



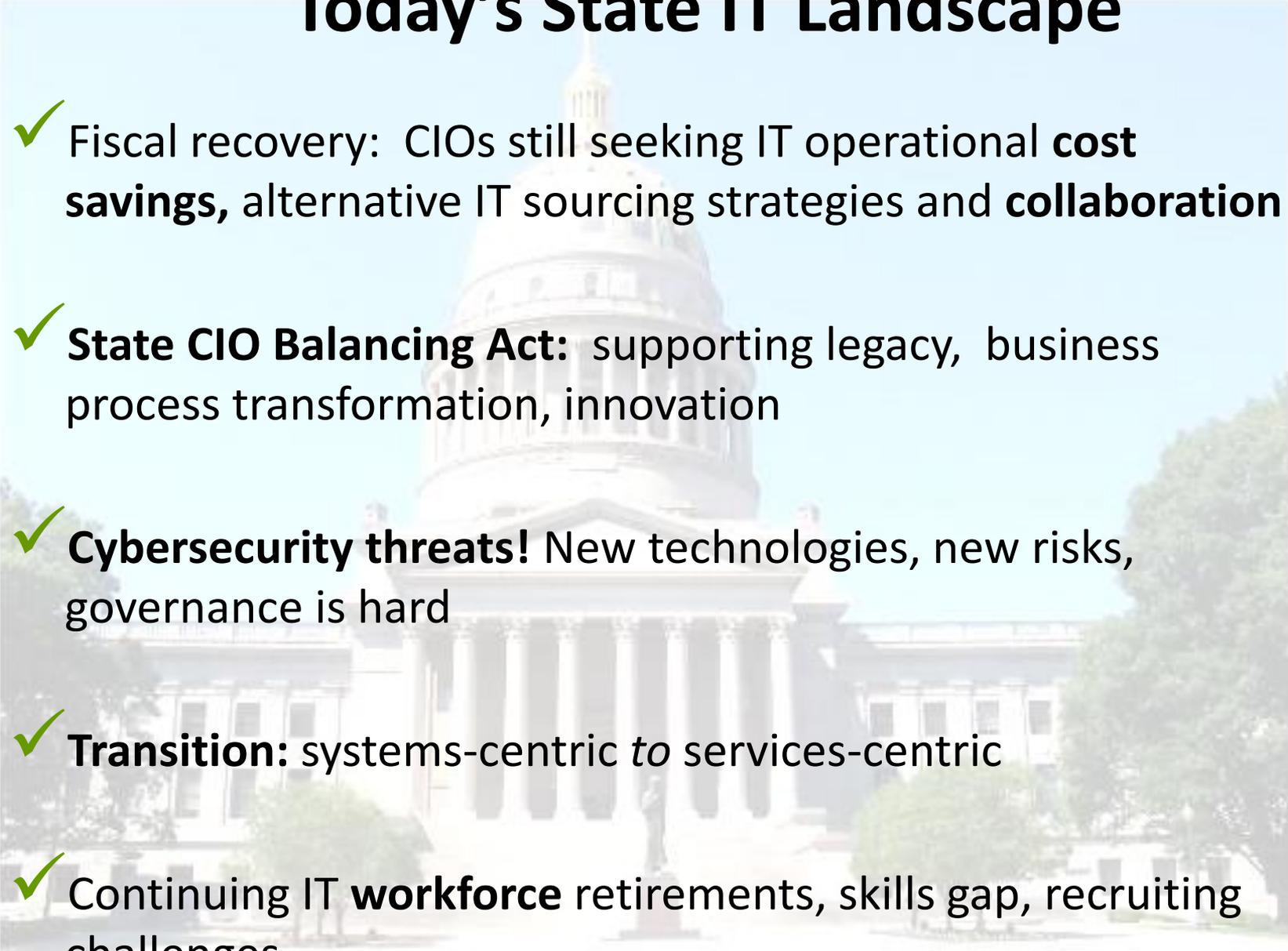
State of the States: Priorities, Trends and Issues

