Workforce Disrupted

Today's technology office has fewer lifers than ever before. What should your new team look like?

Civic Tech Reimagined
A look at an IT shop remodeled, startup-style.

Radical Restructuring
Does Holacracy have a place in government?

Partnering Up
Chicago taps private sector data expertise.

Today's technology office has fewer lifers than ever before. What should your new team look like?
A T&T security experts analyze more than 310 billion flow records each day for anomalies that indicate malicious activity. It’s what makes us uniquely qualified to help state and local government agencies address the security challenges they face. Our proactive network-based approach to managed security delivers some of today’s most powerful weapons to combat cyber security attacks - helping to safeguard all the elements of your IP infrastructure. To learn more, download the CIO Security Guide at att.com/govsecurity.

When managing security in an all-IP network, it helps to see the big picture.

AT&T security experts analyze more than 310 billion flow records each day for anomalies that indicate malicious activity. It’s what makes us uniquely qualified to help state and local government agencies address the security challenges they face. Our proactive network-based approach to managed security delivers some of today’s most powerful weapons to combat cyber security attacks - helping to safeguard all the elements of your IP infrastructure. To learn more, download the CIO Security Guide at att.com/govsecurity.
Is It Time to Fire the Boss?
Although Holacracy is still relatively untested in the public sector, it could be worth rethinking how your tech agency operates.
By Dustin Haisler and Tim Howell

Teaming Up for Talent
A partnership helps Chicago leverage private-sector data analytics expertise.
By Adam Stone

A Shared Recovery
CIO Debbie Cotton explains how shared services represent the future of IT in Arizona’s capital city.
By Eyragon Eidam

Spring 2016

Workforce Disrupted
The career public servant is a concept nearing extinction. Here’s how CIOs are preparing for what’s next.
By Steve Towns

Contents
Connecting with citizens is more important and more complicated than ever before. Mobile devices, social platforms and other technologies have expanded engagement options beyond traditional meetings. Our latest Public CIO Special Report helps you make sense of it all.
To some degree, every generation is maligned by those that came before. While not universal, today’s (and yesterday’s) youth are often sidelined, minimized by descriptors like “lazy” and “entitled.” Depending on your perspective and, maybe more importantly, your age, you either entirely agree or are completely offended.

While few would argue that the Greatest Generation, having endured both the Great Depression and the second World War, are deserving of their moniker, millennials often aren’t given the same respect. But is there something to this? A great deal has been written advancing both viewpoints, but much of it seems to poke substantial holes in the idea that the workforce’s largest cohort (more than one in three people in the American workforce is now a millennial, according to Pew Research) isn’t living up to its potential.

Millennials think entrepreneurially, and they’re not afraid to fail. Millennial Magazine says 60 percent of this generation — roughly defined as those born between 1980 and 2000 — consider themselves to be entrepreneurs. They’re less inclined to crave stability than their predecessors and therefore more likely to be turned off by the prospect of a 30-year gig with one employer. They are more diverse than ever before, and though they may not be at one job for long, they want to make an impact and feel their work has made a difference at the end of the day.

What goes without saying of millennials is their status as digital natives, which offers all kinds of advantages to today’s public-sector IT shop. Even those without an IT-centered education can be valuable assets on technology projects. Sanjeev Agrawal, founder and chief executive of Collegefeed and former global head of product marketing at Google, summed it up this way, writing for Forbes: “It’s the way millennials think about technology, and their relationship with it, that is changing everything.”

As you’ll see in the pages that follow, public CIOs are embracing the fact that their workforce is starting to transform, and millennials are a big part of that. While government isn’t traditionally known for flexibility, the silver tsunami and changing demographics are forcing the issue. We’ve talked to several technology chiefs in this issue who are planning smartly and staffing for the future, today.

Austin, Texas, CIO Stephen Ellis sees flexible sourcing as part of the solution. A workforce split between full-time, temporary and contract employees better prepares the city for the normal ebbs and flows of its workload. A background outside of pure IT is increasingly attractive in a prospective employee too. Minnesota CIO Tom Baden explains that cloud solutions offer business-minded employees a chance to make an impact in IT.

The Washington state technology office is experimenting with a more horizontally oriented workplace structure called Holacracy. Implemented at Zappos by CEO Tony Hsieh, it breaks down traditional organizational boundaries, and advocates say it fosters greater adaptability in the face of change.

The common denominator running through these approaches is an openness to considering something new — new ideas from new people. The leaders in these pages show that adopting that mentality can position their agencies for success.

By Noelle Knell
By Steve Towns

The career public servant is a concept nearing extinction. Here’s how CIOs are preparing for what’s next.
These days, IT employees might have a background in theater instead of computer science. They’re more likely than ever to be part-timers and short-timers instead of career public servants. Some of them are even configuring networks on a phone rather than a PC.

What, exactly, is going on here?

These are all signs of the new normal for government IT departments. Public CIOs and their staffs face disruption from almost every angle – the long-anticipated baby-boomer retirement wave is beginning to crest, younger employees have new ideas about how and where they want to work, and rapidly evolving technology is rewriting the resume of typical tech workers.

Those forces are driving CIOs to rethink everything from how they attract talent and what type of talent they really need, to their ratio of full-time to temporary employees.

“It’s a major challenge,” said Ohio CIO Stu Davis, of coping with both the state’s evolving IT needs and a changing market for technology employees. Davis was one of a dozen state and local CIOs interviewed last year about the future of the government IT department. Nearly all of them see major changes on the horizon for public-sector IT workforces. Here are some of the big ones.

You’ll have fewer career public servants.

The days of the traditional government IT shop staffed with lifelong public servants may be numbered. As baby boomers exit the workforce, these organizations are being rebuilt to more easily expand and contract based on workload.

In Austin, Texas, the concept is called “flexible sourcing.” As older workers head out the door, CIO Stephen Elkins said he’s evolving his staff from almost 100 percent full-time employees (FTEs) to a mix of full-time staff members, temporary workers and contractors. “We want to shift to maybe 70 to 80 percent FTEs and 20 to 30 percent other,” he said. The change is designed to help the city IT organization respond more nimbly to a fluctuating workload and evolving customer demands.

Elkins is one of several public CIOs who say they are adjusting their ratio of full-time to part-time staff.

A similar move is underway in Los Angeles County, where CIO Rich Sanchez also expects to rely more heavily on contract resources. “We’ll approach that probably by developing project-based initiatives so vendors can bid on the development of a project and maybe do some training before they turn the project over to our own resources,” he said. Although the county workforce will likely get smaller, he added, it’ll also get smarter.

To streamline that process, the county is developing a master services agreement that will prequalify vendors for this type of work. “We’re hoping to cut off quite a bit of time because terms and conditions will already be established,” Sanchez said. “It won’t be the traditional 18-month RFP.”

Most CIOs interviewed acknowledged the importance of maintaining a highly skilled core group of full-time government employees, even if the size of that group ultimately shrinks. But some said even full-timers may not have traditional long-term government careers. Instead, the new generation of workers may move between jobs more frequently.

“I think you’ll see people come in and give us three years, then leave for the private sector, and then they may come back when they have a family and don’t want to travel so much,” said Davis.

“But we have to attract them, and we have to create a workplace that is both engaging and challenging for them.”

Platforms are driving workforce strategies.

Although governments still have more than their share of massive traditional
IT systems, more development activity is shifting to off-the-shelf and cloud-based platforms. Like their private-sector counterparts, public CIOs are embracing platforms like Salesforce to create business applications more quickly and easily. And that’s changing what IT employees do.

“Gone are the days when we’re going to have programmers starting from scratch and writing code,” said Mahesh Nattanmai, deputy CIO of New York state. “Many of us are going to use a COTS product or some other platform to build from. So we’re less of a product development shop and more of a system integration shop.”

In New York, the evolution is being accelerated by a sweeping reorganization of state IT launched a few years ago. The plan transferred more than 4,000 agency IT workers into the central Office of Information Technology Services, and the change has ramped up retirements among veteran technology staff. Nattanmai said attracting new employees with updated skills ranks among the state’s biggest challenges.

New York’s technology office is conducting an inventory of development platforms currently used by the state, and that information is shaping its talent management and retention strategies. “We’re trying to understand what our strengths are, where we need to improve and where we need to focus our training dollars,” he said.

Long Beach, Calif., also is looking to align workforce talent with a platform strategy. CIO Bryan Sastokas said the city will change platforms if necessary to match the talent that’s available to hire. “Things are changing so dramatically that you need to take a fresh look at that,” he said.

As the platform approach reduces the need for hardcore coding, CIOs are seeking employees with a mix of people skills, business savvy and tech smarts. They need staff members who can talk to customers, understand their needs and then use technology tools to create solutions.

“We used to call those people ‘business systems analysts.’ The newer terms are ‘user experience architects’ or ‘user experience designers,’” Nattanmai said. “Those are the skills we’re trying to build. Absent that, we speak IT, our customers speak non-IT and we have a big gap in the middle.”

The NYC Story

IT Commissioner Anne Roest (pictured above) faces similar staffing challenges in New York City, including an aging workforce, which she spoke about with Public CIO last December.

“We’ve got to bring a new generation up to take the place of the massive number of people we’re going to lose in the next few years,” she said. The evolutionary nature of technology only complicates hiring efforts, she added. New recruits have to know, or be willing to learn, about things like cloud computing and the Internet of Things. “We need to create an environment where people are ready to take a risk, learn something new and have the support system to in fact learn the new skills and move forward with the changing technology.”

New York City’s efforts include working with local universities as well as neighborhood-based tech hubs. “We’re opening up more opportunities for young technologists to come and work with the city — internships, fellowships — and then giving them an avenue and an understanding of how to get a good city job,” Roest said. “We want it to be the place to work in the city.”

Engagement plays a major role in keeping tech talent around for the long term. New York City hosts brown-bag-style events to get leadership in front of rank-and-file employees, in both small and large group settings. More important than holding the meetings, Roest pointed out, is proving that employee voices are heard. If employees request more support in the form of training, for example, they need to see evidence that the city is willing to deliver.

“We’re working really hard ... to make sure everyone understands that clear career path and that they have the training, tools and support they need to move forward.”

The NYC Story

IT Commissioner Anne Roest (pictured above) faces similar staffing challenges in New York City, including an aging workforce, which she spoke about with Public CIO last December.

“We’ve got to bring a new generation up to take the place of the massive number of people we’re going to lose in the next few years,” she said. The evolutionary nature of technology only complicates hiring efforts, she added. New recruits have to know, or be willing to learn, about things like cloud computing and the Internet of Things. “We need to create an environment where people are ready to take a risk, learn something new and have the support system to in fact learn the new skills and move forward with the changing technology.”

New York City’s efforts include working with local universities as well as neighborhood-based tech hubs. “We’re opening up more opportunities for young technologists to come and work with the city — internships, fellowships — and then giving them an avenue and an understanding of how to get a good city job,” Roest said. “We want it to be the place to work in the city.”

Engagement plays a major role in keeping tech talent around for the long term. New York City hosts brown-bag-style events to get leadership in front of rank-and-file employees, in both small and large group settings. More important than holding the meetings, Roest pointed out, is proving that employee voices are heard. If employees request more support in the form of training, for example, they need to see evidence that the city is willing to deliver.

“We’re working really hard ... to make sure everyone understands that clear career path and that they have the training, tools and support they need to move forward.”
New employees may come from unconventional places.

Closely related to the last trend is the notion that at least some new members of the IT department don't need traditional IT backgrounds. CIOs say new recruits are coming from agency business or program divisions — and sometimes beyond.

“Sometimes I’m asked, ‘Why would you hire someone who might have a theater background into this field?’ But it’s about engagement,” said Sastokas. “We want to be business-driven. We want to understand what our customers really want to know, and how can we engage them and not be so technical.”

The combination of lightweight development platforms and lifelong exposure to technology for many younger workers gives public CIOs more latitude to hire employees with unconventional skill sets.

