The State of Cities & Counties:
Issues and Trends
2015 and Beyond....

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Executive Director, Public Technology Institute
and
Associate Professor of Practice
Rutgers University School of Public Affairs & Administration
Who is PTI?

- Nonprofit 501 (C) 3 organization
- 40+ years of service to local government
- Features best practices, research, awards & recognition
- Is financially independent – dues and grants supported
- Is people-driven on technology matters
- Has the best & brightest technology leader network
- Affiliated with Rutgers University School of Public Affairs & Administration
How PTI Can Help

1. Professional Development
   - Annual Technology Leadership Conference
   - Annual Leadership Retreat for Senior Level Technology Executives
   - Hot-Topic Webinars
   - Ongoing Technology Research Council & Forum Meetings
   - Leading-Edge Topical and Regional Seminars
   - CIO Certification
   - Action Research and Peer Networking
   - Opportunities to Contribute Chapters to Thought-leadership Book Series

2. Awards & Recognition
   - Annual Technology Solutions Awards
   - Annual Citizen-Engaged Community Designation
   - Annual Web 2.0 and Civic Media Award
   - Innovation Lab Designation
   - PTI Fellows Program
   - Opportunity to Spotlight Jurisdictional Solutions in PTI Publications
   - Promotion of Initiatives in National & Technology Publications
   - Member Spotlight in PTI Member E-newsletter and PTI Website

3. Organizational Benefits
   - Unbiased Advocate for Technology Development and Deployment
   - Connect with Peers via Discussion Forums
   - Bridge Between Technology Industry and Local Governments
   - Receive the Latest Technology News and Industry Trends
   - Increased Exposure to Funding Opportunities
   - Incentives for Participating in Member-Get-A-Member Program
   - Group Discounts on PTI Registration Fees
   - Fill Key Technology Positions Through PublicTechjobs.com
   - Discounts on PTI Registration Fees

4. Consulting & Advisory Services
   - Peer-to-Peer Exchanges Focusing on:
     - Technology Planning Assessment and Evaluation Advisory Services
     - Project and Program Management
     - Consolidation Resource Planning
     - Inter-jurisdictional Technology Planning
     - Emergency Communications/Interoperability
     - Environmental and Energy Services
     - Helping Local Governments Tackle Environmental and Energy Challenges
     - RFP Assessment/Evaluation Services

5. Information Network
   - Educational and Information Webinars
   - Council/Forum Meetings
   - Council/Forum Listservs and Archived Discussions
   - Access to Member Only Information on PTI.ORG
   - National and Hot Topic Surveys
   - Discounts on PTI Publications
   - Free E-Newsletters and Electronic Updates
About PTI

1. Webinars (20+ a year)
2. Awards and Recognition Program
3. Relations with National Media
4. Training & Development
5. Research
6. Networking Opportunities
7. Technology Assessment Services
8. Pilot; Proof of Concept Projects
9. Seminars & Summits
10. International Programs and Affiliations
## PTI 2015 “Ins and Outs”

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2015 Law Enforcement Technology Priorities Survey

Ownership of IT development in law enforcement agencies

- (56%) Police/Public Safety IT Dept.
- (52%) City/County IT Dept.

Over 400 local law enforcement officials from across the US contributed to the survey, conducted by Public Technology Institute.

Tech Priorities

- (62.3%) Body-worn cameras
- (52.6%) Radio communications
- (46.3%) Mobile data
- (46.3%) Smart devices

Do you fully utilize mobile technology, including integration with CAD and other tools, via officer smartphone?

- (17%) Yes, all officers have mobile tech
- (10%) Yes, but only some officers use mobile tech
- (18%) No, but we’re planning for it
- (55%) No plans yet

Does your agency utilize body-worn cameras?

- (22%) Yes, all officers
- (12%) Yes, some officers
- (35%) No, but planning to
- (31%) No plans yet

Budgets and spending levels since 2014:

- (48%) stayed the same
- (32%) increased
- (20%) decreased
Top 10 - 2015 Priority Strategies
Cybersecurity Ranks as #1 Technology Priority for Cities and Counties in 2015

1. Cybersecurity
2. Budget and Cost Control
3. Disaster Recovery/Business Continuity
4. Strategic Technology Planning
5. Consolidation/Optimization
6. Mobile Services/Mobility/Enterprise Mobility
7. Cloud Solutions
8. Government Applications
9. Project and Portfolio Management
10. Broadband/Wireless Connectivity

Survey of IT executives conducted January 2015
Top 5 - 2014 Priority Strategies, Management Processes and Solutions
Survey Data

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Available Now...In Print & Kindle
Amazon.com

Published by Public Technology Institute

SEVEN TRENDS
THAT WILL TRANSFORM LOCAL GOVERNMENT THROUGH TECHNOLOGY

Alan R. Shark, D.P.A.
A Different Take......