State of Georgia

March 19, 2014

Doug Robinson, Executive Director
National Association of State Chief Information Officers

Today's State IT Landscape



- ✓ Fiscal recovery: CIOs still seeking IT operational **cost savings**, alternative IT sourcing strategies and **collaboration**
- ✓ **State CIO Balancing Act:** supporting legacy, business process transformation, innovation
- ✓ **Cybersecurity threats!** New technologies, new risks, governance is hard
- ✓ **Transition:** systems-centric *to* services-centric
- ✓ Continuing IT **workforce** retirements, skills gap, recruiting challenges



5) How would you characterize your IT budget this fiscal year? (State Government Only)

18% A. Increased by 10% or more

45% B. Flat

21% C. Reduced by up to 10% or less

8% D. Reduced more than 10%

9% E. What budget?

What percentage of your state IT workforce is eligible for retirement in the next year? (State Government Only)

17% A. 10%

33% B. 20%

17% C. 30%

8% D. 40%

25% E. More than 40%



***View from the
State CIOs***

**Driving the Enterprise
Imperative**

**Balancing Legacy
and Innovation**

State CIO Priorities for 2014



1. Security



**2. Consolidation/
Optimization**



3. Cloud Services



**4. Project & Portfolio
Management**



5. Strategic IT Planning



**6. Budget and Cost
Control**



**7. Mobile Services/
Mobility**



8. Shared Services



**9. Nationwide Public
Safety Broadband
Network**



10. Health Care

IT and Solution Priorities 2014

- 1. Cloud computing:** software as a service, infrastructure, platform, storage
- 2. Security** enhancement tools
- 3. Mobile** workforce : technologies, solutions
- 4. Enterprise Resource Planning (ERP)**
- 5. Virtualization:** servers, desktop, storage, applications, data center
- 6. Legacy** application modernization/renovation
- 7. Business Intelligence (BI) and Business Analytics (BA)**
- 8. Disaster Recovery/Business Continuity**
- 9. Identity** and access management
- 10. Networking:** voice and data communications, unified



2013 ANNUAL CONFERENCE
October 13-16, 2013
Philadelphia, Pennsylvania | Philadelphia Marriott

Leading Through
Innovation and
Collaboration



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Deloitte.

18) When you woke up this morning what was your top pain point? (State CIOs only)

- 18% A. IT security threats
- 25% B. IT workforce
- 14% C. Supporting legacy environments
- 21% D. Lack of shared vision for technology
- 16% E. IT procurement process
- 7% F. No pain, no gain