“When many of us were starting out, tech was foreign,” Sastokas said. “But our children are growing up in that environment. They know this stuff. I have developers who don’t use PCs anymore. They’re going onto switches right off their phones.”

For Minnesota CIO Tom Baden, this trend presents a chance to attract existing state workers with specific business skills into IT. The state will continue to run large, mission-critical systems and hire traditional IT talent to support them, Baden said. But growing adoption of hosted platforms means workers can create solutions without needing to write code or set up servers.

“We’re looking for folks who may not have been trained in a technical space, but they have a real passion for the work they’re doing and they find themselves drawn into technology,” he said. “That’s an area where I’m seeing a positive inflow into IT.”

Since these employees come from program areas like health and human services, they have a deep understanding of end-user needs, potentially leading to more effective solutions. “Another part of this,” Baden said, “is having solid infrastructures, so the focus can be more on the solution set.”

Sastokas contends that adding unconventional employees into the IT workforce begins to reshape IT organizations themselves. As IT groups shift their focus to customer needs, core infrastructure becomes lighter and more agile, he said.

“When you hire in those areas, you’re learning from a different viewpoint, and that’s where innovation can really occur.”

But to reap the benefit of new perspectives, public CIOs must be receptive to change. That point recently was driven home to Portage County, Ohio, CIO Brian Kelley by a new hire who requested a Mac instead of the IT department’s standard-issue PC. Kelley granted the request after considering both the employee’s preference and the fact that the county likely will need Apple expertise as it adopts more of the devices in the future.

“Traditionally the answer would be ‘no,’ but you have to rethink, repack and reconsider things today,” he said. “We’re dealing with a generation of individuals who understand technology, and we need to leverage that to our benefit.”
DID YOU KNOW

37%

Of Federal employees are willing to sacrifice government security to use a personal mobile device at work, despite being aware of cybersecurity concerns.*

Lookout Mobile Threat Protection is the only mobile security solution that can anticipate and defeat the next generation of mobile threats, wherever they come from.

- Detect and remediate mobile threats such as surveillanceware, trojans, and data leakers
- Create flexible security policies for user groups, such as members of SES or employees on extended TDY
- Deploy a beautiful endpoint app that protects user privacy while securing your agency's data

* Data is based on a Lookout survey of 1,002 United States federal employees in 2015. The margin of error is 3.1 percent.
Holacracy is a new organizational structure that aims to increase agility. Although it's still relatively untested in the public sector, it could be worth rethinking how your tech agency operates.

By Dustin Haisler and Tim Howell

Is It Time to Fire the Boss?
Every day we are presented with new headlines that touch on the future of work and how things like robots, artificial intelligence and millennials will impact or disrupt industries. In most of these articles, the common denominator ushering in change is technology. But while technology itself can catalyze and accelerate change in the workplace, it is not the only thing. Often neglected are elements like collective behavior, culture, management and leadership—all of which make up a workplace's organizational structure. And interestingly enough, they are beginning to see major disruptions as well.

The traditional hierarchical organizational structure cannot keep pace in the knowledge age. That is why we see young organizations disrupting large and established organizations at an accelerating frequency. For example, only 12 percent of Fortune 500 companies from 1955 still remain on the list today. That's no coincidence.

Traditional hierarchical organizations fail to adapt and grow because politics and bureaucracy get in the way. They rely on strong leadership and flawless insight from the top down; the people making important decisions are often completely removed from the actual problem. This leads to ideas that sound good in theory but have no real-world value. There also is constant pressure to do more with less and keep up with the rapid pace of change. When organizations structure themselves around power and authority, employees try to fulfill the organization's mission, but they instead spend all their time reacting to the environment.

It's not difficult to see why the traditional organizational structure is starting to break down, but what exists now doesn't have to be the reality. And it's driving organizations to look for new ways to be innovative— that's where Holacracy comes into play.

Holacracy 101

Holacracy isn't the only systematic change to organizational structure, but it's getting positive traction in the private sector. Currently a few hundred companies are using it, and it's easy to see why. Holacracy provides a unique approach to distributed authority and allows employees to self-organize around the work that needs to be done. It is not a lack of structure, but instead a new way of—and different approach to—structure, and it's one that lets organizations be more agile and more rapidly adapt to change. Its emergent organizational structure adapts as business needs change. For organizations that adopt Holacracy, it will be a radical shift, but the benefits may outweigh the pain of the transition.

There are three main ways Holacracy is different from the traditional hierarchical structure:

- **Roles versus Job Descriptions:** The job description becomes obsolete in Holacracy. Instead, individuals are assigned one or more functional roles that outline their responsibilities. **Circles versus Departments:** Departments no longer exist in Holacracy. Instead, organizational structure is built around the work that needs to be accomplished. This leads to ideas that sound good in theory but have no real-world value. There also is constant pressure to do more with less and keep up with the rapid pace of change. When organizations structure themselves around power and authority, employees try to fulfill the organization's mission, but they instead spend all their time reacting to the environment.

IT'S TIME TO FIRE THE BOSS?

- **Governance versus Bureaucracy:** Managers do not exist in Holacracy. Authority is distributed and built into the governance process. Governance builds in many of the responsibilities previously controlled by managers and provides a framework where every employee can propose necessary changes. Try imagining a workplace with no managers, no job descriptions and authority that's distributed. You are probably thinking it would be utter chaos; however, this is not the case with Holacracy. Let's take a look at each of these differences in more detail.

**Roles**

First, let's start by throwing out the job description. (In most organizations it serves little purpose anyway; chances are you rarely look at your job description, and if you did, you would probably spend most of your time in the “other duties as assigned” category.) In Holacracy, this is addressed by separating roles from employees.

A rule is a specific set of responsibilities that accomplishes a set purpose. Employees can have one or more rules assigned to them, but the fact that they are separate provides some unique benefits.

First, a role can be easily moved from one person to another. Second, if additional responsibilities need to be assigned to a role, it’s handled at the role level and not the individual level. This can reduce some of the tension that comes with assigning new responsibilities. Third, if a role has a responsibility that’s no longer needed, it can be removed. This provides an accurate reflection of the work being done instead of the catch-all approach used in job descriptions.

There are three primary attributes assigned to each role:

- **Roles**
- **Circles**
- **Governance**
Holacracy in Government

The idea of using Holacracy in government is still relatively unexplored. Government agencies face some obvious barriers to adoption that private-sector companies do not — but that doesn’t mean it’s impossible to make the switch. In fact, one government agency is leading the change.

Washington Technology Solutions (WaTech) adopted Holacracy in early 2015. This project has received a lot of attention, and we are beginning to see a framework that other government agencies can use. To get an idea of how officials at the agency have approached Holacracy, we sat down with E-Government Director Michael DeAngelo, who is spearheading the experiment. Here are some takeaways from our discussion.

WaTech is the central technology department for the state of Washington. Located in an extremely competitive marketplace, officials were looking for new ways to recruit and retain IT talent — something government typically has a hard time doing because of bureaucracy, politics and the slow pace of change. They hope to adjust that by adopting Holacracy.

When the experiment began, officials had no idea what types of roadblocks they would face. Fortunately neither the legal nor labor departments could find any reason why Holacracy could not be implemented in government. That was a huge win, because nothing can squash change more quickly than legal concerns.

To ease the transition, WaTech focused on a phased approach. Officials started with an opt-in phase where those who embraced the idea participated. Then they focused on educating those employees on Holacracy. With the help of HolacracyOne LLC, they trialed Holacracy out to the phase-one participants. Officials expressed the importance of working with a coach and facilitator when implementing Holacracy — it’s a big change from a traditional hierarchical structure and something that only becomes familiar with experience.

Resources to implement Holacracy at WaTech were limited. The primary expenses were training, coaching and facilitation, followed by software to help manage governance. Both of these costs were low enough that it should not serve as a barrier to other organizations looking to adopt the structure.

The biggest struggle for WaTech during the implementation was learning to operate under Holacracy governance. The transition to governance replaces the executive- or manager-led organization. This is referred to as intelligent design. Instead, Holacracy uses evolutionary design. This is when you design the organization in response to experience and customer needs. In Holacracy, you manage the work, not the people. This is a big change from what organizations are typically used to.

Once Holacracy is up and running, the day-to-day management becomes second nature. WaTech has both governance and tactical meetings. Governance meetings address the organizational structure while tactical meetings focus on the operational issues. Tactical meetings will be familiar to many organizations, but governance will be entirely new. While that does make them difficult, WaTech believes that the benefits outweigh the challenges to making the transition.

After running under Holacracy for seven months in a controlled group, WaTech started to see some of the benefits. Currently, most of the data is anecdotal, but officials have quantified a 20 percent increase in the confidence that employees have around resolving organizational issues.

WaTech is working with Harvard Business School (HBS) on the second phase of its Holacracy transition. Through this partnership, WaTech hopes to test more conclusively whether self-organization creates different employee outcomes. HBS will conduct a study that will include both a control group and Holacracy group. The study will last one year, and HBS will gather a significant amount of data from both groups during that time.

“Regardless of how it ends for us, the fact that we got the ball rolling has really helped other governments think about a different way of organizing,” DeAngelo said.

DeAngelo provided three tips for government agencies looking at adopting the governance structure:

1. Just do it! The worst-case scenario is you go back to the way you have always done things.

2. Be careful how you talk about it. Avoid the term “self-organization” because a lot of people get hung up on the term. Instead use terminology like “self-organization” and “empowering employees.” After that, if they show further interest you can get into the actual system of Holacracy.

3. Get facilitation and coaching. This is not something you can just pick up a few books about and then go out and do.
It’s very rare that you’ll find someone who likes bureaucracy and politics. Unfortunately, those are necessary evils in a traditional organizational structure. When authority is seeded from the top down, you will always have the risk of ego, emotions and personal agendas getting in the way of progress. That is unfortunate because most people just want to do meaningful work. Accomplishing that is very difficult when you have to go through layers of authority. So instead, many people give up and only do what they are told. There has to be a better way, and maybe Holacracy is the answer.

Give it a try. What do you have to lose? Start small and collect as much data as you can. Just make sure to give it a good, honest effort. Operate completely under Holacracy in one small part of your organization — don’t pick and choose the easy stuff. Who knows, it may change the way your organization operates for the next 100 years.
made during the meeting are communicated to other circle members. Circles conduct regular governance meetings where individuals can bring up any suggested changes they have to the circle and underlying roles. Anyone can make a proposal, which can include changing roles, updating accountabilities or adding new policies to the circle. Attendance is not required by everyone in the circle, but if they are involved in the change they should attend.

**Holacracy at Zappos**

Zappos was founded in 1999 and is now one of the largest online clothing and shoe retailers in the world. Acquired by Amazon in 2009, it employs more than 1,500 people and has an annual revenue exceeding $1 billion, up from only $8.6 million in 2000. The astronomical growth that has taken place within the company is apparent.

But this growth worried CEO Tony Hsieh because he understood that as companies grow in size, bureaucracy and politics start to set in. He wanted a new way to run the company — one that would allow Zappos to stay agile and innovative in the midst of the rapid growth it was experiencing. That is when he discovered Holacracy.

Hsieh announced in December 2013 that the company would operate under the Holacracy structure in order to better navigate the challenges of rapid expansion. The company understood that not everyone would buy in to the new system, so it offered employees who chose to leave a severance option of three months. Most people will focus on the 14 percent who decided to take the severance, but Zappos understood that change is difficult. It takes a strong leader to make such a bold decision, but Hsieh knew it was necessary to make the transition successful.

Zappos started with a control group so it had a good understanding of how the system would work for the company. This is an important step for any organization looking at Holacracy. It’s still early in the story for Zappos, but given how adaptable Holacracy is, good things are likely to come. There will always be growing pains in changes as big as this one. But as Holacracy becomes fully ingrained into the company’s organizational culture, we will really begin to see its impacts.

