# City and County Technology and Workforce Trends

Highlights from the 2020 National Survey of Local Government Technology Executives

### **Tech Forecast 2020 Webinar**

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January 22, 2020

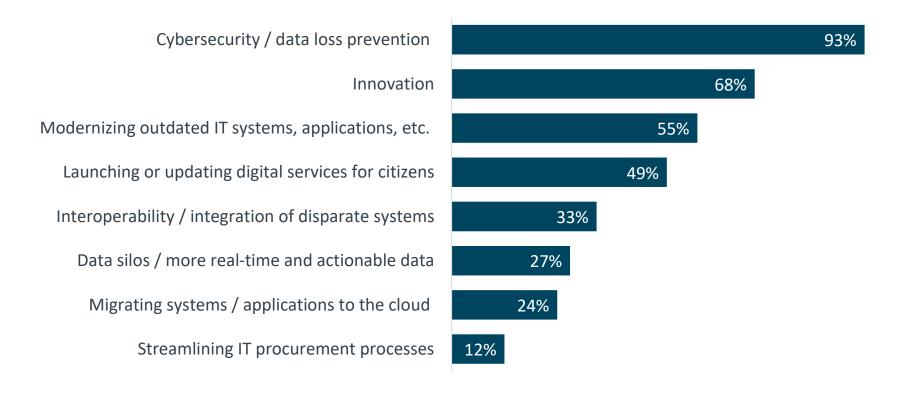


## Background

- 9<sup>th</sup> year that PTI has conducted the survey
- Intent: To provide a snapshot of the technology management issues and organization priorities of local government
- Expanded for 2020 to include new topics and areas of interest
- National survey conducted November-December 2019
- 102 city and county IT executives participated in the survey

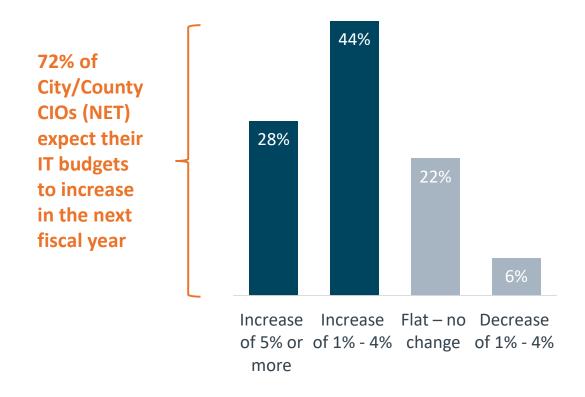


## City/County CIO Technology Priorities Over Next 2 Years





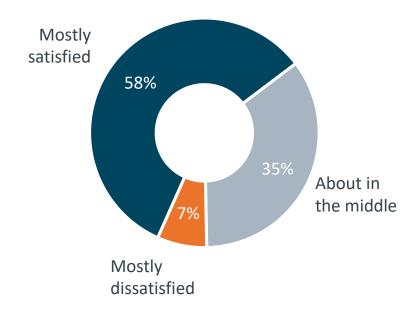
## City/County Technology Budget Expectations





## City/County CIOs Mostly Satisfied with ROI of IT

# Degree of satisfaction with ROI of IT investments



# Top reasons for dissatisfaction with ROI of IT investments

- On-going maintenance costs / support fees / upgrades
- 2. Staff time requirements to operate and maintain
- 3. Complexity / poor user experience
- 4. Upfront cost / too expensive for return
- 5. Features / capabilities don't meet needs



## City/County Cybersecurity Priorities on Many Fronts

Training for general staff, e.g security awareness

Modernizing defenses, e.g. cloud security, SIEM, etc.

Establishing a security mindset for all facets of government

Updating polices to reflect new threats, e.g. ransomware

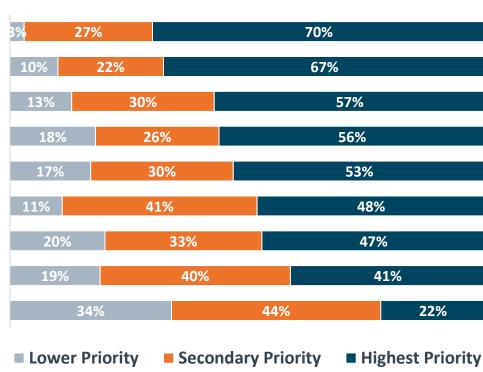
Training for IT staff, e.g. technical training

Developing or testing incident response plans

Adopting a cybersecurity framework, e.g. NIST

Deploying proactive measures, e.g. penetration testing

Deploying next-gen security, e.g. Al-enabled analytics, etc.