CIOs seeking enterprise approaches
and solutions - governance

Cybersecurity requires governance
and investment

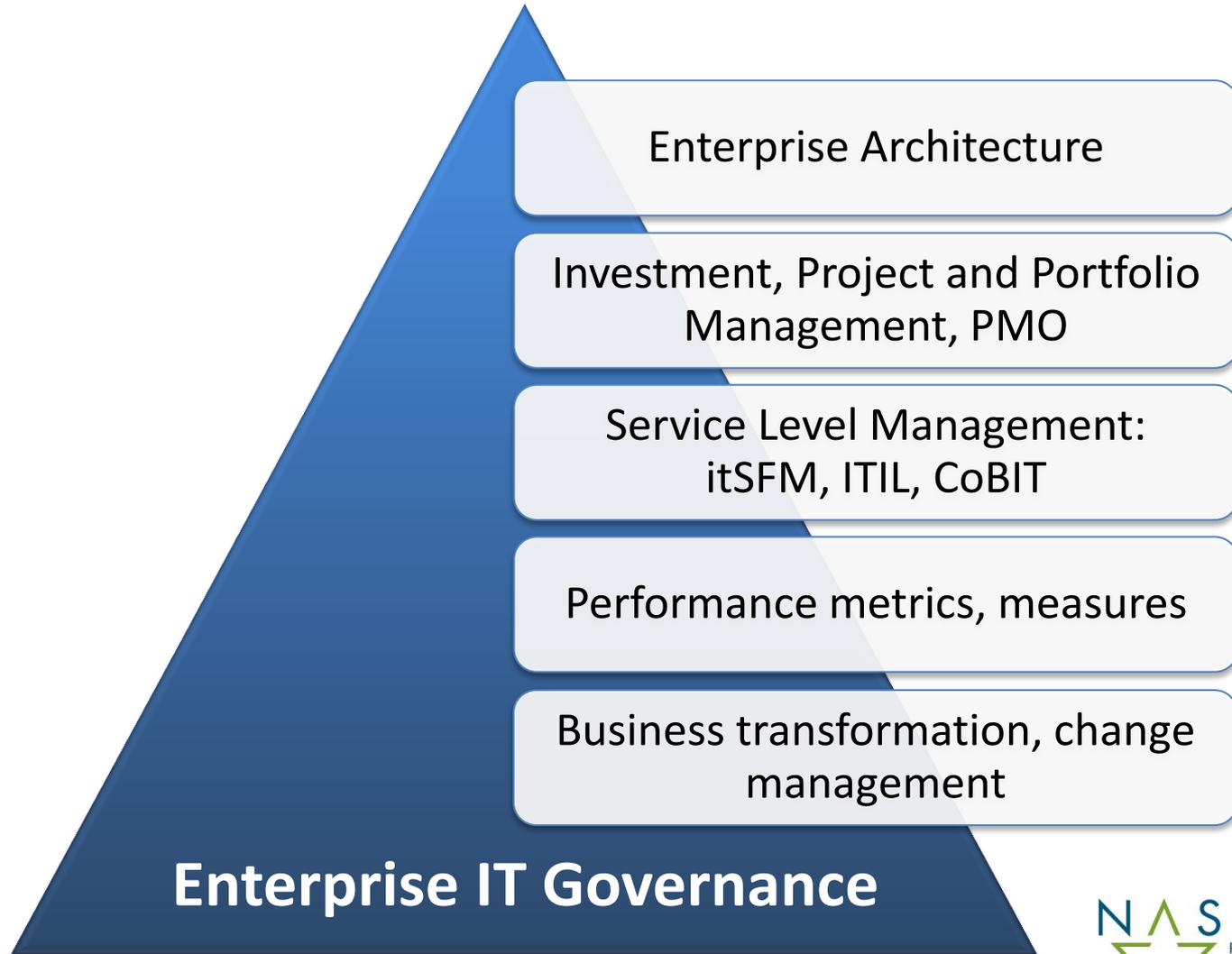
Outsourcing and the use of shared
services models increasing

Consolidation and cloud services
growing

Dissatisfied with IT procurement



Growing Maturity: IT Governance, Frameworks and Business Disciplines



Governance: IT as Strategic Asset

- What decisions must we make to ensure appropriate investment, management and use of IT?
- Who should make these decisions?
- How will we make and monitor these decisions?

Strong IT governance is even more important when resources are constrained. Critical to appropriate IT investment, prioritization and oversight.

IT Project and Portfolio Management



Do you use a formal IT enterprise portfolio management process to support decisions regarding planned initiatives, projects, or ongoing IT services such as application support?

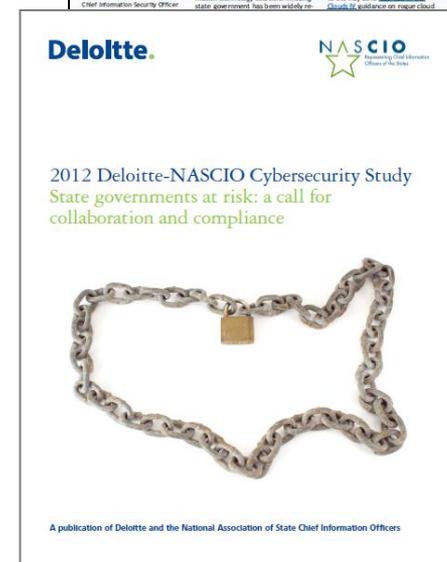


How effective are your state's practices for oversight of large IT projects?



