



Joint Legislative Audit and Review Commission

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In This Briefing

- Background
- IT Security
- Workload and Resources
- NG 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 & enterprise data services*
- Leverage buying power
 - *Over 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

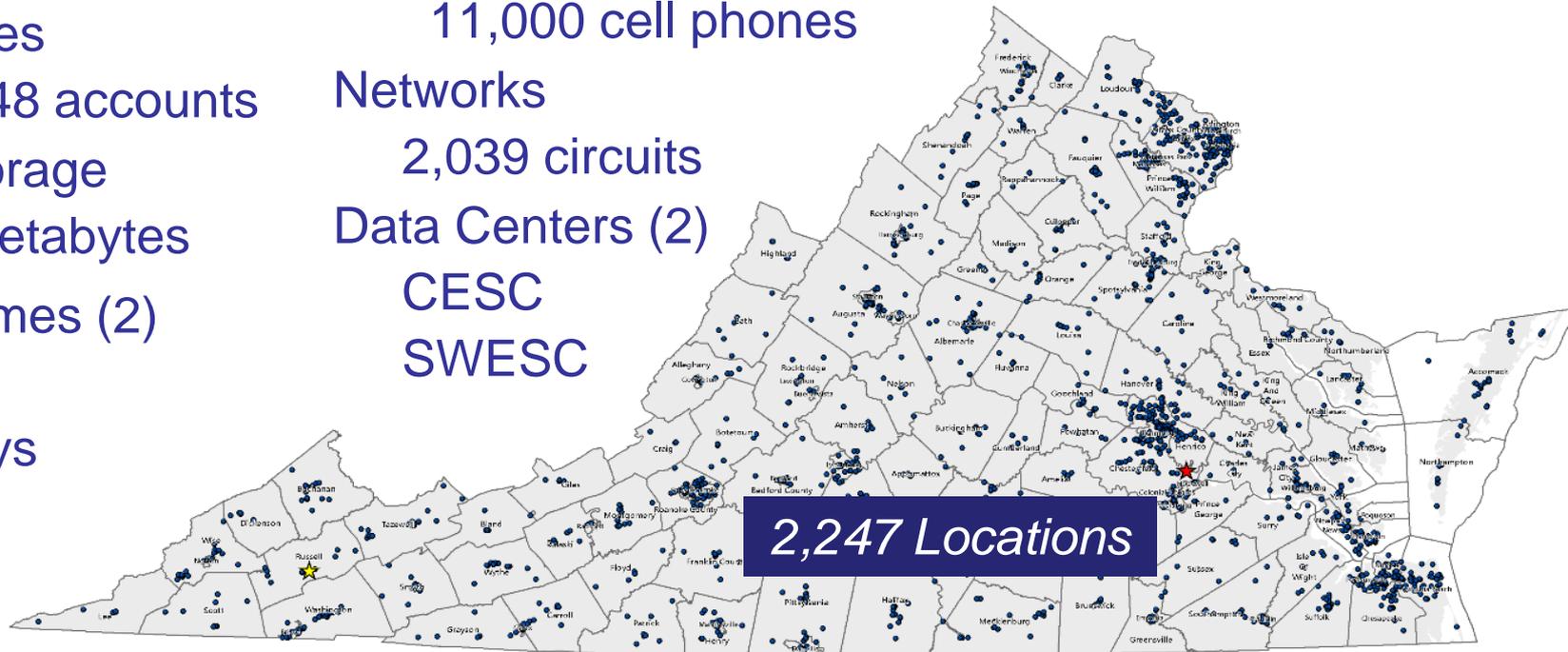
2,039 circuits

Data Centers (2)

