



Joint Legislative Audit and Review Commission

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- 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*



IT Infrastructure

Computers

59,374 PCs
3,356 servers

Mailboxes

58,948 accounts

Data storage

1.5 petabytes

Mainframes (2)

IBM
Unisys

Communications

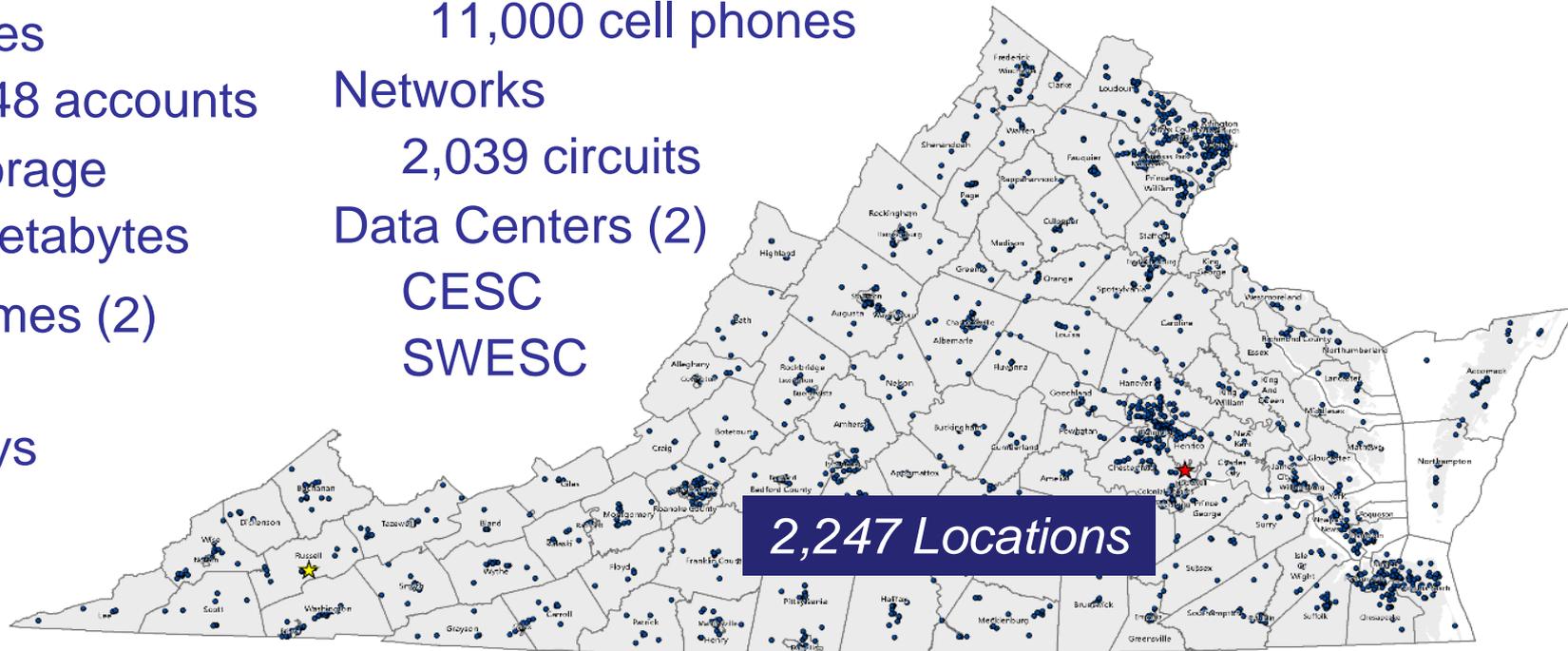
55,000 desk phones
6,100 handhelds (PDAs)
11,000 cell phones