State Governments at Risk!

- States are attractive targets – data!
- More aggressive threats – organized crime, unorganized crime, hacktivism
- Critical infrastructure protection
- Lack of broad executive support
- Governance and authority lacking
- Data on the move
- Need more training, awareness



Growing IT Security Risks in the States

Protecting legacy systems

Malicious software

Inadequate policy compliance

Mobile devices and services

Use of social media platforms

Use of personally-owned devices (BYOD) for state business

Adoption of cloud services; rogue cloud users

Foreign state-sponsored espionage

Third-party contractors and managed services

Reported Causes of Government Data Breaches

1. Unintended disclosure

2. Portable device

3. Physical loss

4. Hacking or malware

5. Insider

6. Stationary device

7. Unknown or other

Cybersecurity



Please characterize the current status of the cybersecurity program and environment in state government.

	Percent
Adopted a cybersecurity framework based on national standards and guidelines	78%
Acquired and implemented continuous vulnerability monitoring capabilities	78%
Developed security awareness training for workers and contractors	78%
Established trusted partnerships for information sharing and response	75%
Created a culture of information security in your state government	73%
Adopted a cybersecurity strategic plan	61%
Documented the effectiveness of your cybersecurity program with metrics and testing	47%
Developed a cybersecurity disruption response plan	45%
Other	6%

States are adopting a cybersecurity framework and implementing monitoring capabilities.

Cybersecurity



What major barriers does your state face in addressing cybersecurity?

	Percent
Increasing sophistication of threats	83%
Lack of adequate funding	77%
Inadequate availability of security professionals	55%
Emerging technologies	42%
Lack of visibility and influence within the enterprise	25%
Lack of support from business stakeholders	21%
Inadequate competence of security professionals	19%
Lack of clarity on mandate, roles and responsibilities	13%
Lack of legislative support	12%
Other	10%
Lack of executive support	6%

Cybersecurity Resources Often Spent on Ineffective Activities

Hacking is easy. Targeted attacks against business and government increased to 30,000 a year in 2013

More than 90% of successful penetrations of networks required only the most basic techniques

85% of breaches took to months to discover

75% of attacks use publicly known vulnerabilities in commercial software that could be prevented by regular patching

Who's Responsible for Protecting State Data?

- Chief Information Officer
- Information Security Officer
- Agency Leaders
- Data Owners
- Human Resources
- Legal
- Employees
- Third Party Contractors



Act and Adjust: A Call to Action for Governors for Cybersecurity

National Governors Association, September 26, 2013

- Establish a governance and authority structure for cybersecurity
- Conduct risk assessments and allocate resources accordingly
- Implement continuous vulnerability assessments and threat mitigation practices
- Ensure that the state complies with current security methodologies and business disciplines in cybersecurity
- Create a culture of risk awareness.

