



Joint Legislative Audit and Review Commission

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- Enterprise Initiatives



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

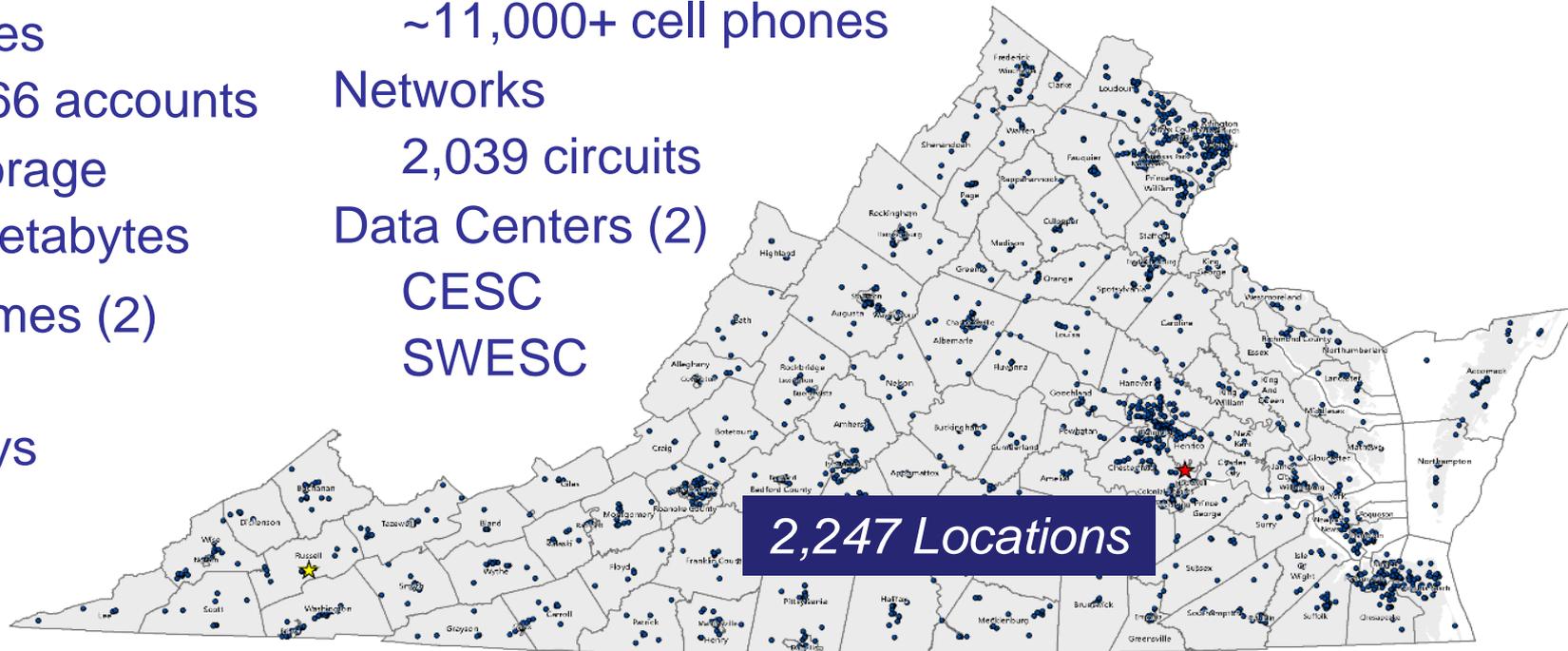
2,039 circuits

Data Centers (2)