Networks

2,039 circuits
Data Centers (2)
CESC
SWESC

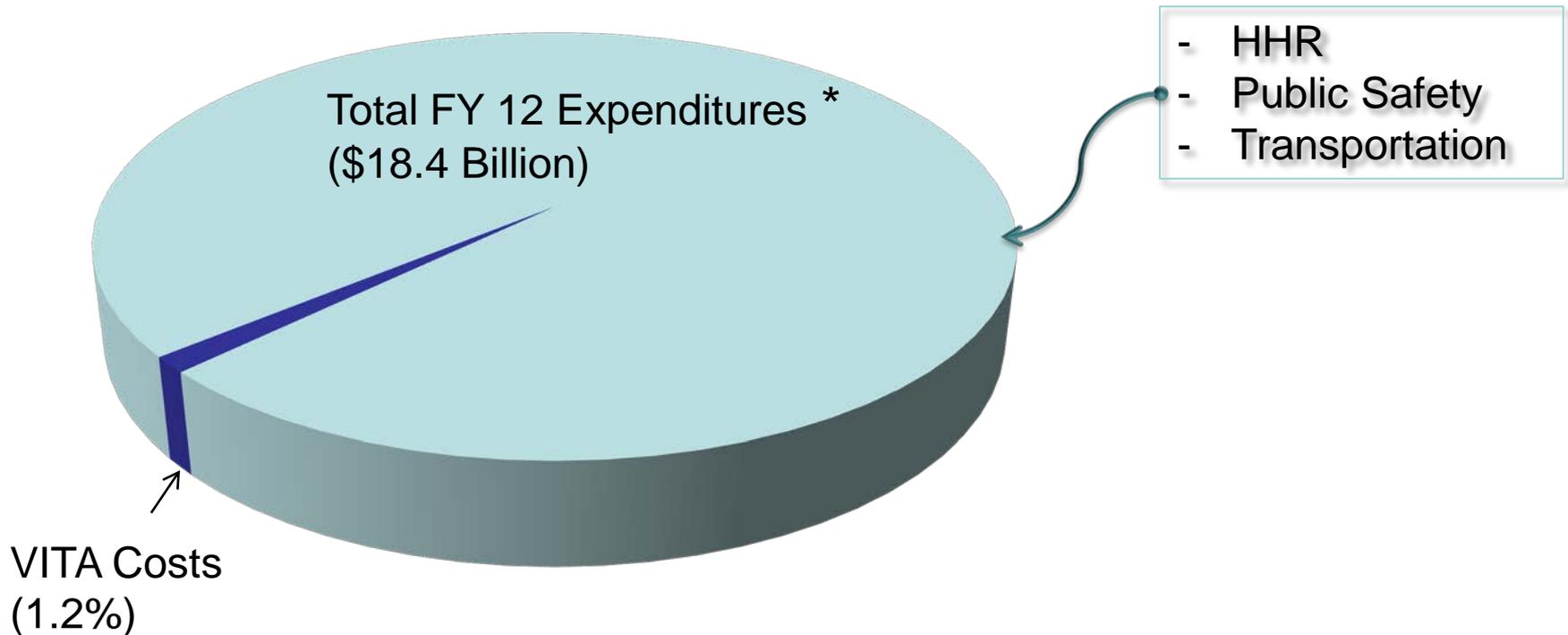
Printers

5,311 network
22,000 desktop





VITA Costs Are Typically 2% of Budgets



Sources: Commonwealth Data Point, VITA

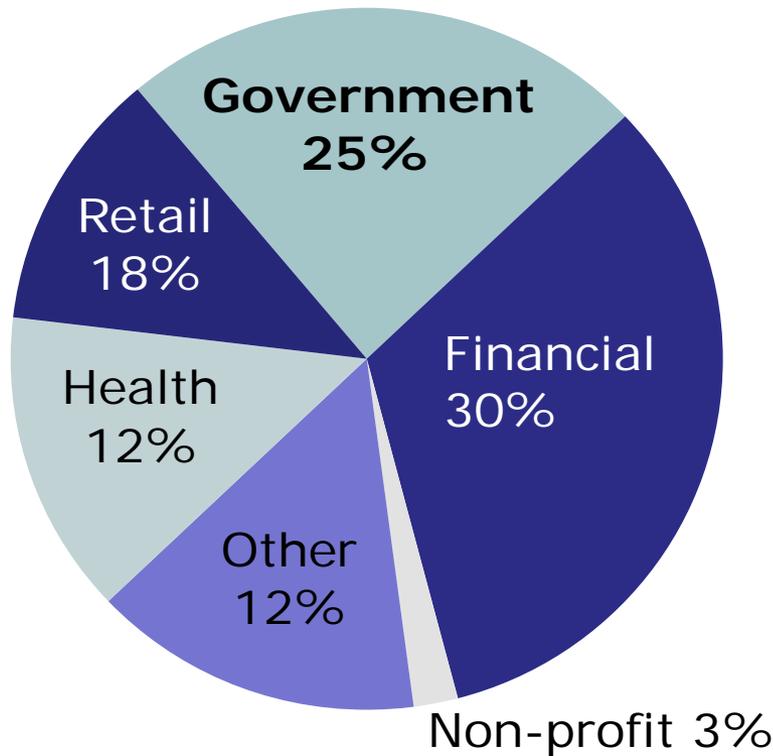
