transportation" routes, but seamlessly integrates trails and routes into one database for planning purposes. When all three phases are complete, this innovative digital database will be available to statewide decision makers and trail users via two distinct Web-based GIS applications. DCR continually examines ways to coordinate and influence the GIS efforts of VITA/Virginia Geographic Information Network. GIS web access: There is a strong demand for improved access for geospatial natural heritage and conservation data using new GIS and web technologies, and it is difficult to keep up with the demand and the technological advances to support it. Changes are occurring rapidly in geospatial software and data format standards. These rapid changes require increased levels of security caused by access to multiple operating systems and more open applications.
- 5) AgBMP Tracking: During the next biennium DCR will continue to enhance the existing suite of AgBMP Tracking, Conservation Planning and Resource Management Planning applications. DCR is currently undertaking a project for the development of the Conservation Planning and Resource Management Planning (RMP) Modules. DCR's Soil and Water group strive to utilize the upcoming state accounting system Cardinal to track payments and fund utilization. The Conservation Planning module will assist Virginia's 47 Soil and Water Conservation districts in the development of plans, including suggested implementation of BMPs, to protect and improve water quality. The RMP module will streamline the implementation of the RMP regulations by providing a single application for the development, implementation, verification and inspection of RMPs. These two modules will interface with the existing AgBMP Tracking Program. Phase 2 of this project is expected to be completed during PY15-16. DCR is also actively working with the 47 Soil and Water Conservation Districts to ensure that all Districts participate in electronic data interface (EDI) so that payments to all Districts can be transferred electronically.
- 6) Nutrient Management (NutMan): DCR manages Nutrient Management Plan data through the NutMan application which was developed in partnership with Virginia Tech. DCR shares ownership of this application with Virginia Tech and it is hosted at Virginia Tech's Technology

Center in Alexandria. While DCR plans to maintain this longstanding relationship with Virginia Tech, DCR may explore options to integrate data between the NutMan system and the Conservation Planning/Resource Management Planning applications during the next biennium.

Proposed IT Solutions

In this section, describe the high-level strategy the agency will use to initiate new IT investments over the next year to 6 years in support of the agency strategic objectives documented in your Agency Strategic Plan. The agency does not need to consider specific technologies at this time, however, the strategy should identify how the IT implementation will provide business value to the organization. This section should align with identified Business Requirements for New Technology (BRnTs). At minimum, please address the following questions in your description of your agency's strategy for initiating new IT investments:

• *What are the most important solutions, based on the priority assigned to the requirements by the business sponsors in your agency, and what is the approach to achieving these priority solutions?*

• *If any new IT initiatives will be started in the upcoming budget biennium, is it the opinion of agency IT leadership that it is adequately funded?*

• *Does the agency's current IT staff have the appropriate skill set needed to support future agency technologies? If not, what skill sets need to be acquired?*

• *If the agency will be engaged in multiple new IT initiatives, how will agency IT staff and agency subject matter experts be used across the initiatives?*

Over the next biennium DCR must better utilize technology to meet the Agency's goals and objectives and customer needs. The below items were specifically identified from the Agency's most recent assessment of IT needs: continue to meet public demand for online services, including mobile services and social media services used to promote recreational opportunities; provide additional IT developers and project managers to ensure the seamless use of database applications to meet stakeholder needs; provide an agency wide GIS coordinator to organize, oversee, and support the use of geospatial data, desktop GIS software and web-based data usage to be more efficient and productive in the use and provision of geospatial data; provide a Database Administrator to ensure that all database information used for DCR decision-making is tied together so that information can continue to be shared with decision makers and constituents in an effective and efficient manner; and adopt an electronic document management system to improve the efficiency of document control, version control, retention, and paper storage requirements.

During the next biennium DCR will evaluate and determine whether to add functionality to the Ag BMP Tracking Program in order to make it the official system of record that tracks all sources of revenues and expenses related to agricultural programs in the Soil and Water Conservation Division. Enhancements for consideration may include allowing for: balances of all sources of revenue related to the division's programs, every Soil and Water Conservation District's (districts) Technical Assistance (TA) and Operation/Administration funding to ensure all allocations, distributions, and balances to districts can be tracked in one system; related enhancements of the financial component of VACS to allow for the quick re-allocation of any source of funds from one district to another; adding a Cardinal interface to streamline district payments, possibly preventing the need to create PO's in advance; adding a reporting component to easily sum and compare funding balances; and upgrading security over the system to ensure the confidentiality, integrity and availability of the data. Addressing these needs can take place once Cardinal replaces IDSS at DCR.