CESC
SWESC

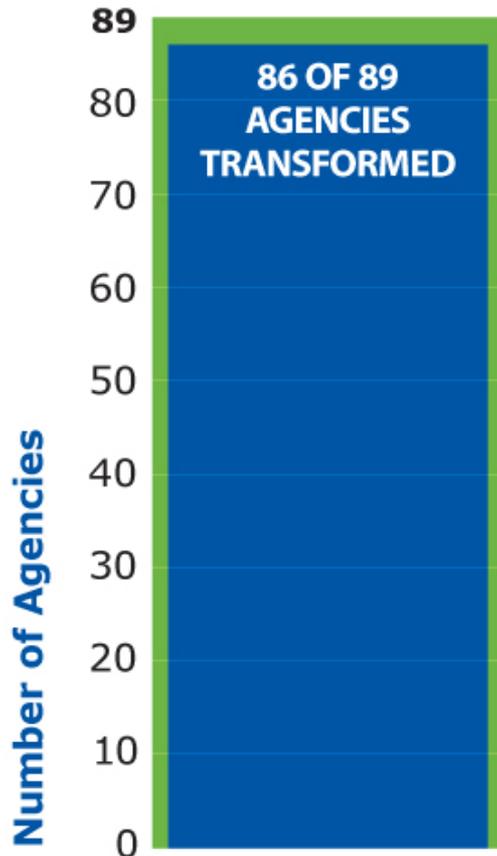
Printers

5,674 network
22,000+ desktop





Transformation Status



- *Critical mass* achieved
- Standard, reliable and secure
- Remaining agencies:
 - VDEM, VSP, & VEC



Technology Roadmap

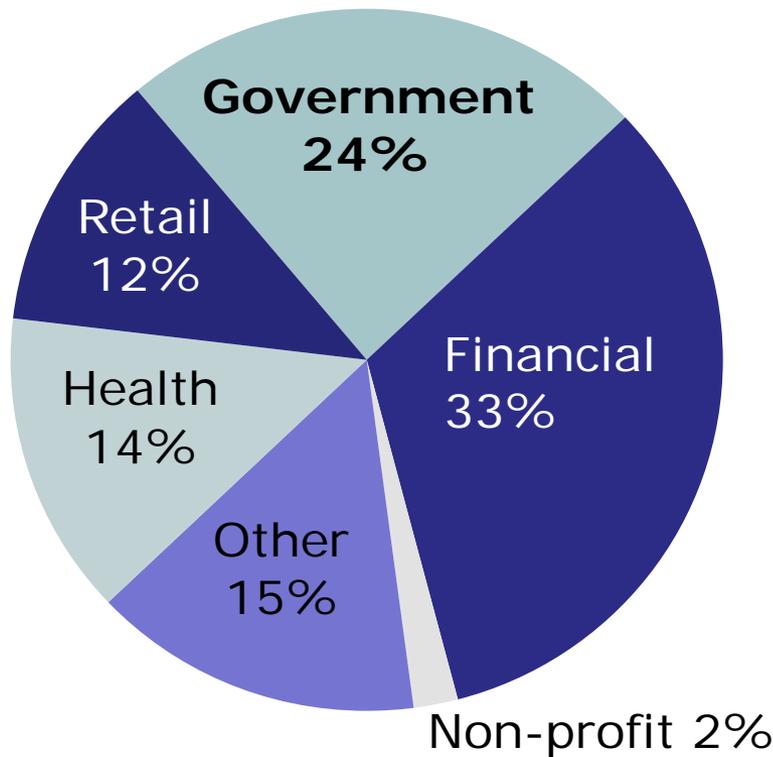
- Transformed agencies benefit from continuous upgrades, including:
 - 14,000 PCs refreshed (Jan 11 – Aug 12)
 - Enterprise Email System migration complete
 - Windows 7 (underway)
 - Office 2010 (underway)
 - Enterprise Storage Systems (CESC)
 - Mainframes (2 - IBM, Unisys)
 - Support systems and tools
 - 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