IT Consolidation: A Key Strategy for Years

To address budget issues and control operational costs

Facilities: reducing data centers, equipment, operational costs

Enterprise services: networks, email, telecommunications, imaging, wireless

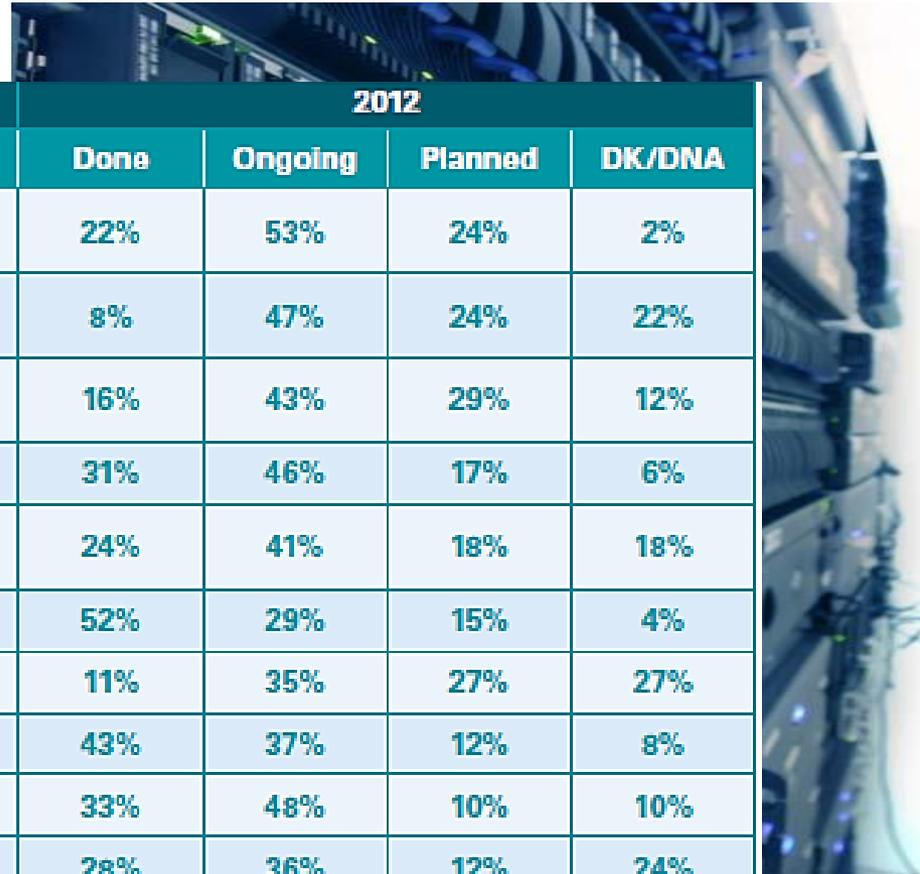
Server consolidation: reducing footprint, operations, security impact, backup/recovery

Applications: enterprise, similar business functions

IT personnel and staffing



What is the Status of IT Consolidation?



Item being consolidated	2013				2012			
	Done	Ongoing	Planned	DK/DNA	Done	Ongoing	Planned	DK/DNA
Backup/disaster recovery	28%	59%	14%	4%	22%	53%	24%	2%
Business applications	19%	48%	19%	21%	8%	47%	24%	22%
Content management	15%	45%	26%	17%	16%	43%	29%	12%
Data centers	31%	60%	17%	2%	31%	46%	17%	6%
Desktop support	29%	31%	25%	20%	24%	41%	18%	18%
Email	53%	37%	10%	6%	52%	29%	15%	4%
Imaging	6%	40%	21%	35%	11%	35%	27%	27%
Security	32%	50%	20%	6%	43%	37%	12%	8%
Servers	30%	63%	16%	4%	33%	48%	10%	10%
Staff	38%	30%	23%	15%	28%	36%	12%	24%
Storage	30%	54%	18%	4%	27%	57%	8%	8%
Telecom	56%	39%	12%	4%	62%	28%	8%	2%

