Joint Legislative Audit and Review Commission

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CoVA IT Infrastructure

Computers
- 57,977 PCs
- 3,485 servers

Mailboxes
- 59,866 accounts

Data storage
- 1.4 petabytes

Mainframes (2)
- IBM
- Unisys

Communications
- ~55,000 desk phones
- ~3,600 handhelds (PDAs)
- ~11,000+ cell phones

Networks
- 2,039 circuits

Data Centers (2)
- CESC
- SWESCR

Printers
- 5,674 network
- 22,000+ desktop

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• **Critical mass** achieved
• Standard, reliable and secure
• Remaining agencies:
  – VDEM, VSP, & VEC
Technology Roadmap

- Transformed agencies benefit from continuous upgrades, including:
  - 14,000 PCs refreshed (Jan 11 – Aug 12)
  - Enterprise Email System migration complete
  - Windows 7 (underway)
  - Office 2010 (underway)
  - Enterprise Storage Systems (CESC)
  - Mainframes (2 - IBM, Unisys)
  - Support systems and tools
    - Help desk, monitoring, network, security and more
New Initiatives Increase Efficiency & Productivity

- Critical Mass enables *enterprise approach* and facilitates *shared services*
  - Commonwealth Authentication Service (DMV)
  - Enterprise Data Management service (VITA)
  - Service-Oriented Architecture (VITA)
  - eGOV program (Virginia.gov, agency websites)
  - Workplace Collaboration Service (SharePoint)
  - Workplace Productivity Solution (CRM)
  - Email archiving (Symantec)
  - “Bring Your Own Device” mobile computing support

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*Virginia

- 70,947,657 attack attempts
- 323,064,576 spam messages

*Jan – Jun 2012, transformed agencies only

Security breaches of over 1 Million records
Source: Privacy Rights Clearinghouse, A Chronology of Data Breaches, Aug 2012
Increase in Security Incidents

4th Quarter 2010 - 2nd Quarter 2012
IT Security – Current State

• Security Architecture and Standards
• Protecting CoVA Data 24 x 7 x 365
  – Intrusion detection & vulnerability scanning
  – Antivirus & firewalls
  – Spam & web content filtering
  – Centralized & automated software patching
  – Secure remote network access (2-Factor VPN)
  – Encrypted internal email
• Intelligence & Information Sharing
  – Collaborating with FBI, DHS and others

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• Improve Analysis & Risk Assessment
  – Full packet analysis to address data exfiltration
  – Risk management tool (being pursued) to identify potential impact of breach or outage

• Enhance Access Security
  – More secure remote network access (SSL VPN)
  – Password resets (from 90 to 45 days)

• Address Security Compliance
  – Increasing VITA’s capabilities
Current & Future Governance of IT Security

• Current Governance
  – Contract, standards & policies set requirements
  – NG & agency compliance evaluated via audit

• Future Governance Considerations
  – Federal regulations & third-party mandates require new security efforts for agencies
  – Agency constraints impede security gap correction & limit auditing to find unknown gaps
    • EX: Annual security reviews, JAVA, Win 7
  – CIO has limited authority to ensure compliance
Addressing Service Interruptions

• Process of Continuous Improvement
  – SAN Corrective Action Plan nearly complete
  – CESC hardware/software improvements
  – Testing of core network redundancy

• Circuit Outages Affect Public & Private Sectors
  – VITA has no statutory oversight of utilities
  – VITA offers network redundancy options

• Virginia Disaster Recovery Readiness
  – Agencies decide whether to use DR service
  – Virginia one of few states to conduct actual tests

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136 IT Projects
- 54 “major” projects ($490 M)
- 82 non-major projects ($49 M)

VITA Staffing Constraints Limit Oversight
- Major projects overseen by VITA
- Limited resources are focused on highest risk
- Move to IT “programs” creates new challenges

17% of Core Applications Are End of Life
- CARS, PMIS, eligibility systems
- Example: VITA telco billing system
CoVA FY 2012 IT Expenditures

FY 12 Spending = $1.004 B

- Executive Branch: 52%
- 41% Higher Ed.
- 4% Independent
- 3% Judiciary
- 0.4% Legislature

Source: VITA staff analysis of Auditor of Public Accounts data.

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Trends in Executive Branch IT Costs

Source: Auditor of Public Accounts.
Agency Service Demands Drive IT Costs

July 2007 - July 2012

Work Requests

Jul 07  Jan 08  Jul 08  Jan 09  Jul 09  Jan 10  Jul 10  Jan 11  Jul 11  Jan 12  Jul 12
VITA Costs Are Typically 2% of Budgets

Total Expenditures *
($18.4 Billion)

VITA Costs
(1.2%)

Sources: Commonwealth Data Point, VITA

* Top 3 Secretariats account for 74% of VITA invoices
VITA Costs Primary for Vendor Payments

- 8% VITA Organization
- 2% Debt Recovery
- 90% to Vendors for IT Services

- VITA is primarily an Internal Service Funded (ISF) agency
  - >1% of VITA costs are GF
  - ISFs overseen by JLARC
  - Rates adjusted annually
  - Audited by APA, reported to federal HHS
  - FY 2013 rates decreased 2.3% (avg.)
Prospective Timeline for IT Services

Request
2015 Session

Plan
Jan 2016

Procure
Jan 2018

Transition
Jun 2019
Challenges, Look-ahead

- **IT security**
  - Threats continue to evolve
  - Compliance remains a concern
- **Lingering resistance to shared services approach**
  - IT as a *fully-managed service*, not just hardware
- **Customer service is improving, but work remains**
- **Evolution of NG relationship**
  - Technology innovation
  - Continuous change to NG contract
- **Aging “legacy” applications**
- **VITA organization**
  - Insufficient oversight authority
  - Aging workforce
Questions?

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