## Training and Professional Development

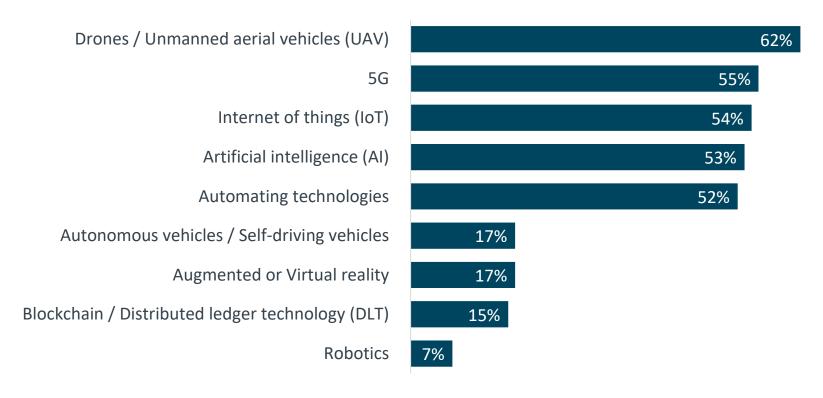
### Wish list for training at CIO's agency / department

#1	More training on emerging technology areas
#2	More training on core areas, e.g. infrastructure, systems, data, etc.
#3	More cross-training to better understand government operations
#4	More training on project management, agile design, user-centered design, etc.
#5	More leadership training for managers
#6	More soft skills training
#7	More simulations / real-world training scenarios



## **Emerging Technologies Start to Impact Cities/Counties**

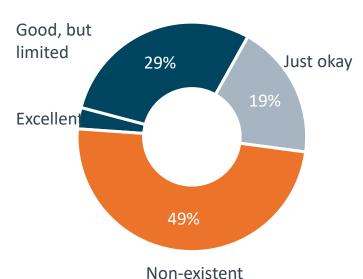
Technologies in some phase of adoption and/or on the radar of city/county CIOs





# Potential Opportunities for Further Collaboration Between City/County CIOs and State CIOs?

# Rating of jurisdiction's relationship with the state CIO



#### Top cited collaboration opportunities

83%	Cybersecurity assistance / alignment of cybersecurity strategies	
58%	Procurement / purchasing and acquisition	
56%	Shared services / managed services	
52%	Collaboration opportunities	
39%	Smart city / innovation / emerging tech	
21%	Cloud / data center	



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# In Addition to the Topics Just Presented the Survey Explores:

- IT Procurement
- Digital Service Delivery
- Staffing
- Budgeting
- Smart Cities and Counties
- Cloud Strategies
- Managed Services



#### **Smart City/County Ecosystem:**

A "deeper dive" into the usage and security needs and issues, and how to develop (or promote the need with elected leaders) a solid foundation for the ecosystem. Right now, many local governments are experiencing that individual departments are "doing their own thing" versus a city/county-wide approach or strategy.



- How do IT executives manage IoT?
- ➤ More on AI where is it headed, and can local governments develop a roadmap to implement AI within the organization and as a service delivery option.
- ➤ Managing IT Compliance Policy and Privacy: This should be considered a priority and not an after-thought for IT executives.



- ➤ **Blockchain** What is the latest and ID examples of how local governments are using.
- ➤ The Maturity Model of IT: Not every IT department is the same. How can local government IT departments benchmark each other?
- Regional approaches to IT operations and service delivery for IT executives to explore?



- Skillsets that IT executives are looking for in their staff. The "soft skills" are often lacking.
- > Innovative approaches to attracting and retaining IT talent.
- > IT/project/department collaboration tools.
- > The latest with the managed services concept of IT.



### "Ins and Outs 2019 - 2020"

OUT	IN
1. Cyber Security as a concern	Cyber Security as a crisis
2. Perimeter-Based Security Focus	Holistic Active Monitoring and Response Systems
3. Smart Applications	Smart Government
4. Database transactions	Blockchain
5. Uber/Lyft	Bikes/Scooters/Autonomous vehicles
6. Smart software	Artificial Intelligence (AI)
7. Robotics	Robots/Bots
8. Innovation	Change Management
9. Virtual & Augmented Reality	Mixed Reality
10. Hiring IT Staff (internal)	Managing IT staff (external)



### **Additional PTI Research Resources**

Weekly email scan of technology news



Emails from PTI on upcoming events, new research, webinars, etc.





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