Government: #2 Target of Cyber Attacks



Security breaches of over 1 Million records

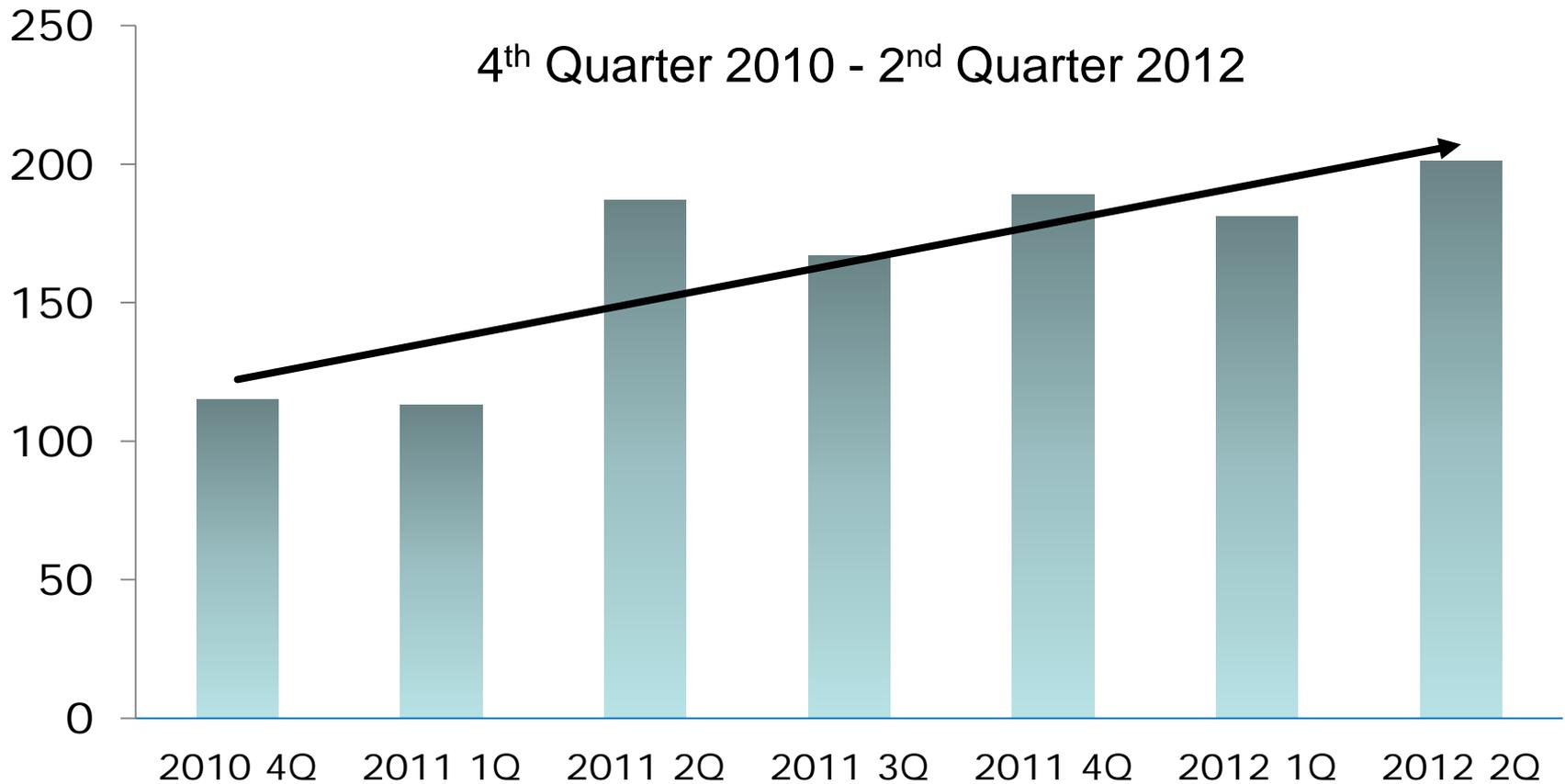
Source: Privacy Rights Clearinghouse, *A Chronology of Data Breaches*, Aug 2012