CESC
SWESC

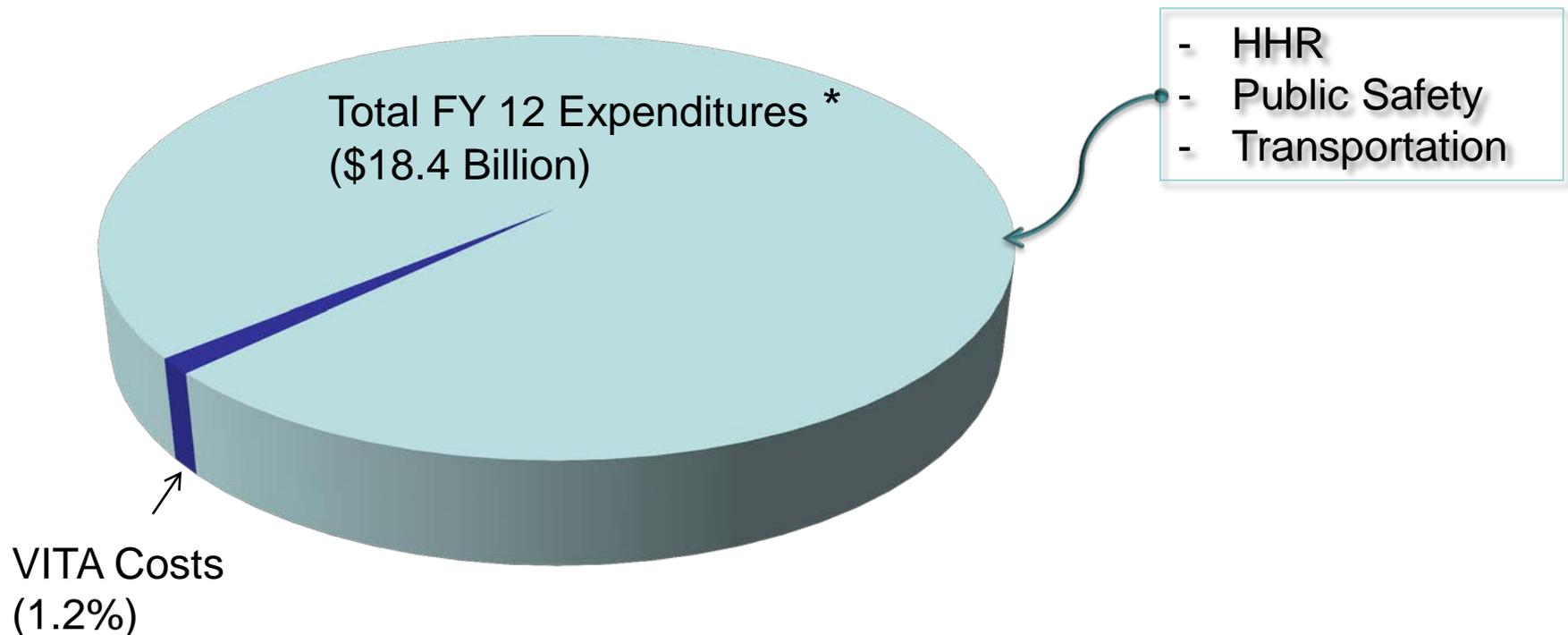
Printers

5,311 network
22,000 desktop





VITA Costs Are Typically 2% of Budgets



Sources: Commonwealth Data Point, VITA

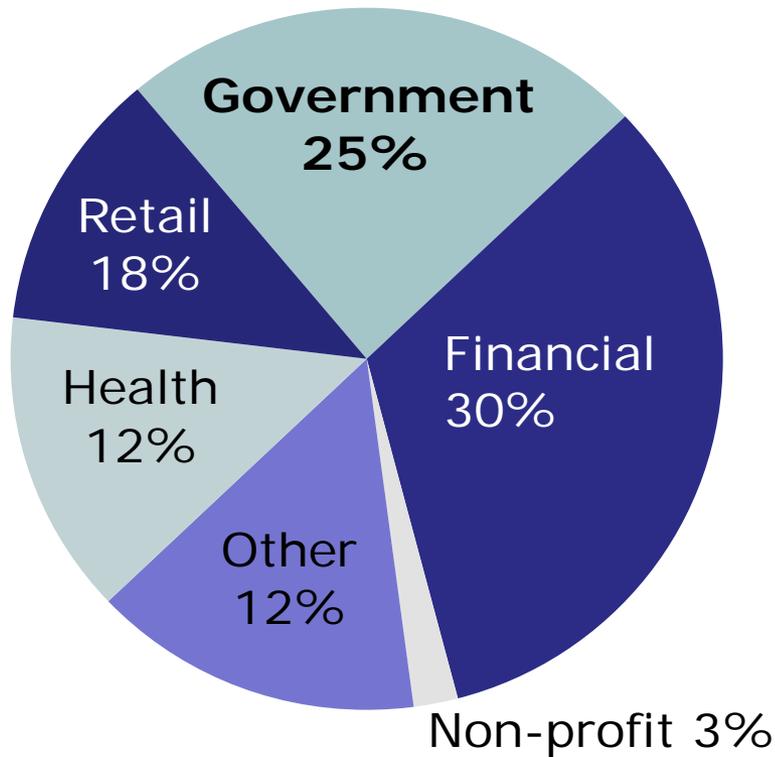
* Top 3 Secretariats account for 74% of VITA invoices