Report Title: Strategic Plan

Agency: Department of Conservation and Recreation

Date: 8/10/2015

Current IT Services

Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Projected Service Fees	\$1,294,094	\$818,844	\$1,326,446	\$839,315
VITA Infrastructure Changes	\$0	\$0	\$0	\$0
Estimated VITA Infrastructure	\$1,294,094	\$818,844	\$1,326,446	\$839,315
Specialized Infrastructure	\$0	\$0	\$0	\$0
Agency IT Staff	\$269,998	\$0	\$269,998	\$0
Non-agency IT Staff	\$494,400	\$0	\$494,400	\$0
Cloud Computing Service	\$0	\$0	\$0	\$0
Other Application Costs	\$164,000	\$279,428	\$164,000	\$279,428
Total	\$2,222,492	\$1,098,272	\$2,254,844	\$1,118,743

Proposed IT Investments

Category	Costs Year 1		Costs Year 2	
	GF	NGF	GF	NGF
Major IT Projects	\$0	\$0	\$0	\$0
Non-Major IT Projects	\$0	\$715,000	\$0	\$0
Agency-Level IT Projects	\$0	\$0	\$0	\$0
Major Stand Alone IT Procurements	\$0	\$0	\$0	\$0
Non-Major Stand Alone IT Procurements	\$0	\$0	\$0	\$0
Agency-Level Stand Alone IT Procurements	\$0	\$0	\$0	\$0
Total	\$0	\$715,000	\$0	\$0

Projected Total IT Budget

Category	Costs Year 1		Costs Year 2		Total Costs
	GF	NGF	GF	NGF	
Current IT Services	\$2,222,492	\$1,098,272	\$2,254,844	\$1,118,743	\$6,694,351

Proposed IT Investments	\$0	\$715,000	\$0	\$0	\$715,000
Total	\$2,222,492	\$1,813,272	\$2,254,844	\$1,118,743	\$7,409,351

Report Title: Business Requirements For Technology

Agency: Department of Conservation and Recreation (DCR) **Date:** 8/10/2015

BReT - DCR 2013 Overall Audit Program

BRT Type: Business Requirement for Existing Technology

Date Submitted: 9/29/2014

Mandate:

Mission Critical:

Description:

The agency was not in compliance with the overall risk program requirements for 2013. This BReT is for bringing the agency back in compliance.

BReT - DCR 2014 MS Server 2003

BRT Type: Business Requirement for Existing Technology

Date Submitted:

Mandate: No

Mission Critical:

Description:

Vendor support for MS Server 2003 operating system will end 7/14/2015.

BReT - DCR 2014 Oracle Database 9.2

BRT Type: Business Requirement for Existing Technology

Date Submitted:

Mandate: No

Mission Critical:

Description:

Vendor support for Oracle Database 9.2 ended on 7/1/2010

BReT - DCR 2014 SQL Server 2005

BRT Type: Business Requirement for Existing Technology

Date Submitted:

Mandate: No

Mission Critical:	
Description:	
Vendor support for MS SQL Server 2005 database will end 4/12/2016	
BReT - DCR State Parks Reservation System	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	1/15/2015
Mandate:	No
Mission Critical:	
Description:	
This is a sole source procurement. The Virginia State Parks reservation center has utilized Reserve America's reservation product since 1994. DCR is at the end of a 3 year purchase agreement for the service with Reserve America. This new agreement extends services out through December 31, 2019.	
BReT - DCR State Parks Reservation System 2015	
BRT Type:	Business Requirement for Existing Technology
Date Submitted:	2/12/2015
Mandate:	No
Mission Critical:	
Description:	
DCR has an ongoing need for a real time reservation system to assist customers in making reservations through a call center or online for the cabins, campgrounds and other facilities and programs at all of the Virginia State Parks. The need includes the capability of managing facility occupancy as well as reporting functions. The reservation system includes payment collection and required reports to meet APA financial requirements.	
BRnT - Cardinal	
BRT Type:	Business Requirement for New Technology
Date Submitted:	
Mandate:	
Mission Critical:	
Description:	
Cardinal will replace CARS as the Commonwealth's accounting system by February, 2016. DCR's financial systems will need to be modified to interface with Cardinal.	

Report Title: Appendix A 14 -
16 Report

Agency: Department of
Conservation
and
Recreation
(DCR) **Date:** 8/10/2015

Agency Head Approval: No

There are no Category 1, 2, or 3 IT Projects
and no Budget Category: Major IT Projects
for this agency.

There
are no
Category
4 IT
Projects
for this
agency.

Report Title: Appendix A 14 - 16 Report

Agency: Department of Conservation and Recreation
(DCR)

Date: 8/10/2015

Agency Head Approval:

No

There are no major procurements for this agency.

There are no
non-major
procurements
for this
agency.