*Virginia

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

*Jan – Jun 2012, transformed agencies only

Increase in Security Incidents





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



IT Security – Future State

- 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



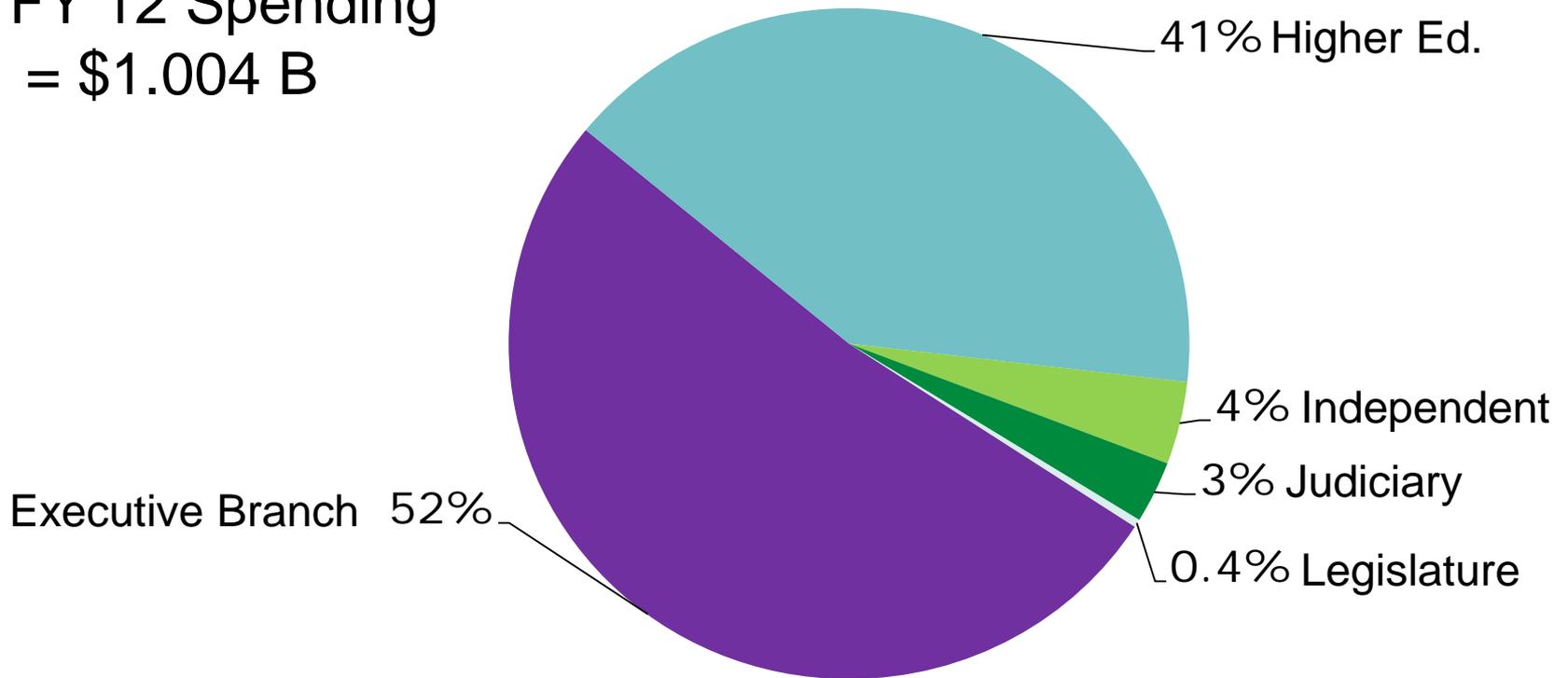