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
- Re-engineered eGov outsourcing model, including re-design of Virginia.gov
- Received several national awards

Government Data Breaches & Attacks



Security breaches of over 1 Million records

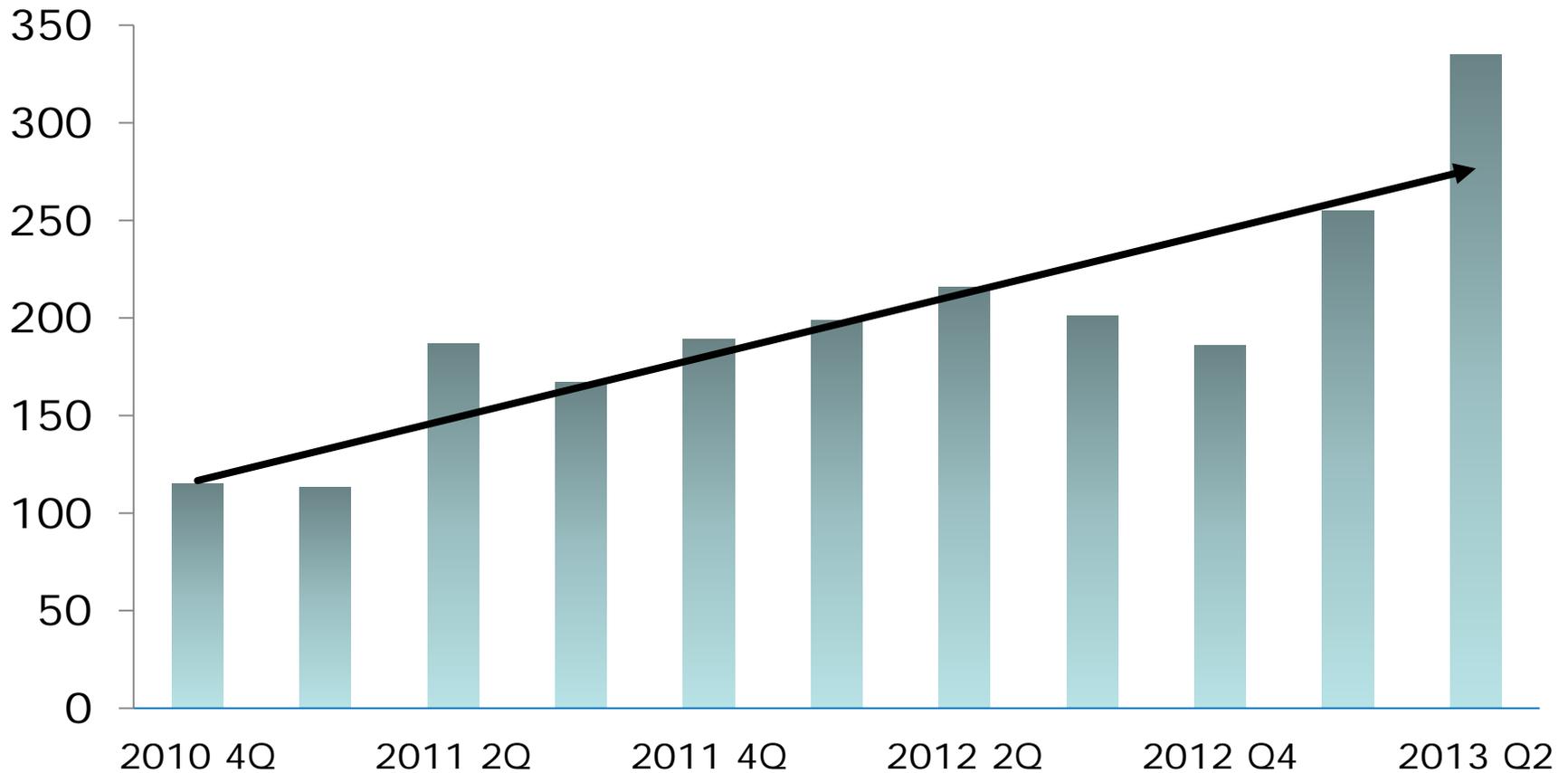
Source: Privacy Rights Clearinghouse, *A Chronology of Data Breaches*, Aug 2013