Source: NASCIO-TechAmerica –Grant Thornton LLP 2013 State CIO Survey

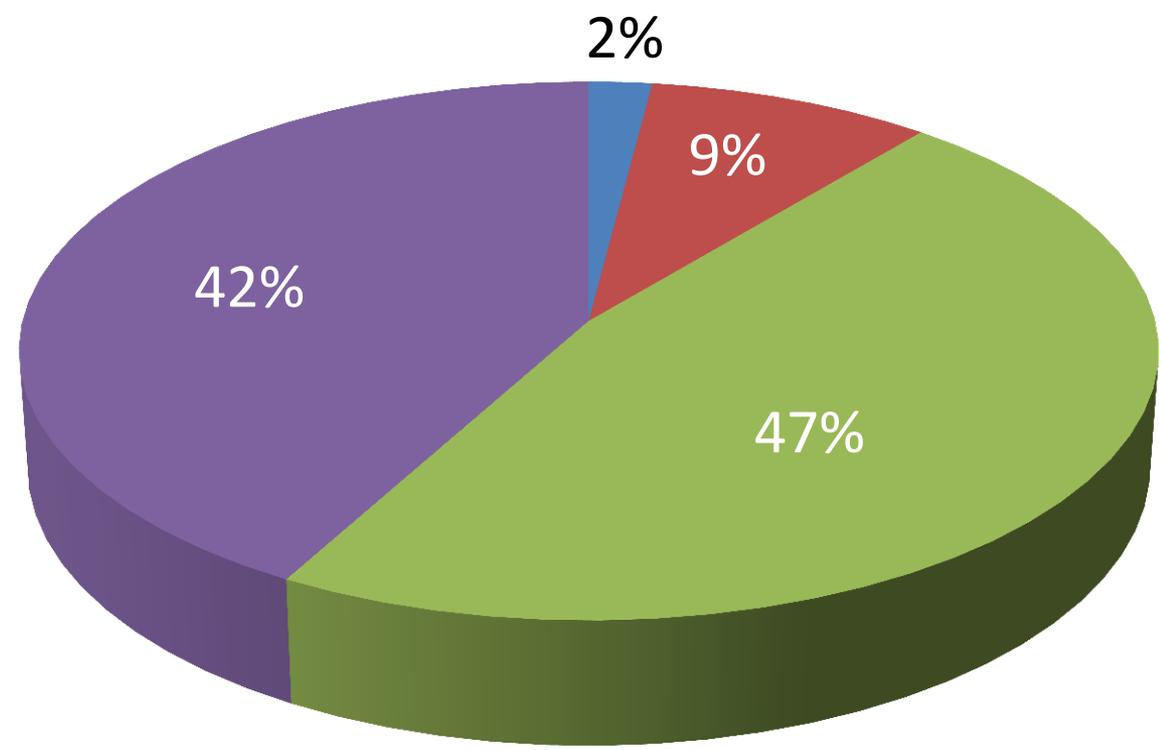
April 2013

All Aboard! Advancing Enterprise Email Consolidation in the States



Source: NASCIO-NASTD Joint Survey, April 2013

- Project has been cancelled
- Planning stage
- Project is ongoing
- Project is done



Enterprise email consolidation a top priority

Sourcing



Question	2010 Response	2013 Response
Owns and operates all state IT assets and operations	32%	29%
Owns and operates multiple data centers	58%	65%
Owns and operates a consolidated data center	55%	57%
Outsources some of its IT infrastructure operations	58%	51%
Outsources some of its IT application and services	42%	69%
Uses a managed services model for some or all IT operations	50%	65%
Uses an IT shared services model for some or all IT operations	66%	73%

The outsourcing of IT applications and the use of shared services models has increased significantly over the past few years. Expect managed services to grow.

States Moving Toward Technology as a Service

- Cost savings and efficiency
- Flexibility and scalability
- Rapid provisioning
- Better data security



Cloud services as an option

- Move from systems-centric to services-centric
- Shift spend from O&M to new services
- Support collaboration, transparency, insight

Cloud Services



What is your state's status regarding cloud services?		
	2013	2012
The state is already highly invested in cloud services	6%	15%
The state has some applications in the cloud and is considering others	68%	56%
The state is still investigating cloud services	22%	19%
The state has considered cloud services but has rejected it	2%	0
Other	2%	10%
Don't know/does not apply	0%	0

What categories of services have you migrated or do you plan to migrate to the Cloud? (select all that apply)

E-mail and collaboration	64%
Storage	48%
Geographic Information Systems	48%
Disaster recovery	44%
Program/business applications (e.g., licensing, unemployment insurance, workers' comp, etc.)	42%
Office productivity software (e.g., word processing)	37%
Digital archives/electronic records	31%
Citizen relationship management	25%
Open Data	25%
Enterprise Resource Planning	23%
Imaging	15%
Other	15%

Business objectives

Governance

Acquisition strategy

Jurisdictional issues

Security and privacy concerns

Policy and legal issues

Exit strategy



Cloud Services



How has your state procured third-party cloud services?

