In This Briefing

• Background
• IT Security
• Workload and Resources
• Northrop Grumman Contract Planning
VITA: Achieved Major Policy Goals

- Provide standardized infrastructure
  - Reliable, secure, licensed, maintained
- Curtail failed IT projects
  - Consistent project management oversight
- Enable data sharing across agencies
  - Data standards and enterprise data services
- Leverage buying power
  - More than 100 statewide contracts
- Enhance IT security
  - Enterprise infrastructure protections
Computers
- 59,374 PCs
- 3,356 servers

Mailboxes
- 58,948 accounts

Data storage
- 1.5 petabytes

Mainframes (2)
- IBM
- Unisys

Communications
- 55,000 desk phones
- 6,100 handhelds (PDAs)
- 11,000 cell phones

Networks
- 2,039 circuits

Data Centers (2)
- CESC
- SWESC

Printers
- 5,311 network
- 22,000 desktop

2,247 Locations
VITA Costs Are Typically 2% of Budgets

Total FY 12 Expenditures * ($18.4 Billion)

- HHR
- Public Safety
- Transportation

* Top 3 Secretariats account for 74% of VITA invoices

Sources: Commonwealth Data Point, VITA
FY 2013 Accomplishments

- Several technology upgrades
- Met all FY 2013 financial targets
  - 3rd payment toward line of credit
  - FY 2014 rates reduced slightly
- Adopted several new statewide standards
- Electronic data management (EDM) deployed to support eHHR (Health and Human Resources)
- Re-engineered eGov outsourcing model, including re-design of Virginia.gov
- Received several national awards
Virginia agencies (FY 2013)

- 118 million attack attempts
  - 321,792 daily
- 759 million spam messages

Security breaches of over 1 Million records

Increasing Security Incidents (2010-2013)
Origins of Attacks on CoVA – July 2013
IT Security: Overview of Roles

- VITA sets standards, oversees Commonwealth’s security program
- Northrop Grumman responsible for infrastructure security
- Agencies responsible for security of business applications and data
VITA Has Broad Statutory Security Role

- Set security architecture and standards
- Oversee Northrop Grumman
- Perform overall incident response
- Share intelligence and information (FBI, DHS, State Police, VDEM)
- Conduct risk management
- Oversee and assist agencies
  - CIO has limited authority to ensure compliance

www.vita.virginia.gov
Northrop Grumman Responsible for Infrastructure Security

- Physical and logical security
  - Data center protection
  - Firewalls, intrusion monitors, encryption, compartmentalization, antivirus and spam filters

- Detection, containment and removal of security incidents affecting the *infrastructure*

- However, most attacks affect *applications*
  - Northrop Grumman assists with attacks against applications

- Agencies remain responsible for protecting *applications and data*
State Agency IT Security Efforts Are Mixed

<table>
<thead>
<tr>
<th>Agency Responsibilities</th>
<th>Agencies in Compliance</th>
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<tbody>
<tr>
<td>Appoint information security officer</td>
<td>97%</td>
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<tr>
<td>Develop, maintain IT security audit plan</td>
<td>71</td>
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<tr>
<td>Conduct IT security audits every three years (minimum)</td>
<td>63</td>
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<tr>
<td>Develop, maintain corrective action plans</td>
<td>56</td>
</tr>
<tr>
<td>Develop, maintain policies and procedures to control unauthorized uses and intrusions</td>
<td>42</td>
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Source: 2012 Commonwealth of Virginia Information Security Annual Report
• VITA needs additional staff and resources to assess and respond to *evolving* threats
  – Need additional analysis of third parties that are targeting the Commonwealth
  – Current staffing focuses on incident response, not overall assessment of threat patterns

• State agency staffing constraints impede security gap correction and limit auditing
  – Agencies must test their applications against new patches and evolving federal requirements
Agency IT Projects Are Increasing

Note: Active projects only

VITA Oversight:
- Project management
- Financial
- Data standards
- Architecture
- Northrop Grumman contract
- Procurement
- Security
Staffing Hasn’t Kept Pace with Workload

Work Requests

VITA Staff

July 07  July 08  July 09  July 10  July 11  July 12  July 13

0  100  200  300  400  500  600  700

Virginia Information Technologies Agency

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Staffing Constraints Hinder Oversight

• Staffing levels decreased following budget reductions (FY 2008-2012)
  – Retained customer-facing and direct service staff
  – Reduced oversight, analytical and support staff

• Shortages impede fulfillment of statutory duties
  – Recent additions address minimal unmet needs
  – Additional staff needed to address new requirements and increasing service demands
Inadequate Staffing Creates Threats

• Thin bench: same person responsible for oversight, service delivery and planning
  – Only one person in key areas: disaster recovery, telecommunications, network, email, desktop computing, server and mainframe computing, and help desk

• High reliance on IT contract support staff

• Focus on day-to-day service delivery
  – No resources to innovate or plan
  – Reactive, not proactive
Additional Staff Create Opportunities

- VITA needs adequate staff to provide insight, not just oversight
- Additional staff needed to plan for expiration of Northrop Grumman contract
  - Third-party expertise also required
- Staffing increases depend on:
  - JLARC approval of surcharge
  - DPB authorization of expenditure
  - Availability of skill sets in IT marketplace
  - Competitiveness with other employers
Prospective Timeline for IT Services

- **Prepare**
  - 2013 - 2014

- **Request & Plan**
  - 2014 - 2015

- **Produce**
  - 2016 - 2017

- **Obtain Approval**
  - 2018 Session

- **Transition**
  - June 2019

Note: Calendar Years
Challenges, Look-ahead

- Third wave of IT is upon us: cloud, mobile, social media
- Evolving and increasing IT security threats
- Lingering resistance to shared services approach
  - IT as a fully managed service, not just hardware
- Customer service is improving, but work remains
- Evolution of Northrop Grumman relationship and contract
  - Technology innovation
- Aging “legacy” applications
- VITA organizational constraints
Questions?

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VITA’s Mission: Mandate for Change

- Executive Branch, Legislative Branch leaders called for
  - Business-like approach to managing IT services across the enterprise of state government
- Concept of “shared services” (cloud computing)
  - Statewide IT infrastructure for government entities
- Central oversight of IT procurement, projects, security, standards, policy and procedures, Wireless E-911 and contingent labor
- Modernization is a journey
  - Step 1: Creation of VITA and statutory framework
  - Step 2: Transformation of infrastructure
  - Step 3: Enterprise applications and services