IT Projects Are Overseen by VITA

- 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

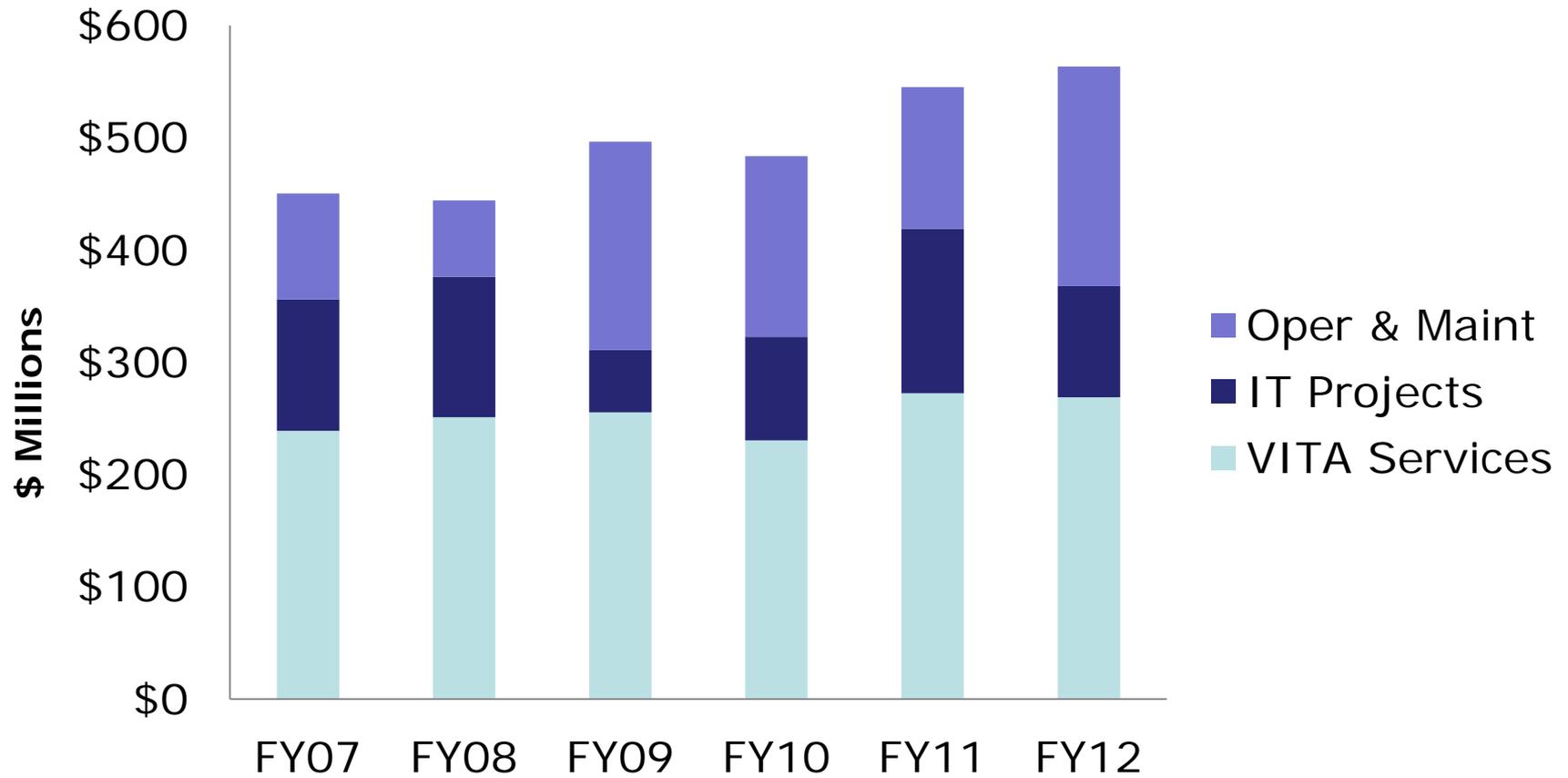
FY 12 Spending
= \$1.004 B



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



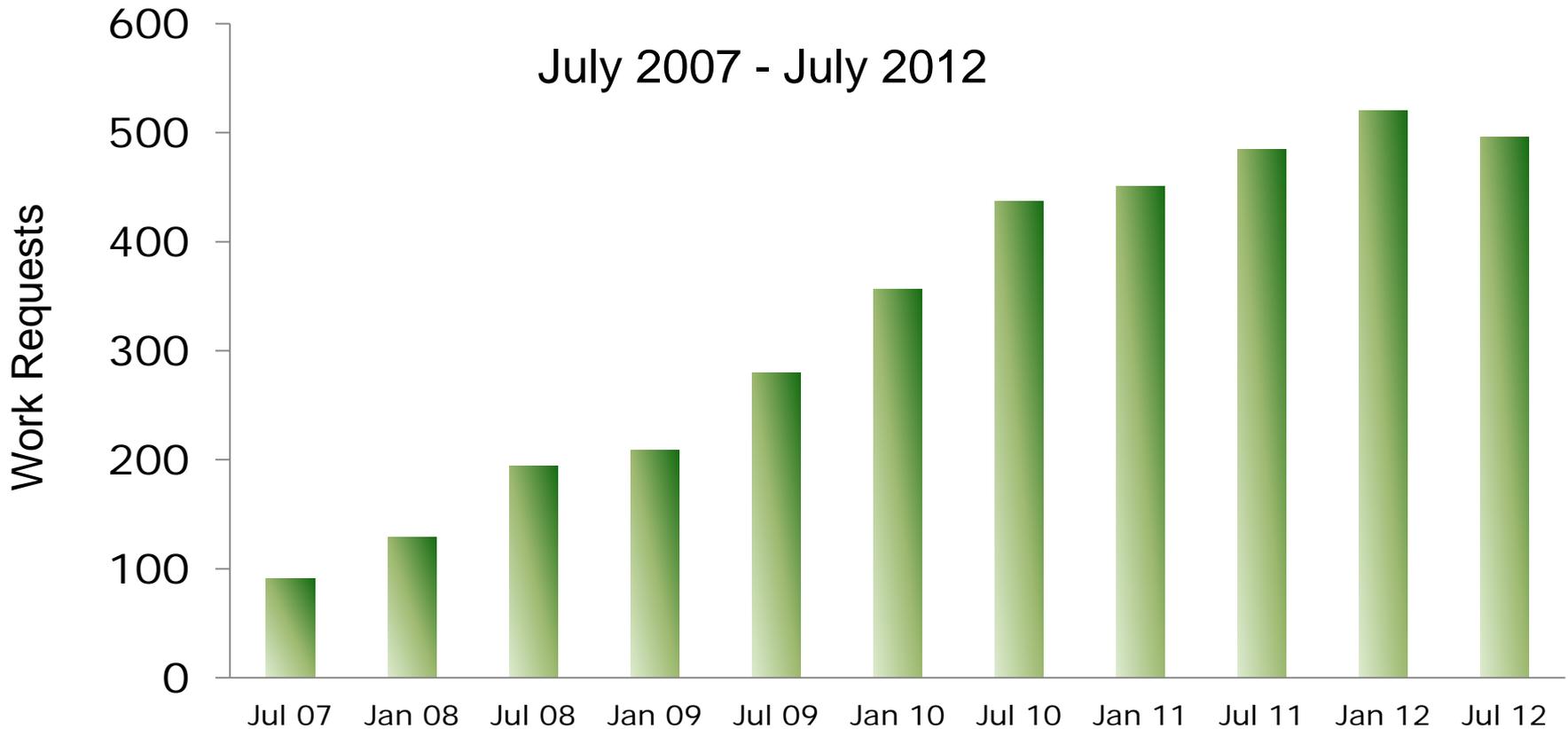
Trends in Executive Branch IT Costs



Source: Auditor of Public Accounts.