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
- NG responsible for infrastructure security
- Agencies responsible for security of business applications & data



VITA Has Broad Statutory Security Role

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



NG Responsible for Infrastructure Security

- Physical & logical security
 - Data center protection
 - Firewalls, intrusion monitors, encryption, compartmentalization, antivirus & spam filters
- Detection, containment & removal of security incidents affecting the *infrastructure*
- However, most attacks affect *applications*
 - NG assists with attacks against applications
- Agencies remain responsible for protecting applications & data



State Agency IT Security Efforts Are Mixed

Agency Responsibility	Agencies in Compliance
Appoint Information Security Officer	97%
Develop & maintain IT security audit plan	71
Conduct IT security audits every 3 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

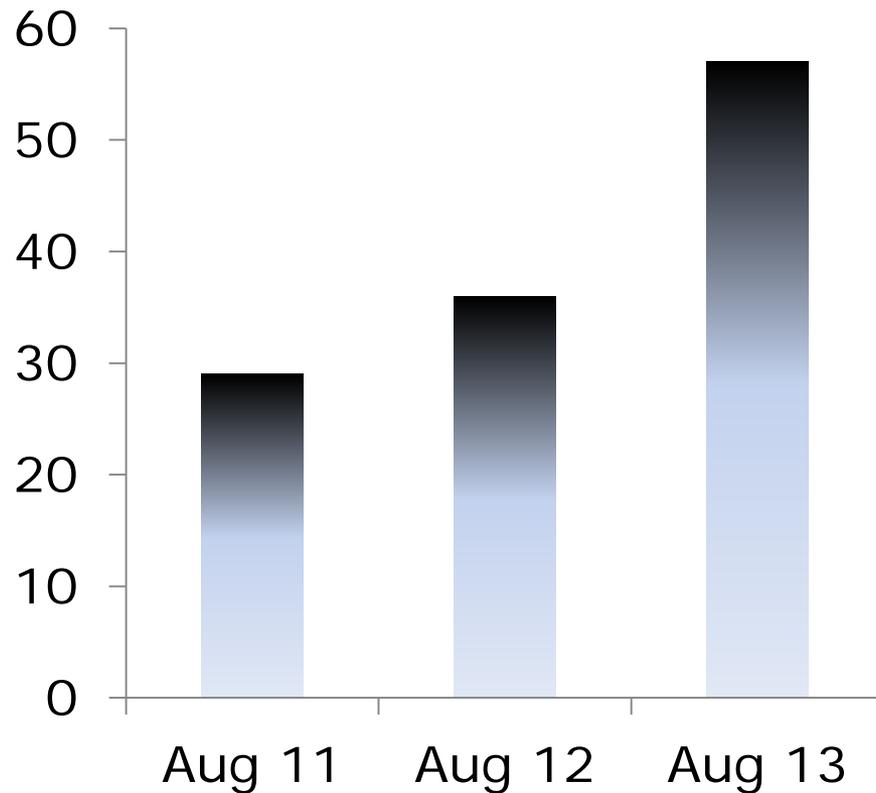


VITA & Agencies Lack Security Staff

- VITA needs additional staff & resources to assess & 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 & limit auditing
 - Agencies must test their applications against new patches & evolving federal requirements