* Top 3 Secretariats account for 74% of VITA invoices



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

Government Data Breaches and Attacks



Security breaches of over 1 Million records

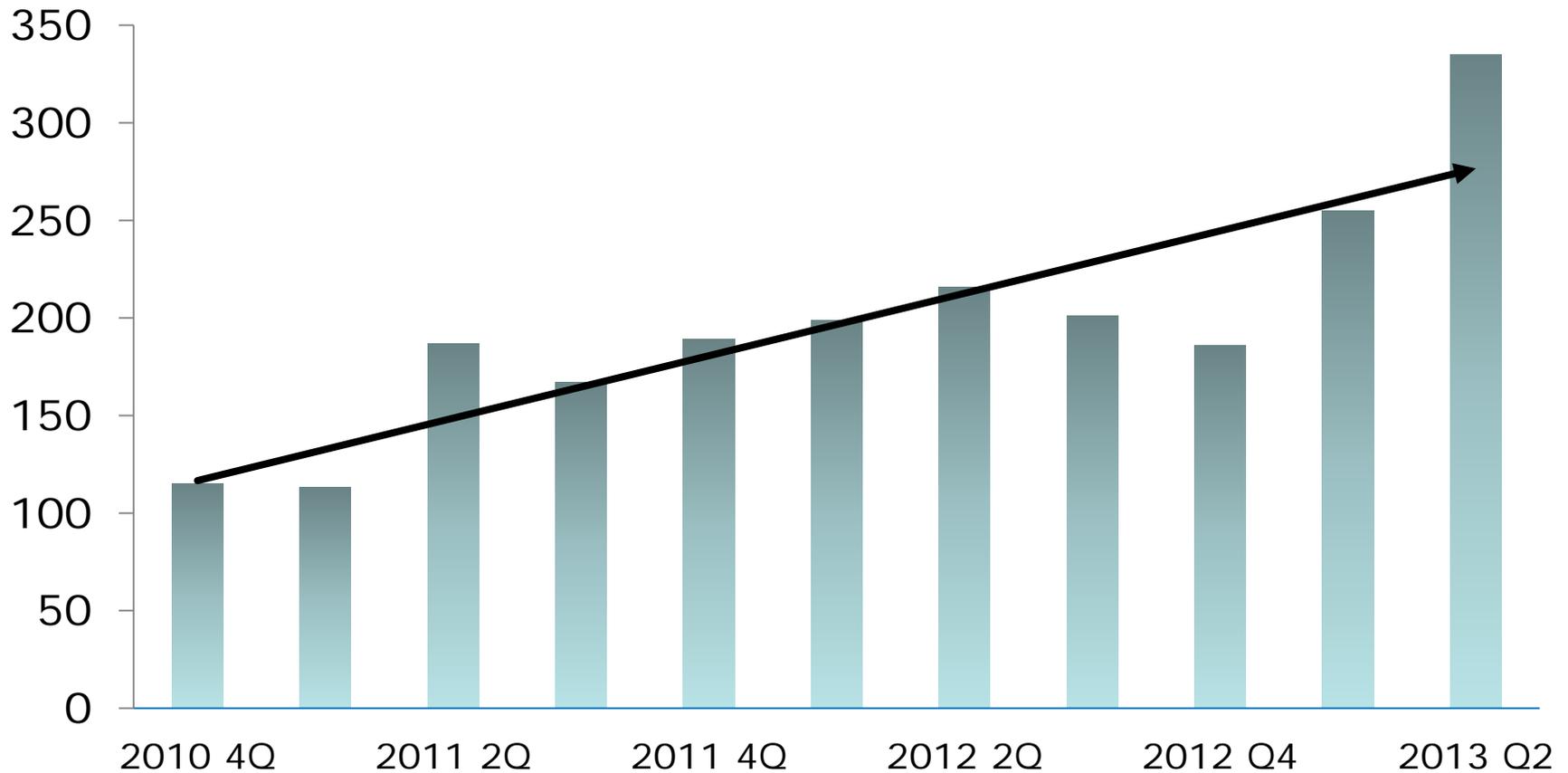
Source: Privacy Rights Clearinghouse, *A Chronology of Data Breaches*, Aug 2013