	2012	2013
Used an existing procurement vehicle not specifically designed for cloud services	65%	65%
Created a specific procurement vehicle for cloud services	44%	47%
Leveraged cloud services procurement vehicles created by multijurisdictional consortia	15%	31%
Leveraged cloud services procurement vehicles created by the federal government	6%	16%

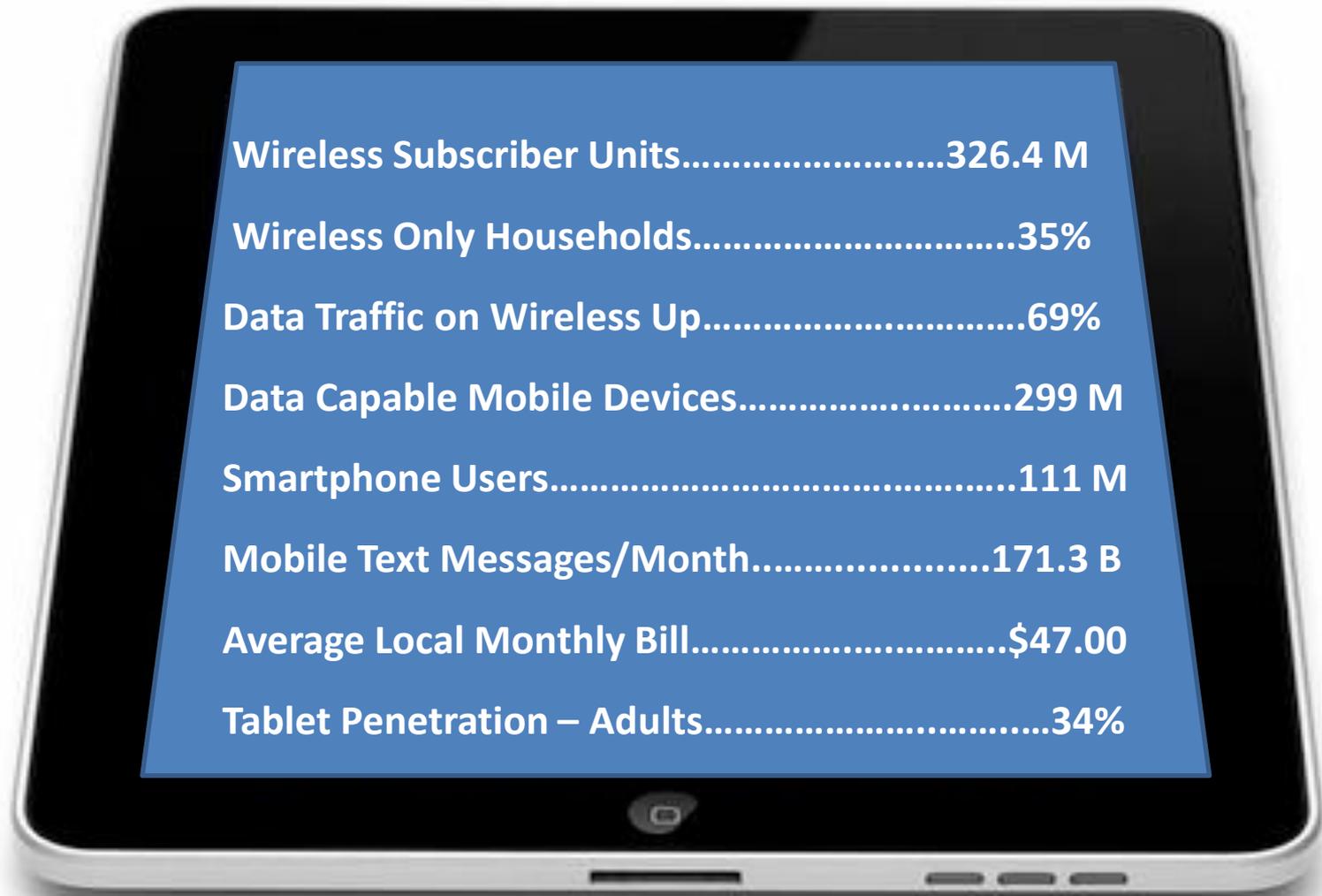


Because of state procurement challenges, expect continued growth in multistate and cooperative purchasing options in 2014.