Published by Public Technology Institute

Ten TRENDS
THAT WILL TRANSFORM LOCAL GOVERNMENT THROUGH TECHNOLOGY

Alan R. Shark
The Seven Trends that will Transform Government Through Technology

1. Rethinking the use and deployment of technology.
2. Technology Leadership – Who Decides?
3. Cloud-Based Solutions
5. Social and Civic Media.
The Ten Trends that will Transform Government Through Technology

1. Rethinking the use and deployment of technology.
2. Technology Leadership – Who Decides?
3. Cloud-Based Solutions.
5. Social and Civic Media.
7. Big Data and Data Analytics.
8. Knowledge Management.
9. GIS Enterprise Solutions.
1: Rethinking Technology

- Projecting flat to decrease in spending
- Less discretionary funds, staff & resources
- Need to do *much* more with *much* less
- Consumerization of IT
- Rethinking Infrastructure
- Performance management & measurement tools now critical
- The Human Element
- Saving Green and going Green
Coming to Terms......

BYOB (bring your own bottle)

BYOD (bring your own device)

BYOT (bring your own technology)
Elements of Consumerization

✓ Powerful devices (by any standard)
✓ Stable platforms
✓ Abundance of applications (apps)
✓ Ease-of-use
✓ Feature-rich
✓ User configurable
✓ Relatively inexpensive
✓ Off the shelve convenience
The “Retirement Boom” & Knowledge Management....
2. Technology Leadership: Who Decides?

- Emerging CIO role
- CIO Relevance
- Need for high-level champions
- Leading Innovation
- IT governance revisited (centralization vs. decentralization)
Today’s CIO........
The CIO Leader must.....

• Be a technologist – not a technician
• Be a leader – not a manager or dictator
• Be a business-minded person – not an accountant
• Be proactive – not reactive
• Be a diplomat – not a politician
The New CIO
Must evolve into the “Chief Innovation Officer”!
3. **Cloud-Based Solutions**

- More than simple Definitions
- Virtualization
- Risk Management
- Cloud Computing
- Hybrid Solutions
- Renting vs. Owning
- Storm Clouds
The Subtle Shift to Cloud Computing

Owning Data & Infrastructure

Owning Data & Managing Infrastructure

- Internal applications
- Public safety & Public works
- FirstNet
- Intelligent transportation
- Greater use of video conferencing & training; telepresence.
- E-government to M-government
Mobility......

- Traffic
- Crime prevention/reporting
- I-Witness News
- E-Vote
- Public Opinion
- Weather & Disaster Alerts
- Travel Information/Possibilities
- Shopping
- Economic Development
- E-Health
- Local government information
- Web 2.0 & 3.0
- Social Equity
- Accessibility
The Latest Transformative Device – the Tablet
5. Social Networking – Beyond E-Government Takes Hold

- Web 2.0 & 3.0
- Greater public interface
- Mobile Apps
- On-line voting?
- Instant information & instant misinformation
THIS IS THE WEB.
The Content Corner: Harness the Power of User-Generated Content
• 2015, Apple celebrates 100 billionth App Download. (1.6 million+ Apps).
• 2013, 75% of all app downloads were for Android devices. 1.5 million + apps available.
• Found at the Apple Apps Store: The White House, FEMA, USA Jobs, Federal Reserve, NASA, IRS, EPA, etc.
If You See Something, Tweet Something

August 16, 2010

“A lot has been written about the potential for social media to enable crime, but what about going in the other direction?,” said Erik Sass on The Social Graf.

People know where you are at all times (and when you’re not home) with GPS-enabled applications, like Twitter and Foursquare.

But, thanks to a tweet from a Red Line commuter, Boston’s MBTA Transit Police are using social media to
See Something Send Something™

See Something Send Something is the preeminent nationwide suspicious activity reporting (SAR) tool for citizens to help in the fight against terrorism. See Something Send Something has information to educate you on what to look for and when to submit suspicious activity reports along with how to receive important alerts. The SAR tool connects you to a nationwide network of Intelligence Centers by routing tips to the correct center for analysis.