**Resources**

Looking for more? Check out these resources for additional information on Holacracy.

**Holacracy Website**

[www.holacracy.org](http://www.holacracy.org)

Holacracy is a set of best practices created by Brian Robertson and is a registered trademark of HolacracyOne LLC. You can find numerous resources on the Holacracy website, including the Holacracy Constitution, training and events, and professional services.

**Holacracy Wiki**

[wiki.holacracy.org](http://wiki.holacracy.org)

The wiki is a great resource for finding additional information on Holacracy. Whether you are looking for frequently asked questions, definitions or just more information on how Holacracy works, this is a good place to start.

**GlassFrog Software**

[glassfrog.com](http://glassfrog.com)

GlassFrog Software is a cloud-based solution for managing a Holacracy organization. The software was designed by working directly with the creators of Holacracy and is a simple tool to keep track of your organization.

**WaTech Blog**

[spo.wa.gov/holacracy-blog](http://spo.wa.gov/holacracy-blog)

Follow Washington Technology Solutions’ experiment with Holacracy. This blog provides a front-row seat to what’s happening at the agency and an in-depth look at how the transition is going.

---

Duarte Haisler is the chief innovation officer of Public CIO’s parent company, e.Republic. Tim Howell is a former government technology and innovation guru for multiple government agencies across the state of Texas.
87% of legislators said they are interested in furthering their education around cybersecurity.
Rethinking Citizen Engagement

Your constituents are connecting in new ways. Here’s how to reach them.

A Research Report from the Center for Digital Government
Table of Contents

6 Rethinking Why and How You Engage

8 Unpacking Your Engagement Options

10 Engagement Continuum: A new concept for connecting

12 Tech Tools for Expanding Your Engagement Activities

14 Engagement Profiles: A look at real-world strategies

24 5 Reasons Why Engagement Can Be Hard

25 The Future of Engagement

© 2016 e.Republic. All Rights Reserved
100 Blue Ravine Road, Folsom, CA 95630
916.932.1300 phone | 916.932.1470 fax
Cover photo by David Kidd
Engagement at the Intersection of Tradition and Transformation

Introduction

Phoenix, the nation’s sixth largest city, has never had a mass transit system that matched its size. Automobiles and highways have been the preferred method of transportation. But that’s beginning to change. The city’s first light rail line has been a resounding success, both in ridership and its boost to the economy. Based on evidence from community feedback, however, it was clear the city was still not meeting the transit needs of its 1.4 million residents. City leadership decided to ramp up transit spending, but knew they first had to understand what residents really want when it comes to a modern mass transit system. By combining traditional city hall meetings with new technology tools, such as the network platform “mySidewalk,” the Phoenix Transportation Department was able to engage residents in an unprecedented way. The result was passage of a transportation tax package that, when combined with federal funding, will generate $31.5 billion for new transit projects.

Why was the transit initiative so successful in car-friendly Phoenix? “We reached out to parts of the community that had been silent,” said Maria Hyatt, the city’s public transit director, in an interview with Public CIO. “Technology is an incredible tool for reaching a lot of people quickly.”

Civic engagement has undergone a profound shift in recent years. Besides traditional town hall debates and printed materials, a digital version of engagement has developed where Web platforms, mobile apps and live-streaming video have pushed the process online, making it more participatory, compelling and potentially transformational. At the same time, a new kind of citizen has emerged — one who behaves differently than before. These citizens are used to engaging online with the private sector and are more distrustful of government. “Interest in civic engagement is directly proportional to the public cynicism in government,” Steven Bosacker, director of public sector innovation at Living Cities, told Public CIO. “Dissatisfaction with government is a big driver for people who say we need something new and different.”

These shifts present a dilemma for state and local governments. First, they must manage civic engagement across a continuum — from passive engagement, where citizens’ smartphones become sensors to spot traffic congestion or automatically record the location of potholes, to single-issue engagements around parks or school problems, to full-on engagement, such as debating a proposed budget either virtually or in person at city hall. Second, state and local governments must contend with community and business engagement, understand what types of behavior and issues drive these two different groups, and then devise the right kind of engagement.

Given the public’s level of distrust in government and their high expectations of public officials and institutions, civic engagement has arguably never been more important. Yet, governments struggle to engage citizens effectively today — and that problem may become more prevalent in the future. This raises several key questions:

• Are governments prepared to engage a new generation of citizens who expect engagement to be done on their terms?
• Do government leaders truly understand the concept and its importance, particularly as it becomes driven by technology and social platforms?
• Do governments have a grasp on how traditional and new forms of engagement fit together?

To answer these questions, the Center for Digital Government (CDG) surveyed 213 state and local government officials to understand their current civic engagement activities and plans for the future. This report analyzes those results and also draws heavily on CDG’s annual Digital Cities surveys and Best of the Web awards to understand current best practices and trends. On the following pages, we examine what’s driving today’s engagement efforts, the types and methods of engagement, and the technologies that support engagement. We also provide real-world examples from key locations.
Civic Engagement: So Many Definitions

“Civic engagement or civic participation is the encouragement of the general public to become involved in the political process and the issues that affect the community.”
— Wikipedia

“Being sensitive to and understanding the world’s problems as well as addressing them through collaboration and commitment.”
— Duke University

“Civic engagement is increasing civic participation by encouraging participation in civil society.”
— Civic Honors

What is it for Government?

“Civic engagement is the process of engaging constituents through active or passive processes to increase the collective intelligence and well-being of a community.”
— Center for Digital Government
Governments Are Finding New Ways to Engage

What types of civic engagement strategies are you using?

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social media (platforms)</td>
<td>79%</td>
</tr>
<tr>
<td>Open data (transparency)</td>
<td>40%</td>
</tr>
<tr>
<td>Virtual meetings/agendas</td>
<td>31%</td>
</tr>
<tr>
<td>Community policing</td>
<td>31%</td>
</tr>
<tr>
<td>Crowdsourcing</td>
<td>23%</td>
</tr>
<tr>
<td>Web portals</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
<tr>
<td>Not using any digital civic engagement strategies</td>
<td>11%</td>
</tr>
</tbody>
</table>

They Are Increasing Engagement Activities

Over the past five years, how has civic engagement changed in your jurisdiction?

- Increased: 56%
- Decreased: 7%
- Same: 37%
- Other: 2%

They Are Blending Tech-Based and Traditional Methods

What is your primary strategy for civic engagement?

- Inform and get quick feedback from residents on city actions through social media and other digital means: 14%
- Deeper, longer, deliberative conversations about issues of common interest that may involve social media along with conventional surveys, town halls, public meetings, focus groups and citizen advisory groups: 24%
- Hybrid of the two, weighted toward digital media: 20%
- Hybrid of the two, weighted toward conventional means: 40%
- Social media and other digital means are not part of our civic engagement: 4%

Source: 2016 Center for Digital Government Civic Engagement Survey
Rethinking Why and How You Engage

In 1964, America’s space program was well underway, construction of the interstate highway system was going at full tilt and President Lyndon Johnson was launching his war on poverty, while putting together the framework for what would become Medicare — a safety net health care system for the elderly. There seemed to be little that government couldn’t do and America’s trust in government — at 74 percent, according to Pew Research Center data — reflected our belief in the public sector as a valued institution for problem solving.

Today, public trust in government is at less than 25 percent, one of the lowest points since surveys on the topic were first conducted. When you ask people why civic engagement is needed, many reasons are given, but one of the top concerns is the public’s historically low confidence in government. Without trust, it becomes harder for government at any level to move forward with new, innovative programs to better serve the public, while maintaining the existing services that we expect government to perform on a daily basis. Much of this distrust is aimed at the federal level, Pew Research data shows, but states and to a lesser degree, local governments, also are viewed with skepticism.

Get the public and government engaged with each other and the chances of bringing about more positive change — whether it’s to help revitalize our belief in the public sector as a valued institution for problem solving.
old neighborhoods, improve transit services or ensure public participation in the budget-making process — are likely to improve, say experts and public officials.

But there’s another issue that is pushing the civic engagement process in new directions. Today, people have far different expectations compared to past generations. Face-to-face meetings on a weekday evening down at city hall just don’t work in today’s digitally dependent society. “The digital culture is changing expectations,” said Eric Gordon, a professor at Emerson College and director of the Engagement Lab, in an interview with Public CIO. What’s happening is an expansion in the kinds of engagement that occur in our social, professional and personal lives. People interact and engage with online retailers and with friends on Facebook on a regular basis. That expectation is now spreading into government. “The institution of government is having to respond and change, like every other institution, because of changing expectations of feedback and interactivity,” said Gordon.

As noted, everyone from online retailers to the entertainment industry to newspapers has had to adapt to meet the public’s expectations, a change that has been fueled by social media and other digital platforms. “Every industry has to shift in order to accommodate new modes of participation and interaction,” Gordon said. “Government has to shift as well, but it’s more complicated than an industrial shift, so it needs its own kind of thinking about how to make those shifts smartly.”

There’s a third, far-reaching reason why civic engagement is growing in interest and value. The 20th-century version of government operated by centralizing decision-making and problem-solving within a bureaucracy, which was well-skilled at collecting, sorting and analyzing information to develop policies that responded to society’s challenges. But as Beth Noveck, director of GovLab, a data research network at New York University explained in an interview with Public CIO, that mindset has changed with the start of the 21st century. “We know from wide experience from business and other domains that the best ideas, the most innovative ideas, develop from expertise that’s never exclusively within the four walls of an institution.” The underlying assumption and vision is that government has to engage and collaborate with citizens to solve the complex problems society faces today.

Meet Your New Citizens

<table>
<thead>
<tr>
<th></th>
<th>Then</th>
<th>Now</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of American adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>owned a smartphone in</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>35%</td>
<td>64%</td>
</tr>
<tr>
<td>of American adults</td>
<td></td>
<td></td>
</tr>
<tr>
<td>owned social networking</td>
<td>7%</td>
<td>65%</td>
</tr>
<tr>
<td>sites in 2005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Americans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>said they trust the</td>
<td>7%</td>
<td>24%</td>
</tr>
<tr>
<td>government in Washington</td>
<td></td>
<td></td>
</tr>
<tr>
<td>always or most of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time in 1964</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of U.S. consumers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>used a mobile payment</td>
<td>7%</td>
<td>40%</td>
</tr>
<tr>
<td>application in 2013</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of U.S. consumers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>used a mobile payment</td>
<td>7%</td>
<td>40%</td>
</tr>
<tr>
<td>application in 2014</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Pew Research Center; Walker Sands Communications

— Beth Noveck, director of GovLab

“We know from wide experience from business and other domains that the best ideas, the most innovative ideas, develop from expertise that’s never exclusively within the four walls of an institution.”

— Beth Noveck, director of GovLab
Unpacking Your Engagement Options

At the broadest level, civic engagement is about how government, society and citizens interact. To engage requires knowledge, skills, values and motivations to make a difference. The outcomes can vary, from more voter participation and volunteerism to increased feedback that improves the quality of life in a community.

There are many ways that state and local governments can foster engagement. On one end of the spectrum there is passive engagement. This could be something as simple as an app on a smartphone that automatically records a bump on a city street and transmits that data to the department of public works as a geo-coded alert about a possible pothole. Engagement becomes progressively more active, depending on what is happening and what level of communication is required between government and citizen. The town hall meeting is perhaps the most active form of engagement, in which face-to-face dialogue — possibly blended with live, online surveys — takes place to tackle a critical issue, such as new spending for a city budget or plans for neighborhood revitalization.
At first glance, customer service may not seem like your typical type of engagement. But for many jurisdictions, serving citizens has morphed into a type of engagement that reflects, to some degree, what Amazon has done to customer service — turning it into an interactive experience that can take place at a time and place of the customer’s choosing. Customer-oriented service is one of the leading trends in local government, and by approaching it through the lens of engagement management, cities believe they can not only improve services, but also generate the kind of feedback — and high-value data — that can improve quality of life and the public’s trust in government.