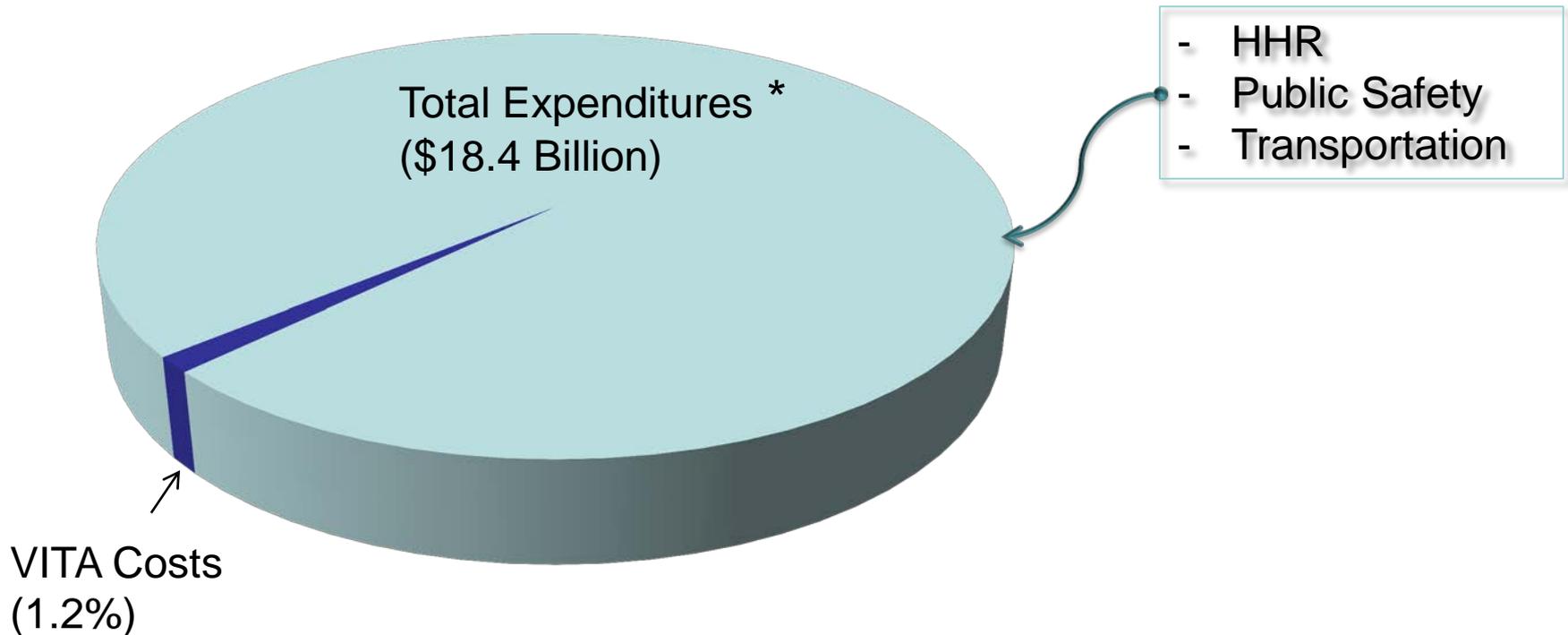


Agency Service Demands Drive IT Costs





VITA Costs Are Typically 2% of Budgets



Sources: Commonwealth Data Point, VITA

* Top 3 Secretariats account for 74% of VITA invoices