Agency IT Projects Are Increasing



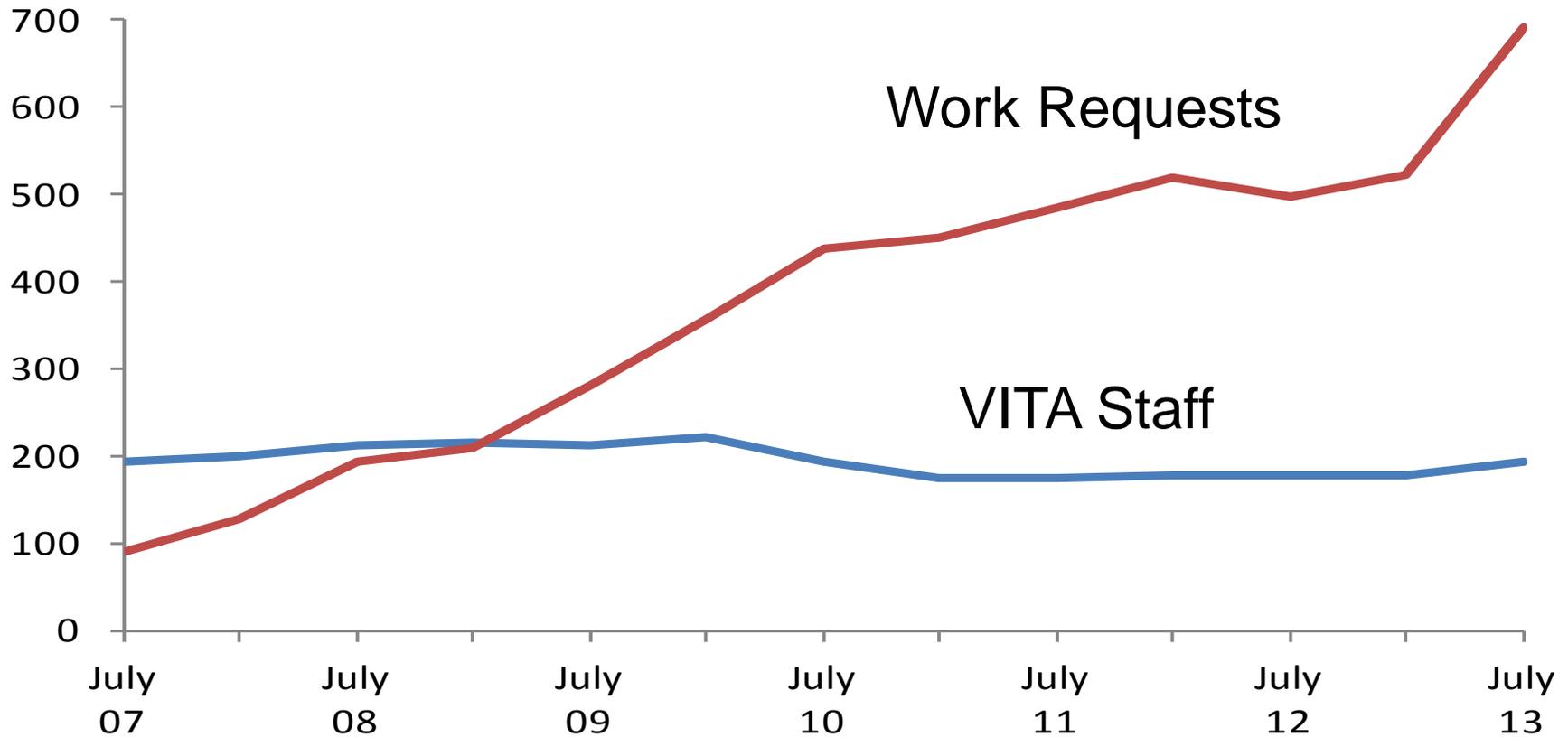
Note: Active projects only

VITA Oversight:

- Project Management
- Financial (TCO)
- Data Standards
- Architecture
- NG 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 & direct service staff
 - Reduced oversight, analytical, & support staff
- Shortages impede fulfillment of statutory duties
 - Recent additions address minimal unmet needs
 - Additional staff needed to address new requirements & increasing service demands



Inadequate Staffing Creates Threats

- Thin bench: same person responsible for oversight, service delivery, & planning
 - Only one person in key areas: disaster recovery, telecommunications, network, email, desktop computing, server & 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