4 Ways to Engage

Transparency
Strengthening government accountability through open data and records

The open data movement has unleashed a wave of previously locked-up data for public consumption. The impact has been tremendous in terms of generating new tools and conversations between the public and government officials on everything from crime to health care. Transparency is also crucial to improving political engagement, according to the Sunlight Foundation, which advocates for better public records campaign finance laws. Transparency has last become the fuel for civic engagement throughout all levels of government.

Democracy
Bringing citizens into the decision-making process using traditional and tech-driven methods

Some might argue that any form of civic engagement, no matter how passive, represents some form of democracy in action. Civic engagement certainly has its roots in town hall meetings that can be traced back to the colonial era. Today, those meetings continue to be the bedrock of democracy-driven engagement in small towns and large cities. But the practice has taken on new meaning in the digital era as the format evolves, including the addition of live-streaming meetings, online surveys to measure citizen sentiment around an issue, and participatory budgeting, which lets citizens make informed decisions on how a portion of a budget will be applied to services.
A Continuum of

Traditional citizen engagement activities and newer technology-based techniques form a continuum of options that require varying degrees of effort and commitment from citizens. Effective engagement strategies combine both traditional and tech-based methods that let citizens choose how to get involved in their communities.

Riverside, Calif.
The Engage Riverside transparency site serves up city information via infographics, dashboards, interactive visualizations, maps and video. The site has logged more than 540,000 page views since its debut in 2014.

Alexandria, Va.
ParkLink, an interactive GIS-based "parks and amenities finder," combines information about all of Alexandria’s publicly accessible open spaces into a single application. Besides helping residents and visitors locate the nearest park, the app includes an extensive list of searchable amenities such as playgrounds, swimming pools and dog parks.

Tallahassee, Fla.
The DigiTally app lets mobile users connect with city information and conduct a wide range of transactions. Residents can report problems such as potholes, graffiti and broken street lights, and track progress on repairs. They can also use the app to pay utility bills, track bus locations, report electrical outages and calculate property taxes.

Passive engagement:
Constituents unconsciously engage in processes for government.

Boston
Boston’s Street Bump app uses the accelerometer and GPS technology in citizens’ mobile phones to automatically detect potholes and notify city officials about needed repairs. As users drive, the mobile app collects data about the smoothness of the ride, giving the city real-time information it uses to fix problems and plan long-term investments.

Austin, Texas
The city hopes to harness GPS location information from motorists’ mobile phones to real-time traffic signals. The technology would track drivers’ speed and location, and that data would be used to sense potential traffic jams and adjust traffic signals accordingly.

Riverside, Calif.
The Engage Riverside transparency site serves up city information via infographics, dashboards, interactive visualizations, maps and video. The site has logged more than 540,000 page views since its debut in 2014.

Alexandria, Va.
ParkLink, an interactive GIS-based "parks and amenities finder," combines information about all of Alexandria’s publicly accessible open spaces into a single application. Besides helping residents and visitors locate the nearest park, the app includes an extensive list of searchable amenities such as playgrounds, swimming pools and dog parks.

Tallahassee, Fla.
The DigiTally app lets mobile users connect with city information and conduct a wide range of transactions. Residents can report problems such as potholes, graffiti and broken street lights, and track progress on repairs. They can also use the app to pay utility bills, track bus locations, report electrical outages and calculate property taxes.
Columbia, Mo.
The city website provides historical electric and water usage data for rental units in Columbia. Renters can search expected utility costs for a property by entering a street address or locating it on an interactive map.

Kansas City, Mo.
The Art of Data initiative selected 10 local artists to turn information from Kansas City’s open data site into visual art. The artists pulled information from 10 different data sets, ranging from life expectancy by ZIP code to citizen satisfaction with the safety of their neighborhoods. An exhibit of the art drew more than 3,000 people.

Ft. Lauderdale, Fla.
Citizens can access live and archived video from city commission meetings, as well as submit electronic comments about agenda items.

Seattle
This city holds multi-subject meetings that allow citizens to participate in several topics during a single live event. The approach reduces the number of events that interested citizens must attend, and it breaks down single-topic engagement silos.

Active engagement:
Constituents consciously engage in processes for government.

Baton Rouge, La.
Open data is the foundation for a city-created GIS portal that uses a combination of cloud-hosted technology and server-side Web services to provide authoritative map data to city decision-makers and citizens.

Phoenix
An online engagement platform lets citizens suggest ideas for new transit services and street infrastructure. Using polling, mapping, open-ended questions and discussion prompts, residents directly helped develop a new transportation plan. The city also used traditional in-person meetings to gather input.

Kansas City, Mo.
The Art of Data initiative selected 10 local artists to turn information from Kansas City’s open data site into visual art. The artists pulled information from 10 different data sets, ranging from life expectancy by ZIP code to citizen satisfaction with the safety of their neighborhoods. An exhibit of the art drew more than 3,000 people.

Ft. Lauderdale, Fla.
Citizens can access live and archived video from city commission meetings, as well as submit electronic comments about agenda items.

Seattle
This city holds multi-subject meetings that allow citizens to participate in several topics during a single live event. The approach reduces the number of events that interested citizens must attend, and it breaks down single-topic engagement silos.

Baton Rouge, La.
Open data is the foundation for a city-created GIS portal that uses a combination of cloud-hosted technology and server-side Web services to provide authoritative map data to city decision-makers and citizens.

Phoenix
An online engagement platform lets citizens suggest ideas for new transit services and street infrastructure. Using polling, mapping, open-ended questions and discussion prompts, residents directly helped develop a new transportation plan. The city also used traditional in-person meetings to gather input.
Tech Makes a Difference
Public officials say technology can strengthen government-to-citizen relationships.

Do you believe innovative technology can improve civic engagement?
- Yes: 91%
- No: 0%
- Don’t know: 9%

Are you seeing evidence of innovative technology improving civic engagement in your jurisdiction?
- Yes: 57%
- No: 23%
- Don’t know: 20%

How would you rank the relationship between innovative technology and improved civic engagement?
- Very high: 12%
- High: 68%
- Neither high nor low: 18%
- Low: 1%
- Very low: 1%

What are the most significant benefits from using new technological tools in support of civic engagement?
- Better services for citizens: 44%
- Increased transparency: 68%
- Improved citizen perception of government: 41%
- Greater citizen participation in government services: 34%
- Greater democratic participation in policy issues: 10%
- Better communication between public figures and citizens: 56%

Source: 2016 Center for Digital Government Civic Engagement Survey
Tech Tools for Expanding Your Engagement Activities

It’s hard not to find technology’s role in civic engagement — it ranges from the databases used to keep track of projects, to online surveys, social media platforms and streaming video from live forums. Just a few years ago, incorporating technology into civic engagement was novel enough that everyone wanted to do it, according to Emerson College’s Gordon. “Now, when you decide to create or implement a technology [for an engagement project], there is a sense that there at least be some justification for doing that. And even with the best justification, there’s always an acknowledgement of what it doesn’t do.”

As state and local governments have learned how to adapt technology tools to engagement (rather than the other way around), a rich ecosystem of digital solutions has emerged that can be leveraged throughout the continuum, from passive to active engagement.

Platforms: The term “platform” has become ubiquitous in technology today. For the purposes of engagement, they tend to be networking platforms that foster peer-to-peer communications and interactions, and transparency platforms that support the publication of open data. Some of the networking tools that exist include: Nextdoor, mySidewalk and Neighbor.ly to name a few. Transparency platforms exist as commercial ventures, as well as platforms run by transparency advocacy organizations, such as Code for America, Sunlight Labs and CivicLabs.

Social media: Facebook, YouTube, Twitter, Instagram and even Yelp have become universal onramps to engagement. While technically platforms, they provide a variety of ways to trigger engagement that can be both passive and active. Although it’s tempting to make social media the default engagement tool because adoption has become nearly universal, smart public officials recognize they have their limits.

Mobile: Smartphones and tablets, combined with the apps they run, have transformed how and when people interact. The days when going online meant booting up a desktop PC are long gone, allowing citizens to engage while untethered. Mobile devices help engagement spread across the continuum, giving citizens the ability to passively engage through apps, such as Street Bump and Citizens Connect, as well as engage online in a more active fashion, without actually having to attend a neighborhood meeting.

CRM: Originally developed as a type of call center technology to support 311 and similar hotline systems, customer relationship management (CRM) software has morphed into an engagement management system for many cities. Recognizing that citizens use different channels to reach government besides the phone, CRM has incorporated a variety of online communications technologies, as well as feedback mechanisms that inform citizens on the status of a query, request or complaint. Some cities even use CRM as an enterprise-wide customer service platform where engagement is proactive and ongoing.

Data analytics: With so many tools and platforms available, it has become increasingly evident that state and local governments are collecting vast amounts of data, which has to be quickly and effectively analyzed if an engagement project is going to succeed. Cities and states are currently in the early adoption phase of data analytics for engagement. If it’s done, it happens as a human endeavor. But technology is moving rapidly and already there are efforts underway to analyze engagement data and give it a storytelling component so the public better understands the outcomes, said Gordon. “There’s more of an emphasis on making the input and output a little bit more human.”
Engagement Types:
Democracy, transparency
Engagement Tech:
Platforms, data analytics
Engagement Summary:
As Atlanta builds a new stadium for its professional football franchise, it also seeks to revitalize the surrounding Westside community in ways that don’t overlook longtime residents. An online, interactive database will become a hub of conversation, information and strategies to ensure residents of these historic neighborhoods share in the growth and progress as a result of the new facility.

Engagement Profile: Atlanta
Remembrance and Revitalization
Urban living is back in vogue.

But just about every city that has experienced a surge in urbanism has found the growth and benefits can take place at an uneven pace. Atlanta’s Westside community is about to experience a boom thanks to the construction of the new Atlanta Falcons football stadium. However, the Westside is also a cluster of neighborhoods rich in African-American history, but poor when it comes to economic development, housing, transportation and other urban amenities.

Atlanta Mayor Kasim Reed wants to make sure the Westside neighborhoods aren’t overwhelmed, or worse, bypassed as urbanization projects, such as the new stadium, get underway. Westside Future Fund, a multi-partner project, was launched to help ensure Atlanta’s historic neighborhoods share in the city’s growth and progress. The project has since been selected by the City Accelerator initiative (a joint project of Living Cities, the Citi Foundation and the Governing Institute) to explore innovative ways to revitalize inner-city neighborhoods.

Atlanta wants to use engagement strategies to help unify the people who live in the Westside neighborhoods. “There have been efforts in the past to revitalize neighborhoods, but without a focus on the people,” said Terica Black, Atlanta’s manager of grants and partnerships. The goal is to have the residents define their greatest needs rather than have the city presume what those needs are.

Black and others are aware of engagement problems from past projects. Besides the issue with top-down approaches, fragmented engagement practices have been another problem. “We wanted to avoid engagement fatigue when too few residents are asked for their input too many times,” said Black.

So Atlanta is working to engage a larger base of residents and develop strategies that continue the conversation even when administrations change.

Christopher Le Dantec, a professor of digital media from Georgia Tech who is helping build tools for the Westside engagement project, said one of the goals is to create a community narrative to help spark interest. That might take shape using some old-fashioned media: a local newspaper with stories by and about residents.

But there are more modern ways to help residents be remembered, while pushing forward with revitalization efforts that will range from economic development and housing to social services, transportation, public health and education initiatives. “Technology offers a way to capture what the residents are doing, as well as their perspectives, in tangible ways that we can access at different points,” said Nasim Fluker, director of programs for the Westside Future Fund. “Everybody has a smartphone these days, no matter their income level; technology is a way to connect this community that has been somewhat isolated economically.”