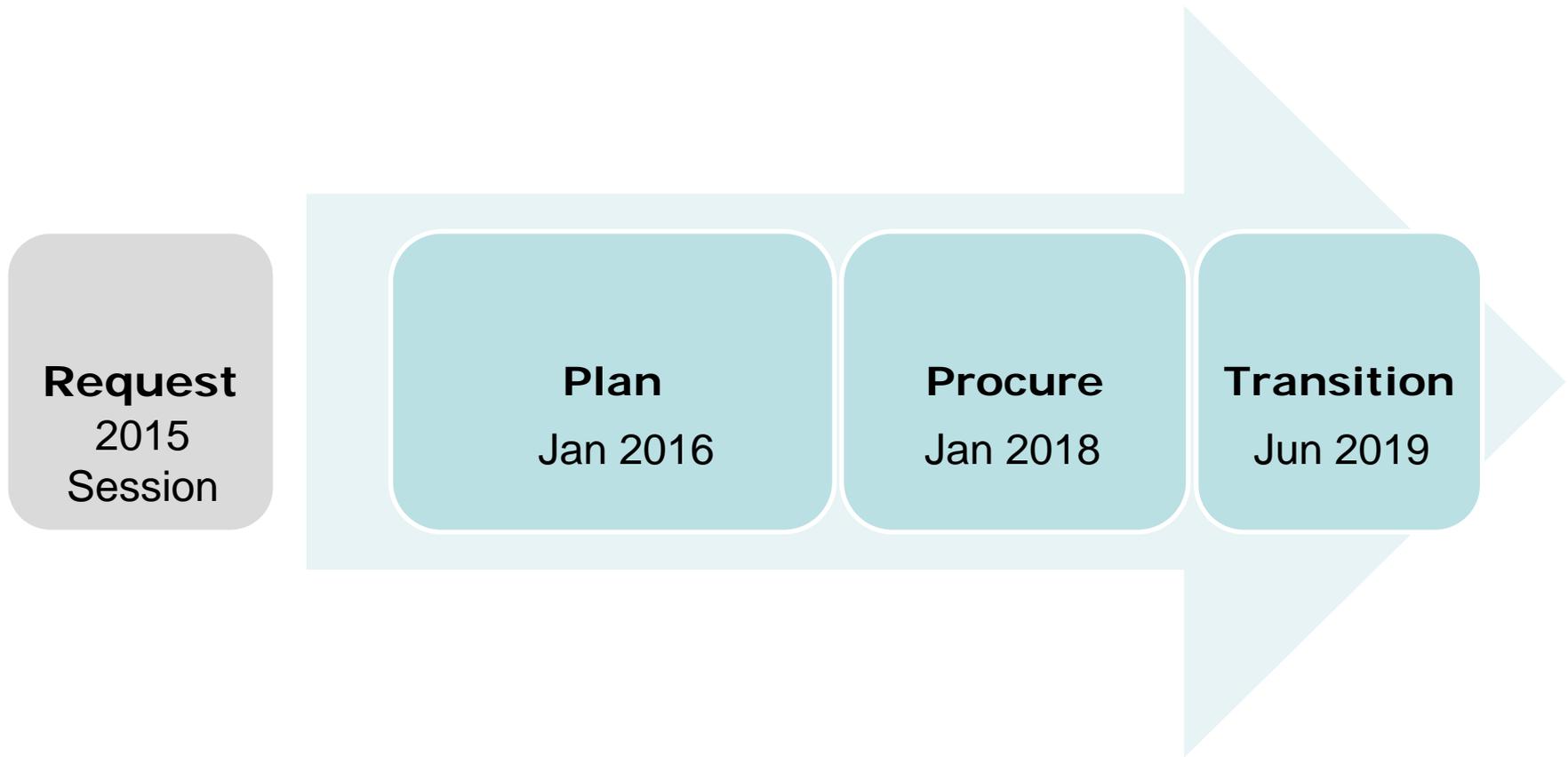
VITA Costs Primary for Vendor Payments



- 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





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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