A close-up photograph of a person's hands holding a white tablet horizontally. The person is wearing a light blue button-down shirt. The word "Mobile" is overlaid in white text in the center of the image.

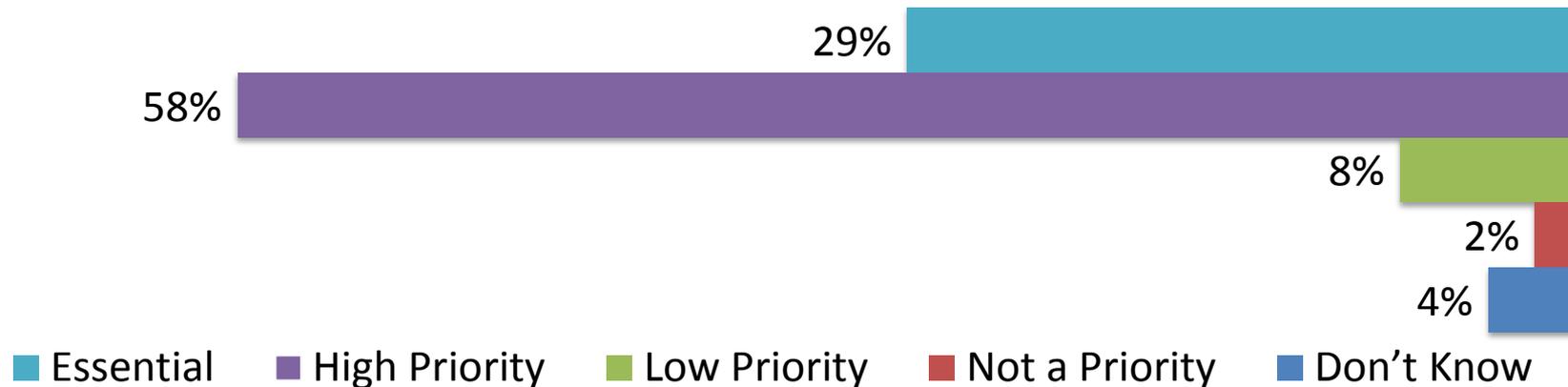
Mobile

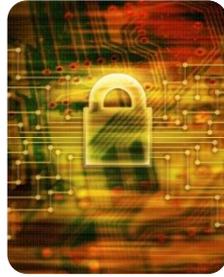
By the Numbers: Mobile Explosion in the U.S.





Within the state CIO's strategic agenda and IT operational plans, how would you characterize mobile devices and applications?





Direction
strategic
or ad
hoc?
Policy?

Managing
mobile
devices?
MDM?
BYOD?

Security
and
privacy

Managing
business
and end-
users

Lack of
technical
expertise:
apps,
security

Native
apps, web
or both?

Legal
Issues?
Terms of
Service
from apps
stores?

Considerations: Productivity, Data Sharing, Citizen Services, Mobile Apps, BYOD



How is your state managing mobility?

	2012	2013
Totally fragmented and uncoordinated	12%	10%
A few coordinated government-wide projects and initiatives, but mostly fragmented efforts	46%	49%
Mostly coordinated government-wide projects and initiatives, a few fragmented efforts	32%	37%
All mobility projects well-coordinated government-wide	6%	0%
Don't know/does not apply	4%	4%

What's Trending in States...

- Continued cybersecurity threats, data breaches, inadequate state response, NIST Framework
- More cloud services deployed – private, managed and outsourced. Public and multi-tenant?
- Focus on project/portfolio management discipline
- Open Data: museum to marketplace
- Innovation – CIO strategy and investment
- Analytics: Do You Think or Do You Know?
- More collaboration on services
- Innovation in IT workforce strategies



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