Already, the project has set up a database of unique entries, ranging from the types of engagement practices and organizations that are involved to a list of the key stakeholders. As the database grows, it will become public and interactive, capturing not just information but knowledge that will allow conversations and strategies to move forward. That’s important, because the project has been underway for just several months out of an 18-month timeframe.
Engagement Types:
Crowdsourcing, open data

Engagement Tech:
Social media, platforms

Engagement Summary:
Long Beach engaged local experts and citizens at large to create a strategy for attracting new businesses to the city. These efforts led a major automaker to locate a new logistics hub there. Long Beach also crowdsources input from city residents to set the direction of open data activities.

Engagement Profile:
Long Beach, Calif.

From Crowdsourcing to Corporate Sourcing
It has the second-busiest container port in the country and is one of the largest ports in the world. With a population approaching 470,000, the city is solidly in the mid-tier of urban centers in the country. But Long Beach is almost surrounded by the much larger, brasher Los Angeles, which makes it harder to stand out, whether it’s to attract new industry or the next generation of digitally savvy workers.

So Long Beach decided to rely on its smarts to build economic activity and find ways to leverage its open data to support growth and skills building. First came economic development. Bloomberg Philanthropies gave the city an Innovation Grant that has been used to tap into area expertise — such as the California State University at Long Beach — to help the city think about how it can better meet the needs of area businesses. The city has also turned to the expertise of its residents, using civic engagement to start the conversation about economic direction, according to Bryan Sastokas, the city’s director of technology and innovation.

The effort is beginning to pay off, with a new technology park located on the site of a former Boeing aircraft manufacturing facility. Already, Mercedes-Benz has set up shop there, creating a major logistics hub for the company. Sastokas attributes the landing of Mercedes to the fact that the city’s residents and business leaders engaged and then decided that Long Beach’s road to economic success lay through its past history as a leader in transportation.

Engagement has also worked in a more unique way. Rather than hire (a rather expensive) chief data officer to lead the city’s open data initiatives, Long Beach turned to crowdsourcing to figure out what data would benefit its citizens and how open data should be presented for maximum transparency and value. “We wanted to develop a new open data policy and really try to provide data that will be impactful from the user experience,” said Sastokas. So, citizens interact with city officials on new ideas through the city’s Web portal, events and group meetings. The portal allows citizens to launch discussions, as well as participate in forums, meetings and surveys.

The city is also maximizing civic engagement through social media and, in a unique twist, tapping the media that is available through the city’s television production studio. “We try to help businesses gather information, film them and put together presentations for events, such as ‘innovation week,’ which can be marketed around so that businesses in other cities can see what’s happening here,” said Sastokas.
Civic engagement has many important parts. But one that doesn't get a lot of attention is the role of the coordinator. This person must have the ability to understand whether or not an issue needs outreach or engagement, identify the right resources needed to move engagement forward, work with different groups — both inside and outside of government — to get the project off the ground, help identify the kinds of information that must be collected and then help city staff correctly analyze the data to ensure the outcomes are of value.

When CDG surveyed state and local governments on this topic, 47 percent said they had a coordinator who was responsible for overseeing and implementing civic engagement efforts. Nikola Pavelic is Dubuque, Iowa's civic engagement coordinator. He was the first to hold the position, so he has helped create and shape it.
Dubuque isn’t a big city — with a population of 60,000 — but it has the same problems that confront every modern urban center. At the heart of the matter is the fact that city leaders recognize they need to better connect with their citizens, so they understand where their tax dollars are going and why.

“Transparency is a big reason behind the engagement projects,” said Pavelic. “It’s also about aligning the city council’s priorities with the public.”

Pavelic works with the city manager and city council on strategic planning to identify which goals and priorities should involve civic engagement. So far, the city has launched two broad initiatives: one centers on the city’s budget, and the other involves a new ordinance for a resiliency advisory commission that will deal with adverse events that may impact the Dubuque region economically, environmentally or even socially.

The city has used technology as a foundation for its civic engagement, contracting with a commercial data publishing platform to create a public face to Dubuque’s budgeting process. This allows citizens to see how the city is spending taxpayer money and from where the money is coming. As for engagement itself, technology is not a driving force in how things get done. "A lot of our engagement involves surveys, so we use a combination of community center kiosks, online platforms for surveying and then traditional in-person meetings," said Pavelic.

With limited resources, Pavelic doesn’t want to go too broad with technology in civic engagement, but rather use it in a targeted way. "I’m working with our IT department on how we can use technology to identify performance metrics. We have some [metrics], but in terms of results-based accountability, we have to come up with a tool that the public can make sense of, instead of something that is only understood internally.”

Pavelic would also like to use technology to combat a common problem in his field of work: engagement fatigue. It’s not just government that wants to engage citizens these days. "It seems like everyone wants to engage the public for everything," he said. His solution would be a website or an app that would be a central repository of engagement opportunities, the documents that are part of each opportunity, as well as meeting information as the project goes live, so citizens can view what is going on, what the topic is and when it is taking place. "Ideally, the software would have the ability to integrate into the public’s own online calendars, if they choose, so they can view everything automatically, by date and so on," he said.

DAVID KIDD

DUBUQUE SURVEYS CITIZENS VIA COMMUNITY CENTER KIOSKS, ONLINE PLATFORMS AND IN-PERSON MEETINGS.
Reforming the Engagement Process

Engagement Types: Democracy
Engagement Tech: Platform
Engagement Summary:
To reduce engagement fatigue, Seattle created multi-subject meetings that allow citizens to participate in several topics during a single event. The approach reduces the number of events that interested citizens must attend, and it breaks down single-topic engagement silos. Now the city plans to create an online repository of the conversations taking place.
Seattle has a rich history of civic engagement that has worked well over the decades. But today, the city, with an estimated population of 662,000, is growing rapidly. The tried and true methods of engagement, involving a small group of active neighborhood residents meeting at a specific time and location to discuss and plan, were considered out of date.

Adding impetus to change was the fact that the city needed to update its comprehensive 20-year roadmap for growth at a time when it was already facing a significant housing crisis. Seeing an opportunity, Mayor Ed Murray appointed Kathy Nyland as director of the Department of Neighborhoods. One of her first tasks was to engage Seattle’s disparate neighborhoods with the knowledge that adding more housing could be both necessary and tricky at the same time.

According to Nyland, the Department of Neighborhoods is the city’s eyes and ears, so having a well-run engagement plan is vital. “We feel we are operating from an antique model when it comes to engagement, so we decided to drill down to examine the mechanisms of what we do to engage citizens and find out what works and what doesn’t,” she said.

Two related problems quickly rose to the surface. First, it was clear the city’s various departments engaged the same community about different projects within a short period of time, with a lot of overlap and not a lot of talk among departments about what was going on. To reduce the number of engagement silos, Nyland and her staff tried to understand how each department approaches engagement and then develop a process so engagement projects could be better coordinated. The other problem was engagement fatigue: too many projects involving the same small group of citizens over and over.

The initial process to untangle problems around silos and fatigue was to create a robust, centralized calendar, “so that everyone can see what’s going on,” she said. While the idea has been tested out in a few departments, Nyland says the concept needs more testing before it can be made scalable across the city.

The other process was to develop a multi-layered approach to neighborhood participation so citizens could have the flexibility to choose which project they wished to attend. Initially, departments resisted the idea of holding more than one neighborhood meeting at the same time, but as Nyland explained, multi-purpose meetings would work the same way a newspaper worked: different messages, about news, sports, entertainment and so on, all in the same format. “We have found that communities appreciate that there is a multitude of topics at the same time, with a variety of staff on hand,” she said.

Like other engagement projects, the use of technology is still in the early stages. Shifting from a traditional model of neighborhood meetings to something that is more asynchronous takes time. “We are looking at developing an online repository of all the conversations taking place,” said Nyland. “This calls for a platform that would allow the right people access to the conversations.”

Already, the coordinated approach to neighborhood engagement is paying off in savings as the city reduces the need to rent public spaces for multiple meetings. As a result of the work, Nyland’s Department of Neighborhoods is fast becoming the city of Seattle’s civic engagement hub.
Engagement Profile: Phoenix

Boosting Transit Spending with a Blend of Engagement

Engagement Types:
Democracy, crowdsourcing

Engagement Tech:
Platform

Engagement Summary:
Phoenix used a mix of new and traditional engagement methods to build support for a transportation tax. An online platform lets citizens mark desired transportation improvements on an interactive map. The city also held live meetings to discuss the plan. In all, more than 6,000 comments were collected to help shape the transportation plan.
The success Phoenix had with its transportation tax initiative mentioned at the beginning of this report came from a blend of old and new engagement techniques. Maria Hyatt, the city’s public transit director, pointed out that Phoenix’s demographics have been changing recently, making it harder to reach constituents, especially younger people, through evening meetings. “They don’t attend meetings to get information, so we looked for another way to capture the input of the community,” she said. The mySidewalk platform the city uses is multi-dimensional. “We can do surveys; we can ask citizens to pin on a [digital] map what they want, where they want it and when they want it,” Hyatt said.

Compared to traditional meetings, the tool proved dynamic for communications. The city ended up engaging 3,700 citizens through the software platform and, when combined with people who showed up at live meetings, garnered more than 6,000 comments that helped shape the transportation plan.

Nyland said technology injected some flexibility into the engagement process that wasn’t there before. “With the software, we could start with a big category of information and then narrow down what the citizens wanted. We gathered input, analyzed it and then put it back out for another survey. That helped us narrow down the community’s priorities.”

Citizens who preferred to use technology to engage offered different viewpoints than citizens who attended meetings or who talked directly with staff at transit stops and centers. “People online were focused on the economic aspects of transit, connecting businesses with neighborhoods, while people we talked to directly, such as riders, focused on issues like the need for more shade at stops, more frequent bus and light rail, longer hours, those sorts of issues.”

The use of technology was a breakthrough for the city’s public transit agency. “We can’t go back to the old ways,” said Hyatt. “We have to figure out new ways of engagement. We continue to evaluate different kinds of software to find which one meets our needs the best. This kind of online engagement is very effective.”

States of Engagement

Cities may have the greatest opportunity to engage citizens directly, but states also are working to build stronger connections with their residents, often through better customer experience and transparency.

In 2015, a number of states unveiled innovative enterprise Web portals intended to link citizens with information and services faster and more easily. For instance, Utah analyzed how citizens historically have used its website and then created targeted microsites that curate the most frequently used state and local government information. In addition, the state classified and geotagged 7,000 searchable items to ensure the portal’s search function delivers what citizens are looking for.

Texas revamped its website too, releasing a radically simplified single-page portal in 2015. The state used analytics to pare down homepage content to services and information sought most frequently by citizens. In addition, a powerful search function helps users locate whatever they need.

Arkansas began thinking beyond the portal with Gov2Go, a mobile app described by state officials as an intelligent “personal government assistant.” The app, available for iPhone and Android, delivers hyper-relevant information and services to state residents, tracking deadlines and issuing reminders for common transactions like property tax payments and license renewals. The more citizens use it, the smarter the platform becomes about their individual needs.

And Iowa piloted a digital driver’s license that ultimately may let motorists replace physical licenses with a digital copy they carry in a smartphone. Approximately 100 employees at the Iowa Department of Transportation tested the digital driver’s license app late last year. “It’s about offering customers choice and convenience,” said Andrea Henry, director of strategic communications for the Iowa DOT, in an interview with Government Technology. “Choice in how they get their services from a government agency, and choice in the fact that they can have their driver’s license in a digital format in addition to the plastic card.”

On the transparency front, California broke new ground in 2014 by creating an open data portal for health and human services information. Initially stocked with data sets from the California Department of Public Health — including birth profiles, popular baby names, poverty rates and asthma statistics — state officials say the portal eventually will serve as a hub for open data from other California HHS departments.
1 Engagement fatigue: The phrase pops up throughout this report and it really is one of the defining challenges of modern civic engagement. Citizens are being asked to engage on just about everything, and not just from government, but from other sectors, such as health care and online retailers, said Dubuque’s Pavelic. Exacerbating the issue is that engagement projects too often involve the same people showing up for meetings. “We are casting a wider net to engage a larger base of residents,” said Atlanta’s Black, in reaction to the problem. Seattle’s Nyland said fatigue happens because too many departments keep reaching out to the same people for engagement. The need to reach the so-called silent members of the community, the ones who don’t attend the live meetings, is critical to successful engagement, said Hyatt, of Phoenix.