Learn what to look for, stay informed, and act on your intuition with the official See Something Send Something app. For situations requiring an immediate response always call 911 or local police directly.

Download for Apple iOS devices

Download for Android devices
Federal Government Mobile Apps Directory

Looking for government information and services optimized for your smart phone? Find government native apps, hybrid apps, responsive sites, and mobile websites that offer official information and services in the palm of your hand.

Are you interested in using the API driving the information on this page? Check out our API documentation on GitHub.

App Stores for Government

Apple Store for Government

The Apple Store for Government offers powerful desktop and portable computer solutions at special prices for government agencies and employees.

1-877-41-APPLE FREE
Underlying Issues of Consumerization of Technology – Video the Killer App

I can see you now!!!

Cisco
Neighborhood Watch.....
The New Mantra....

“If you see something say something!”

To, or in addition to:

“If you see something – send something”!

Source: Shark, 2010
Social Media Aids Real-Time Situational Awareness.....
It’s Time to Re-Think IT Governance and Technology Leadership!

Who is in charge?

What are the new skill-sets needed?

Where are the barriers
Barriers (Firewalls) to Innovative IT Governance?

Public Safety IT

City or County IT Support
Public Safety Communication Patterns Using Web 2.0

Twitter → P.S. Web Portal → Facebook → YouTube → Reverse 911™
Public Safety Communication Patterns Using Web 2.0

- Twitter
- P.S. Web Portal
- Facebook
- YouTube
- Reverse 911™

Mobile Apps, Videos, Text, Audio, etc
Crime Reports App™
Public Safety Apps & Challenges

1. How will 911 be able to handle *in-bound* personal video calls, live feeds, and text messages?
2. Should we wait for NG9-1-1??
3. How will this information be processed, indexed and stored?
4. What new training will be required?
5. What new types of equipment has to be purchased?
6. What new polices, laws, and procedures need to be created?
7. How can we best manage citizen expectations?
8. What is the cost both in terms of time and staff?
9. How will this change IT governance?
E-Government and Digital Services
E-Government

- Apps
- Social Media
- Web
- Phone
- Open Data
- 311

E-government
Smarter, Leaner, Faster Government
Better Decisions

Mobile + Web + Integration

Smarter + Leaner + Faster

City of Sacramento 311 Mobile
6. Regionalism/Shared Services as a Necessity not a Luxury

- Pressure to work with other jurisdictions
- Regional datacenters
- Regional communication systems
- Regional Budgets (?)
- Regional IT staffing (?)
Typical Local Government Support

- IT Infrastructure
- Finance
- Public Safety
- Transportation
- GIS
- Public Works/Facilities
- Health Care
Other Areas of IT Activities

- Schools
- Courts/Justice
- Utilities
- Libraries
- Election
7. Protecting the Enterprise: Energy Assurance, Network & Cyber Security

- Energy Assurance Plans
- Exterior threat prevention
- Internal Threat prevention
- Enlightened redundancy
- Training & certifications
- Security Audits
Anthem hack exposes data on 80 million; experts warn of identity theft
22 Million Affected by OPM Hack, Officials Say

By MIKE LEVINE and JACK DATE • Jul 9, 2015, 3:17 PM ET
Key Point:

• If Target or Home Depot is breached one can simply go to another store.

• If a State or local government is breached one can’t simply shop (move) to another location!

• Worse – state and local governments store and process far more sensitive information!
RANSOMWARE & CYBER EXTORTION: COMPUTERS UNDER SIEGE
Ransomware: How Hackers Are Shaking Down Police Departments

By ALYSSA NEWCOMB  •  Apr 13, 2015, 11:08 AM ET
56% of respondents to the quick poll DO NOT currently have an enterprise-wide cyber security plan. For these respondents, the resources most needed to create such a plan are:

- Human capital resources (85%)
- Financial resources (77%)
- Leadership support (54%)
- Technical expertise (39%)
PTI Quick Poll – Cyber Security

Cyber Breach Response Planning

• 67% of respondents DO NOT have a formal Cyber Breach Response Plan.
“No worries, I keep all the necessary passcodes pasted to my monitor so I don’t lose them!”

Siobhan Duncan
The 25 worst passwords of 2014: Is yours one of them?

1. password
2. 123456
3. 12345678
4. abc123
5. qwerty
6. monkey
7. letmein
8. dragon
9. 111111
10. baseball
11. iloveyou
12. trustno1
13. 1234567
Available Resources
Available Resources (Cont’d)
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