Virginia agencies (FY 2013)

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



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



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

Agency Responsibilities	Agencies in Compliance
Appoint information security officer	97%
Develop, maintain IT security audit plan	71
Conduct IT security audits every three years (minimum)	63
Develop, maintain corrective action plans	56
Develop, maintain policies and procedures to control unauthorized uses and intrusions	42

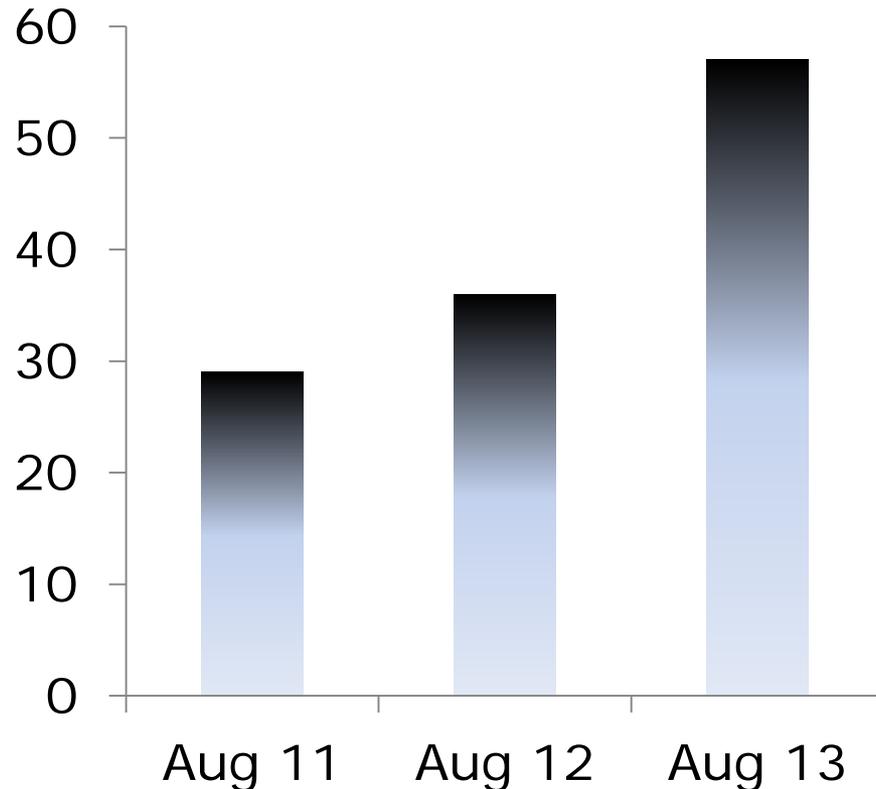
Source: 2012 Commonwealth of Virginia Information Security Annual Report