2 Staffing issues: The use of civic engagement continues to grow. A demanding public expects to be engaged and public officials recognize how it can help drive modern government on many levels. Likewise, government workers recognize the enormous potential that can come from a well-crafted, well-run engagement project. But is there enough capacity in government to meet the demand? Emerson College’s Gordon has studied civic engagement and sees a strain as the amount of civic engagement grows. “I’m seeing this demand being placed on people who have no training on how to do this and haven’t had the time to think about what it means to engage well; it’s just not part of their job. We’re kind of seeing some stresses on what’s expected of city government and how they may act.” The solution? More capacity and training, according to Gordon.

3 Complexity vs. speed: Civic engagement is not easy. And it’s getting harder all the time. Governments need to engage new populations that have been under-represented in the past. There also are engagement disparities between renters and homeowners, according to Bosacker, of Living Cities. It adds up to trickier demands for public officials, he said. So, engagement has to be done thoroughly and diligently, making planning complex. But that complexity shouldn’t slow down how information and results are communicated back to participants, said Pavelic. “You have to have a quick way to get back to those who have participated and tell them what we have learned and explain what we are going to do with their input.” The issue of turn-around keeps coming up as jurisdictions do more engagement projects, according to Pavelic. Just as important, the information needs to be in a summary format that the general public can understand, he added. While technology can help with dissemination, it has its limits when it comes to synthesizing the issues and outcomes and then clearly communicating them back to the citizens who were part of the engagement process.
4 The direct democracy conundrum: Has technology created unrealistic expectations when it comes to just how much citizens can engage with their local governments? Bosacker cautions that while technology can quickly gauge how citizens feel on a certain issue, he doesn’t think it results in a higher caliber of engagement. “The danger is that if you use technology to increase the frequency of asking citizen input on just about every issue, then they can expect that to be the case.” The problem that can ensue is one where citizens expect to see their response showing up in most of the decisions made by city government. “I fear that we are moving away from our current form of representative democracy towards direct democracy. I would never want to see engagement get to a place where we expect all decisions to be made directly, because citizens become less willing to accept a decision that doesn’t reflect their choice made through technology.”

5 The sharing challenge: Technology has helped make civic engagement more inclusive. By extension, it could make the role of government more collaborative. Imagine a wiki-type public sector, with government using technology to match people with certain skills to certain problems, so that it can find the best, most innovative ideas to help solve the complex problems we face today. Imagine a LinkedIn for government, said GovLab’s Novick, author of the book, Smart Citizens, Smarter State. “It would be a talent bank, a digital directory of people and their skills.” The cornerstone of this type of engagement is skills sharing. The challenge is finding people who are willing to share, whether they are individuals in the private sector, or public servants who have skills outside their domain of work. Novick also points out that in order for this unique type of engagement to succeed, a legal framework needs to be set up so impediments to this kind of public service can be removed, enabling people to participate in collaborative problem solving. “We have lots of mandates that say government needs to be more consultative, but we don’t have practical ways to make that happen,” she said.

The Future of Engagement

State and local officials recognize the problem. It goes deeper than long-term fiscal problems, neglected infrastructure and a lack of jobs. The public trust in government has plummeted to record lows, and without trust it becomes harder for public officials to launch new practices and policies. When asked about the most important benefits that come from the use of technology to support civic engagement, public officials highly rated “increased transparency,” “improved perceptions of government” and “increased public trust” as key factors. So too were “improved communications” and “improved services.”

Given the high expectations for civic engagement to address government’s trust and perception problems, not to mention the need to continuously improve services, it’s easy to predict that engagement — both online and offline — will become an increasingly important strategy going forward. When it comes to specifics about the future of engagement, especially around technology, the possibilities are intriguing and could lead to some novel practices. In Atlanta, Georgia Tech is helping the city track cyclists. The cyclists would produce data with an app on their phones that will tell city planners everything from the routes they use to the quality of the air at a particular location.

“It changes public engagement because instead of holding a public meeting, the data is captured privately while the cyclist is on a bike path,” said Georgia Tech’s Le Dantec. The project mirrors others that turn people into data collection points — sometimes referred to as “instrumenting people” — that in turn facilitate digital democracy, according to Le Dantec. Tech tools, like the one used in Atlanta, help to “decouple some of the normal processes of democratic participation” from traditional types of engagement.

Another future for engagement might involve more storytelling, said Gordon. Unlike the digital app that silently captures data while cycling in Atlanta, Gordon sees the need to make the input and output process of engagement a little more human, “so it’s not just about ‘put your opinion into an entry box’ but creating some framework that is meaningful in the process of gathering information and feeding it back,” he said. The reason this is important to engagement is that government is ripe with big data sets that can be hard to comprehend. Storytelling can bring meaning to aggregated data that ordinary people will have a better chance of understanding, if presented in the right context.

Gordon points out that while many people might participate in a meeting or an online survey, it’s not the same as engaging. But storytelling is a way to create a relation between people, the data and a process. “What we want to try and do is create sustainable relations for the purpose of efficacy, to empower people,” he said. Bringing technology and storytelling together and engagement is more likely to take root. “That’s why I’m most encouraged by the role that technology can play in making those interactions successful.”

Whether it’s done passively through apps or live meetings, or by combining the two and using new storytelling tools to bring meaning to the experience, the merging of technology with engagement will continue to grow. Long Beach CIO Bastokas has seen engagement grow at all levels in the city and sees it expanding as he looks out over the next five years. “There’s a lot of civic engagement we’re going to be seen doing and that we’re going to actively engage in,” he said. “It’s going to be part of the fabric of how we operate this technology organization forever, and it’s how we will move forward into the future.”
The Center for Digital Government, a division of e.Republic, is a national research and advisory institute on information technology policies and best practices in state and local government. The Center conducts e.Republic’s annual Digital Cities and Counties Surveys; the biennial Digital States Survey; and a wide range of custom research projects. For more information, contact Executive Director Todd Sander at tsander@centerdigitalgov.com.

www.centerdigitalgov.com

Public CIO, a division of e.Republic, is an award-winning platform dedicated to technology thought leadership in federal, state and local government. Through print, online and a portfolio of events, Public CIO provides CIOs and key enterprise leaders with career critical insights on leading and navigating the innovative trends creating efficiencies, driving collaboration and impacting government services.

www.public-cio.com

Todd Newcombe
With more than 20 years of experience covering state and local government, Tod previously was the editor of Public CIO, e.Republic’s award-winning publication for information technology executives in the public sector. He is now a senior editor for Government Technology and writes the “Tech Talk” column for Governing. Tod is also the author of several books on information management.
For a government agency focused on increasing civic engagement, nothing is more crucial than delivering excellent customer service. That’s why many forward-thinking agencies are taking a cue from the corporate world to embrace a more citizen-centric model using customer relationship management systems (CRM) within a mobile- and cloud-first framework.

With a CRM solution, agencies can maintain a history of their interactions with a citizen — regardless of whether those interactions occur via phone, Web or another channel. This insight can help caseworkers, call center representatives and other agency personnel respond more quickly to a citizen’s current needs, and mine this data to better understand what he or she might need in the future.

See how public sector agencies are using Microsoft Dynamics CRM solutions:

**State of Alabama**
The state of Alabama is implementing Microsoft Dynamics CRM solutions to simplify the eligibility enrollment process, and create a single point of contact for its social services programs. Supported by Microsoft Cloud for Government, the initiative will add convenience for participants, significantly reduce paperwork and help caseworkers provide better services more quickly.

**Orange County Sheriff’s Department**
In Southern California, the Orange County Sheriff’s Department relies on Microsoft Dynamics CRM, in part, to track when individual officers use force, or receive complaints, to head off potential problems and help ensure better community relations.

**Grand Rapids, Mich.**
Grand Rapids, Mich., established its new 311 center using Microsoft Dynamics CRM. The “One Call to City Hall” initiative successfully consolidated 266 city department contact numbers to a single non-emergency dial-in where residents now ask questions, discuss utility bills, request services and address other issues. Because call center workers have access to a knowledge database and a history of citizen interactions, they can resolve 85 percent of inquiries without transferring the call. The solution helped Grand Rapids reduce average call time from 6 minutes to just 22 seconds. Citizens can also accomplish many of the same tasks online, and from their mobile devices.

Is Your Data Ready for Prime Time?

Discover, consolidate and enrich government information with OpenText.

Providing data to the public, or utilizing it for decision-making, is more challenging than ever — with data held in outdated systems that are ready for retirement, in departmental silos or paper documents, and in a variety of digital media from presentation slides to video and audio files. Now, in keeping with digital and transparency mandates, CIOs and agency executives are looking to reconcile data in order to release accurate information and secure private information from disclosure, or to consolidate and standardize data before moving it to the cloud.

Let OpenText Digital Information Readiness help you prepare your agency’s data for use. OpenText can capture and securely pull information from the 80 percent of your organization’s data that resides in unstructured information sources — paper and electronic documents, presentations, videos, audio files, photos — and in aging systems ready for migration. Digital Information Readiness lets you preview what’s there, validate it against structured data in your core business systems, and make decisions about what should be retained or safely disposed of prior to migration. OpenText makes it possible to accurately automate that process early in the game, before agencies act on the data. Digital Information Readiness minimizes risk and flags personally identifiable information (PII) or other data subject to privacy or legal constraints.

Optimize return on investment; prepare your agency’s data to be an accurate, reliable foundation — now and going forward — for open data sharing and big data analytics. Make decisions from a single source of truth across your organization.

To learn more, visit: www.opentext.com/what-we-do/industries/public-sector
MODERNIZING CITIZEN ENGAGEMENT
Oracle Customer Experience Solutions Deliver 21st-Century Services

Connected Citizens
Today’s connected citizens have more control at their fingertips than any other time in history. Citizens decide how, when and where they want to engage with government — through web content, on mobile devices or over a variety of social channels. Citizens also expect government to recognize them and use their past interactions to offer a personalized experience.

Modern Interactions
Oracle Customer Experience (CX) solutions enable government to deliver interactions that rival the best modern consumer capabilities, such as services that are optimized for mobile devices and tailored for simplicity. These solutions support personalized interactions, spanning automated self-service to assisted service across multiple channels, including chat, email, social networks and text. And it’s all delivered from an adaptable, integrated platform.

Knowledge is Power
Oracle also provides knowledge tools, which can be embedded into an agency’s existing systems and websites to help citizens and employees conduct transactions quickly and accurately. Whether in one-on-one scenarios or via social communities, agencies can learn from each interaction and tailor content to maximize effectiveness. The result is real-time, relevant insights at every touch point.

INNOVATIVE CUSTOMER EXPERIENCE WITH ORACLE CX
Connected Citizen Journey: From initial contact to resolution, guide citizens through their government interactions.
Availability and Consistency: Operate anytime, on any device, from anywhere, using any platform — including social media — for seamless, omni-channel experiences.
Better, Faster Decisions: Use a comprehensive citizen view, analytics and social media insights to improve decision-making.
Modern Government: Modernize your agency’s business with integrated mobile, social and analytic technologies to exceed rapidly evolving citizen expectations.

To learn more, visit: www.oracle.com/cx
Private sector apps and online services now set the bar for the user experience, leaving government agencies on the hook to deliver the same fast, uninterrupted services to meet citizen expectations.

To match this demand, agencies need a scalable storage solution — spinning disk, a 30-year-old technology, is no longer sufficient. Enter Pure Storage. By moving to Pure Storage’s all-flash array, agencies can deliver critical services faster, reduce their data center footprint, upgrade without disruption and free up IT staff time. Most importantly, agencies can scale seamlessly as storage needs, constituent usage and online transactions expand.