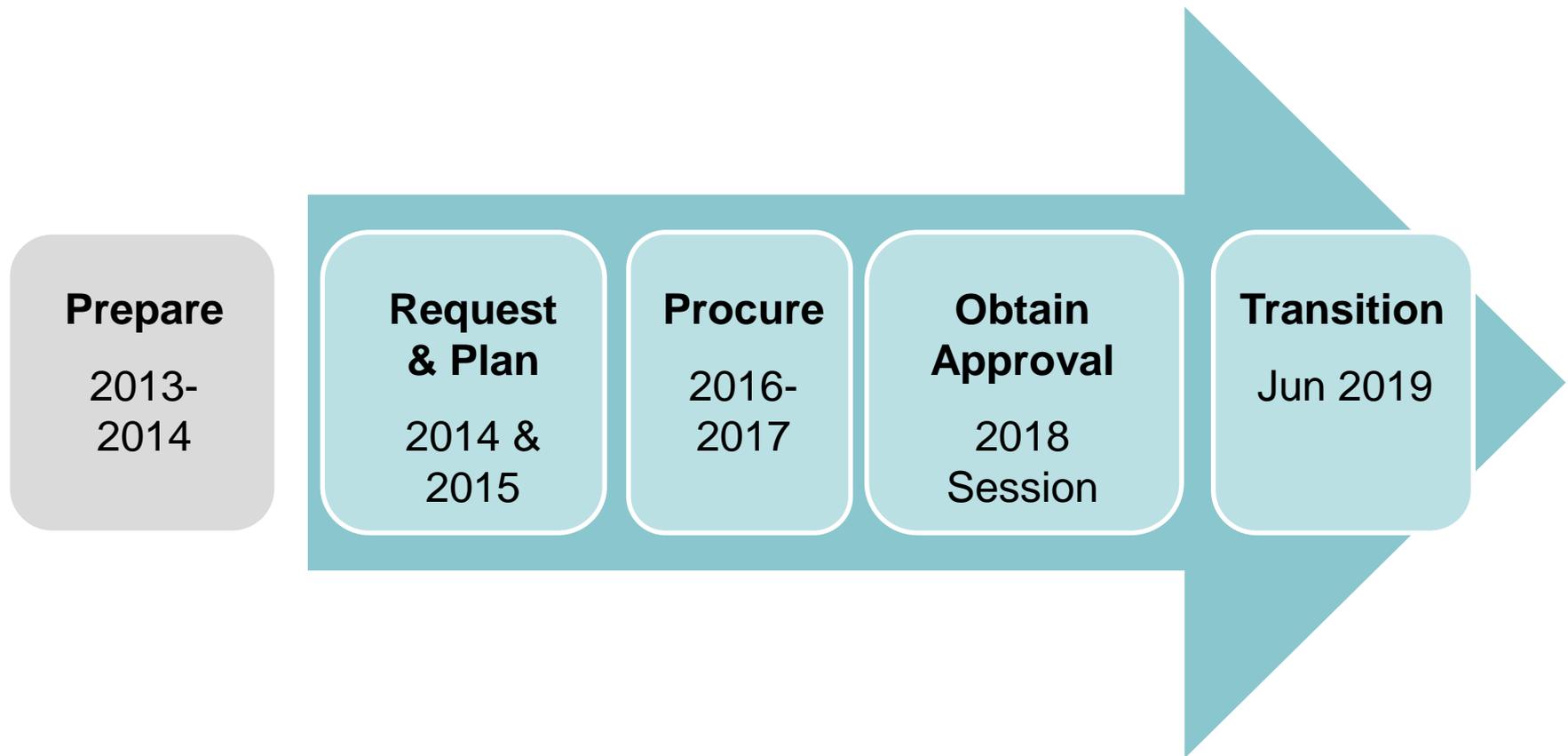


Additional Staff Create Opportunities

- VITA needs adequate staff to provide insight, not just oversight
- Additional staff needed to plan for expiration of NG 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 & 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 NG relationship & contract
 - Technology innovation
- Aging “legacy” applications
- VITA organizational constraints



Questions?

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VITA's Mission: Mandate for Change

- Executive & 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 & statutory framework
 - Step 2: Transformation of infrastructure
 - Step 3: Enterprise Applications & Services