VITA & Agencies Lack Security Staff

- 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



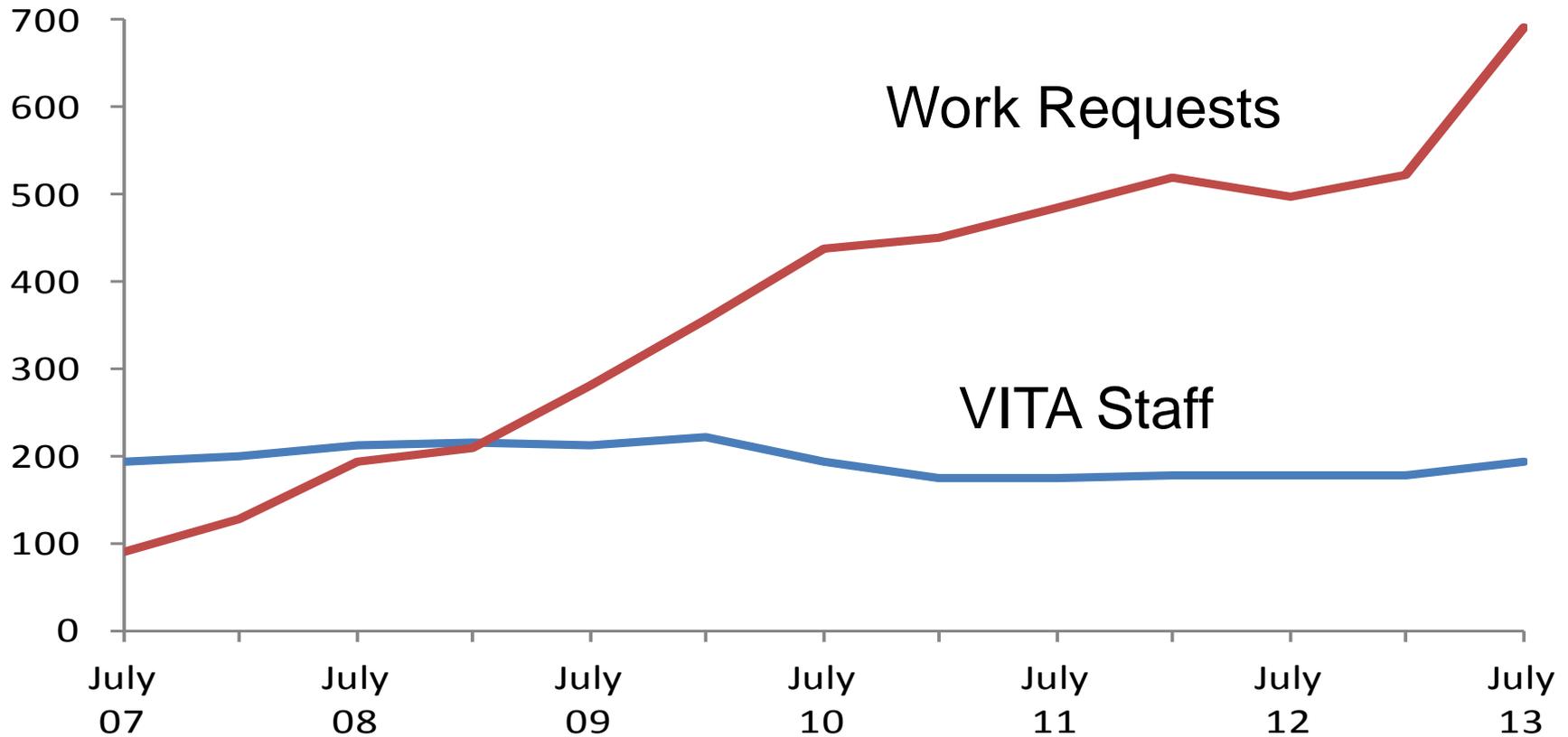
Note: Active projects only

VITA Oversight:

- Project management
- Financial
- Data standards
- Architecture
- Northrop Grumman contract
- Procurement
- Security



Staffing Hasn't Kept Pace with Workload





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



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