Mission Possible
Pure Storage’s flash arrays help deliver mission-critical applications — whether it’s a 911 call center, an online engagement platform, or first responder communications — faster and more securely.

Always On
As with any citizen service, outages are unacceptable. Pure Storage not only eliminates performance dips and maintenance outages, but it is fully non-disruptive. This means agencies can avoid forklift upgrades and update software and controllers without impacting performance.

Anytime, Anywhere
Just as governments are connecting with and serving their citizens 24x7, so is Pure Storage. Administrators can access Pure Storage from any browser and on any device from a cloud-based interface.

Regardless of service or circumstance, governments need to meet citizen expectations. Pure Storage can help your agency play in a cloud-based, ultra-connected and digital world.

To learn more about Pure Storage, visit: www.purestorage.com/government
Public sector agencies know they must go digital to better serve citizens, but oftentimes even their best-laid plans fall short. Digital-first strategies can be hard to implement because government agencies must integrate disconnected technologies to be successful. Verint can help with its Digital First engagement management solution, which combines customer relationship management, Web content management and an enterprise search tool.

Ideal Experience
The ideal citizen experience is personalized, consistent and secure. It’s also intuitive, using previous interactions to pre-populate forms and suggest topics of interest. Citizens prefer to interact with government online and they expect their experience to mirror that of the private sector. Verint’s Digital First engagement management solution enables governments to deliver services that align to citizen expectations.

Economic Advantage
When citizens can’t quickly find answers, they pick up the phone or visit an office. This costs agencies time and money — and the inconvenience often does nothing to improve citizen satisfaction. Verint’s Digital First engagement management solution can help agencies reduce overhead costs by ensuring services are readily available and easy to use.

To learn more, visit: www.verint.com

Verint’s Digital First Engagement Management Solution features:
• A customer online portal that runs alongside, and can integrate with, an existing agency website
• A foundational Web content management system that can be used as the entire agency website
• Self-service capabilities that enable citizens to quickly find information or services, complete digital forms and interact with an online community
• An underlying case management capability that manages the end-to-end fulfillment of services requested by citizens
• Assisted-service capabilities supporting phone, Web and social media contact
Don’t miss any of the Center for Digital Government & Public CIO Special Reports

Upcoming 2016 Special Report Topics:

The Government Enterprise
The dos and don’ts of implementing enterprise-wide IT systems

Government Data – New Sources, New Challenges
Sensors, cameras and other automated technologies bring new implications to government operations

Innovative and Evolving Technology
A look around the corner at what the future holds

Past Special Report Topics:

The Platform of Tomorrow
Big Data and Analytics
The Definitive Guide to Data Centers
24/7 Government

Download past reports at www.govtech.com/library
ArchiveSocial automates the capture and retrieval of records from social networks including Facebook, Twitter, YouTube, Instagram, and LinkedIn for compliance with state and federal public records laws.

http://archivesocial.com/respond
In the past, public-private partnerships have mostly involved the delivery of services, much like the way Chicago teams with Comcast to bring the Web to low-income families through the Internet Essentials partnership. Recently, though, the city has found a new way to partner with the private sector, joining with insurer Allstate to leverage data analysis as a means to improve city services. In an era driven by big data and data analytics, such efforts could represent a new means for public CIOs to take advantage of private-sector expertise.

The city has just 42 health inspectors to monitor some 15,000 food establishments. The best way to tackle this Herculean task is to start by checking in on those restaurants most likely to be in violation of code. But how to know where to begin? Chicago IT officials paired their extensive open data with Allstate’s analytic muscle to come up with a solution, leveraging outside talent to augment internal skills. At a time when skilled workers with deep analytical skills are in short supply, the partnership gave the city access to capabilities it might not otherwise have been easily able to acquire.

“We have been looking for ways to use analytics and data to improve the quality of life for residents, or to improve the...
efficiency of city operations," said Chicago Chief Data Officer Tom Schenk. "To that end, city IT managers and Allstate volunteers looked at a wide range of variables: Does the establishment serve alcohol? How long has it been since the last inspection? Have there been local burglaries, sanitation complaints or unusual weather? In all, some 600 data sets were considered.

“All of that information is available on the city’s open data portal, so it was essentially a matter of gathering what was already there and pulling it all together,” said Gavin Smart, Allstate’s quantitative research director.

Those data produced results in an initial two-month trial, with the city proving that data analysis could help inspectors zero in on potential problems much faster than in the past. In September and October 2014, the health department found 1,637 violations in eating establishments. Of those, 55 percent of critical violations showed up in the first month and 45 percent in the second month. That’s about as expected.

At the same time, the city ran its own model, using data analytics to determine the most efficient hypothetical routes for inspectors. In the simulation, 69 percent of violations turned up in the first month. Data-driven inspections were more timely and more effective, meaning fewer people would have potentially gotten sick. That’s exactly the outcome project planners were looking for. “We want to catch the violations earlier,” Schenk said. “That’s about as expected. At the same time, the city ran its own model, using data analytics to determine the most efficient hypothetical routes for inspectors. In the simulation, 69 percent of violations turned up in the first month. Data-driven inspections were more timely and more effective, meaning fewer people would have potentially gotten sick.”

Why did the data-driven model show such strong results? A number of factors likely came into play, including the productive teaming of the city CTO’s three data scientists with the Allstate volunteers, as well as a quantitative approach that’s just beginning to take hold in public management processes.

What Data Can Do
The Chicago simulation worked because data works. As public CIOs are learning, the rise of big data and analytics has profound real-world implications.

In this case, the city’s access to data-savvy talent came about partly thanks to profound real-world implications.ing, the rise of big data and analytics has

data works. As public CIOs are learn-
ting, the rise of big data and analytics to find
news way to do things,” he said. “This is a great, very specific example of that. And we are starting to see lots of other examples like this all around the country, with big data and data analytics provid-
ing a window on what is happening and generating ideas about what is to be done.”

Allstate, for its part, saw the project as a way to drive positive social action from the kinds of data-driven modeling it already has been doing in the insurance arena.

“That is the beauty of working with data and mathematical models, that you can see the impact of the things you are doing, you can see how well they are perform-
ing,” Smart said. “When you can quantify things, it is easier to see how well you are doing and what the opportunities are.”

Allstate engaged with the city through its Project Lightbulb, a company program that gives each employee four hours a week to pursue work-related interests outside their daily responsibilities. Sometimes this includes professional enrichment, sometimes employees use the time to work on theoretical models and tools. In this case, three to four analysts used their time to help the city solve its restaurant problem.

“This is a great opportunity to give some of our folks a chance to learn from people in different fields, as well as help those folks make some progress in their particu-
ar areas,” said Smart. “And it’s a great way to be able to give back to the community.”

To that end, Allstate volunteers worked primarily on developing data sets and building mathematical models based on available data. That information is sprawling — 600 data sets were put into play. This raises a question: With big data capable of doing so much, how do analysts know when to stop? If they are counting everything from the weather to local robbery statistics, is there anything that doesn’t go into the equation?

“When you are approaching analytic-type projects or problems, you can almost go on forever looking at data sources that might be predictive,” Smart said. “The solution is to work within constraints — how fast do we need a result? — and also to accept that any improvement, however imperfect, still counts as a win. "If we can get something done, get a Version 1 model completed within some reasonable amount of time that shows some reasonable improve-
ment, we can always look to other people to move it forward,” he said.

Making It Work
In the push to put data into play, Schenk noted that there are pros and cons to the kind of public-private arrangement that arose here. While the project did give the city access to data pros at a time when such talent is pricey and hard to come by, it’s also true that any engagement with an outside partner can bog down the public CIO in contractual paperwork.

At the same time, the move toward open-

up access to public data can help over-
come such bureaucratic roadblocks. “When the data is already publicly available, there is no nondisclosure agreement we need to sign,” said Schenk. “It lets us sidestep months of work, since they already have the ability to access that data very easily.”

Still, that very openness merits a word of caution from Smart, who reminds CIOs that analytics will forever be a moving target.

“As the analytic capability grows, people need to be mindful of how to maintain a lot of this. From our own experience in predictive modeling, we know that if you have a model that has been in produc-
tion for quite a while and then trends start to change, it can produce some deterio-
ration,” he said. “You need to have the resource and capabilities to keep refresh-

ing and rebuilding those models.”

For now, the partnership between the city and Allstate is continuing beyond food inspection analysis. In their latest joint venture, analysts have set their sights on prioritizing elevator inspections based on available data. The hope is to isolate those most likely to fail in order to maxi-

mize the benefits of city inspections and best serve the cause of public safety.
State legislators nationwide are increasingly looking at the opportunities and challenges associated with new technologies. While some states grapple with the growing trend of hobby drones in their airspace, others focus their attention on the rise of at-home manufacturing and the ability to “print” a gun. Others still have privacy on their minds as law enforcement agencies come to terms with new capabilities and threats. The following proposals are only a fraction of a larger tech-centric policy discussion happening in the United States, but they offer an interesting look into some of the issues facing lawmakers today.

California — The Federal Aviation Administration issued its own drone registration requirements prior to the 2015 Christmas rush, but states are also examining how to manage the popular devices. A proposed bill in California would mean licensing and insurance requirements for owners of hobby drones in the state. The Drone Registration/Omnibus Negligence-prevention Enactment (DRONE) Act, proposed by Assemblyman Mike Gatto of Glendale, would also require drones of a certain size to be equipped with emergency shutoff and GPS-automated features.

“If cars have license plates and insurance, drones should have the equivalent,” Gatto said, “so they can be properly identified, and owners can be held financially responsible whenever injuries, interference or property damage occurs.”

New Mexico — Campaign finance reform and data transparency are at the heart of New Mexico’s House Bill 105, introduced by Rep. Jim Smith. The legislation would require updates to the secretary of state’s electronic filing systems to provide data in “open, structured formats for easy search and download” as well as cross-checking and compliance features. State senators unanimously approved the bill and it was headed to Gov. Susana Martinez’s desk at the close of the legislative session.

Minnesota — Two Minnesota bills, House Bill 2385 and 2386, deal with the social media privacy of students and employees within the state. Under the proposals, students and employees could not be forced to turn over their social media credentials and would not be required to make their profiles public at the request of school administrators or employers. The bills also would allow legal action to be taken against those who illegally force students or employees to grant access to their accounts.
**New York** — Assembly Bill A8093 aims to provide law enforcement decryption capabilities for smartphones produced or sold after Jan. 1. The bill would require manufacturers and service providers to build in the ability to unlock or decrypt mobile devices for the purposes of criminal cases. Further, the legislation would impose a penalty of $2,500 for each phone sold or leased without this decryption capability. In California, Assembly Bill 1681 would impose similar access requirements.

This hot-button issue came to a head in February when the FBI asked Apple to unlock the smartphone of San Bernardino shooter Syed Rizwan Farook so that the agency could access potential evidence related to that incident last December. Apple CEO Tim Cook strongly reiterated his company’s opposition to the creation of a “backdoor” to the iPhone.

“In the physical world, it would be the equivalent of a master key, capable of opening hundreds of millions of locks — from restaurants and banks to stores and homes. No reasonable person would find that acceptable,” Cook’s statement read.

**Virginia** — Privacy is also at the heart of the Government Data Collection and Dissemination Practices Act, a legislative attempt to give structure to how state agencies collect and maintain data. Under the proposal, agencies would not be permitted to secretly collect information without a clear need. The targets of data collection would be notified about the purpose of the information gathering effort and given the opportunity to correct or erase “inaccurate, obsolete or irrelevant information.” Agencies holding such data would also be required to guard against its misuse.

**New Jersey** — Senate Bill 383 prohibits the production of untraceable firearms and firearm components using 3-D printing and other at-home manufacturing processes. If signed into law, the bill would make it a second-degree crime to “possess, sell, offer for sale, give, assign or otherwise transfer any such firearm or firearm component.” Offenders could be fined up to $150,000 and serve five to 10 years in prison.

A second piece of legislation, Senate Bill 808, proposes the creation of the New Jersey Cybersecurity Commission, which would be tasked with reviewing informational infrastructure, making recommendations for improvements to the state’s cybersecurity posture as well as bolstering the cybersecurity industry in the state.
Small- and mid-sized businesses have created 8 million jobs in the past 15 years. In the last 15 years, while big business eliminated 4 million jobs, SMBs created 8 million.¹

Statistics such as these hit home for state and local governments struggling to recover from the recession. According to Pew, as of January 2016, more than 20 states still collect less tax revenue than at their pre-recession peaks.

Creating a vibrant economic development environment for businesses to thrive is critical if government agencies want to increase revenue and make their state more attractive to new employers and employees, but it doesn’t happen by accident. Innovative state and local governments are modernizing to accelerate business growth at the same time they are simplifying revenue collection.

These states are making their message clear: We’re open for business.

BusinessConnect: Good Service, Good Business

Attracting and retaining new businesses starts with seeing the world from the eyes of business leaders who desire modern tools for frictionless interactions with state and local agencies.

Forward-thinking governments are implementing centralized digital platforms, allowing businesses to conveniently interact and collaborate with government agencies online. Deloitte’s BusinessConnect is one such platform that’s helping states realize the value of a digital engagement solution. For instance, BusinessConnect allows business leaders to easily see the status of their business registration, submit license applications, pay associated fees and more. Questions and concerns are easily resolved via Web chats with government advisers. It also includes a decision tree wizard, which helps business owners navigate government services, processes and relevant regulations based on their specific needs.

Bottom Line Results

By leveraging BusinessConnect, states can attract new businesses, reduce transaction costs, increase tax revenues, improve customer service and forge closer connections with the business community. When companies have a clearer understanding of local regulations, states can anticipate higher compliance rates for licenses and permits, as well as timely payments of fees. Fewer manual processes mean less data-entry overhead and input errors.

BusinessConnect also enables states to identify opportunities for more effective resource allocation. For example, by applying risk-based analysis to data gathered via electronic processes, government agencies can anticipate high-risk areas and allocate resources accordingly.

Learn how to leverage technology to spur economic growth and create a proactive government at:

www.deloitte.com/us/businessconnect or email Kristin Russell at dd-info@deloitte.com

© 2016 e.Republic. All rights reserved.
leaders can determine which business owners are least likely to comply with regulations, and then prioritize inspections accordingly.

One of the largest potential benefits is BusinessConnect’s ability to automate licensing, including inspections, code enforcement, application processing and approvals. This enables business leaders to self-serve and allows governments to track licensing data and more accurately forecast revenue.

5 Steps to Attract New Businesses

Digital engagement platforms such as BusinessConnect provide a modern, cloud-based platform for collaborating with businesses and creating a climate that attracts new entrepreneurs. But technology alone isn’t the answer. Digital modernization should be combined with the following leading practices to maximize results.

1. **FOCUS ON THE ART OF THE POSSIBLE.**
   Provide opportunities for ongoing communication and seek ideas from a large and diverse group of experts. Include commercial businesses and systems integrators with experience in consumer digital engagement and self-service. Speak with peers in the public sector and ask for suggestions on how to cut red tape and streamline engagement. Each of these groups may be a valuable resource for how new technology can transform government.

2. **BUILD A STRATEGIC DIGITAL ROADMAP.**
   Look to technology to move business transactions online and leverage social, mobile and cloud-based solutions. This could include tax payments, business registrations, licensing and permitting.

3. **UNDERSTAND CONSTITUENT EXPERIENCES.**
   Traffic patterns on BusinessConnect can help government accurately gauge business interests. This information will also help states evaluate application processes within and across departments to identify and resolve bottlenecks, resulting in improved constituent experiences.

4. **COLLECT CONTINUOUS FEEDBACK FROM THE BUSINESS COMMUNITY.**
   Using social media, crowd sourcing, online ratings, formal surveys and focus groups, states can respond quickly to emerging business trends, problems and concerns. This open dialogue should help connect government to citizens, ultimately increasing constituent satisfaction and creating a service-based culture.

5. **USE AN AGILE APPROACH TO TECHNOLOGY IMPLEMENTATION.**
   By rolling out new capabilities in small, frequent iterations, government staff will gain confidence in new tools and processes to effectively manage budgets, mitigate risk, increase productivity and achieve wins that justify additional investments.

A Win for Business and Government

States are using technology to create business-friendly environments and foster closer relationships with the business community. It’s a win for both groups — businesses thrive in an environment that encourages growth, while states increase revenues, streamline workflows and improve constituent satisfaction. With the right technology foundation and digital transformation subject matter leaders, state officials can create a roadmap for connecting more closely with businesses and set the stage for economic growth.

Situated in a Silicon Valley high rise, the offices claim half the second floor. There’s a spread of monitors, sometimes two to a desk, that sit beneath the long windows. A whiteboard for code and wire framing spans one wall. Glass doors are etched with motivating maxims: “Think Bigger,” “Inspire,” “Design in Progress.” And for furnishings, the space is outfitted in a shout of purples and lime green upholstery. Think startups. Think Google. Think incubators. That’s the vibe at 250 Hamilton Ave. Yet here’s the hook: This is City Hall. Welcome to Palo Alto, Calif.’s first Civic Technology Center. In April 2015 the center opened its doors as a hub for municipal innovation initiatives and city IT services.

When Jonathan Reichental, now an award-winning civic innovator, signed on as Palo Alto’s CIO in December 2011, he didn’t enter a brightly lit IT department humming with ingenuity. It was, to put it diplomatically, a “work in progress.” “I don’t really know how it got to the place where it was,” Reichental said. “But over the course of several decades, IT was stuck in different areas of the city. It was the 1970s furniture-wise, and everything from the ceiling to the tiles to the carpet and filing cabinets just didn’t reflect the mission we were on to be a leading digital city.”

Not long after joining the IT department, Reichental began monthly field trips to Silicon Valley tech companies. His team visited Apple, Facebook, Google and a slate of others to ideate on potential civic tech. Recalling, Reichental said the trips were spirit lifters, inspiring, semi-revelatory and all of a sudden grievously dismal. For no sooner would they return to their offices than a pall would settle: Two narratives had collided. “We’d go into these great tech environments, so open, colorful, with little kitchen areas and lots of lights,” he said. “Then we would come back to City Hall, to our dark cubicles and 1970s decor. It was horrible.”

It’s a hard truth, especially poignant in the cash-strapped world of government, but where things happen often denote how things happen. At the time, however, all he could do was chart innovation strategies and toil ceaselessly to achieve them. Such efforts weren’t in vain. Reichental led the city to pioneer a number of advancements including digitizing business applications, permitting, civic engagement, 311 services, emergency management systems and more. These were in addition to a city website revamp, a lineup of hackathons, overhaul...
No More Colliding Narratives

Palo Alto’s IT team made numerous trips to visit nearby tech companies. During those visits Reichental recognized that the momentum to innovate wouldn’t be sustainable against a dichotomy of competing messages. Leadership could command and encourage, but the effects would be short-lived if the walls were yellowing, the desks scuffed and the tools outdated. The New Civic Technology Center reflects the culture the city is trying to emulate.
Workplace for the Future

The vision for the center is to become a co-creation space. Here, companies and startups can pitch partnership ideas. Citizens can participate in hackathons and meetups. Staff can find tech support via an Apple-like “Genius Bar.” It’s all the amenities of a startup but packaged for government.

Welcome to City Hall

“When people come to see me at City Hall, they check in electronically at our reception desk and they do a kind of double take,” said Reichental. “They’re like, ‘Wait, is this City Hall?’ Because it doesn’t look or behave like it.”

Reichental is using a 25-year-old legacy phone system, and establishing Palo Alto’s first open data portal and policy.

While modernizing the city’s IT systems and back-end processes, it was clear that the office needed to change to reflect the tech team’s mission. Reichental credits City Manager James Keene for making the wish for a new IT workspace a reality. A little more than two years ago, Reichental approached Keene with his request. He had no expectations, just a decisive recommendation and a lot of hope.

“I recall going to the city manager and I said, ‘We’ve got to spend some money and create a working environment that’s consistent with our ambitions,’” Reichental said. “And I remember his answer was funny. He said, ’Jonathan, of course you do. I was expecting you to do that.’”

The conversation set off a chain reaction of team planning. Reichental drew up a moderate budget. Staff proposed features and sketched office layouts, and this led to blueprints, which gave way to a flurry of approvals, and eventually, the sheetrock started to fall.

Push forward two years and the result is a consolidated IT department that doubles as a community innovation hub. Startups arrive weekly, the community occasionally takes tours and recruitment has boomed. Compared to reports from his colleagues in other cities, Palo Alto is seeing a tremendous demand from job seekers with more than 200 applicants for every IT opening — typically, Reichental said his CIO peers in other municipalities see between 10 and 12.

“It’s like government as a startup,” he said. “It’s just been a success on multiple levels.”

However, Reichental doesn’t see workplace renovations as universal remedies for civic innovation. Success required a concerted effort before the walls came down. Palo Alto had already cultivated a vibrant community of civic innovators, citizens, companies and nonprofits that were waiting when the doors opened. Likewise, on the inside, staff members were ready to apply entrepreneurial innovation strategies. If leadership and staff aren’t in a place to utilize such a space, Reichental said, it won’t work. Similarly, without a community of citizen collaborators, civic tech is just tech.

“I think the No. 1 thing is first you have to have a vision,” he said. “What is it that you’re trying to do? What’s the end game look like?”

What this shakes out to are real-world questions, organizational questions and questions that influence resources and aims. Reichental suggests that officials ask themselves — media hype aside — if their leadership, department heads and staff are sincerely committed to working like a startup. This means taking risks, experimenting and applying urgency to concepts like iterative design, open workspaces and user-centric development.

“You can’t just say, ‘Oh I like the look of it, I’m going to do it.’ Really, you’ve got to have a compelling story,” Reichental said. “What I was able to say was, I’m here because this is the birthplace and heart of Silicon Valley, and we can’t just be another government IT shop. We ought to be doing innovative things and reflecting the community we serve.”

jshueh@govtech.com

PCIO02_.indd   28
PCIO02_.indd   28 3/1/16   2:30 PM
3/1/16   2:30 PM

Welcome to City Hall

“When people come to see me at City Hall, they check in electronically at our reception desk and they do a kind of double take,” said Reichental. “They’re like, ‘Wait, is this City Hall?’ Because it doesn’t look or behave like it.”

Reichental is using a 25-year-old legacy phone system, and establishing Palo Alto’s first open data portal and policy.

While modernizing the city’s IT systems and back-end processes, it was clear that the office needed to change to reflect the tech team’s mission. Reichental credits City Manager James Keene for making the wish for a new IT workspace a reality. A little more than two years ago, Reichental approached Keene with his request. He had no expectations, just a decisive recommendation and a lot of hope.

“I recall going to the city manager and I said, ‘We’ve got to spend some money and create a working environment that’s consistent with our ambitions,’” Reichental said. “And I remember his answer was funny. He said, ‘Jonathan, of course you do. I was expecting you to do that.’”

The conversation set off a chain reaction of team planning. Reichental drew up a moderate budget. Staff proposed features and sketched office layouts, and this led to blueprints, which gave way to a flurry of approvals, and eventually, the sheetrock started to fall.

Push forward two years and the result is a consolidated IT department that doubles as a community innovation hub. Startups arrive weekly, the community occasionally takes tours and recruitment has boomed. Compared to reports from his colleagues in other cities, Palo Alto is seeing a tremendous demand from job seekers with more than 200 applicants for every IT opening — typically, Reichental said his CIO peers in other municipalities see between 10 and 12.

“It’s like government as a startup,” he said. “It’s just been a success on multiple levels.”

However, Reichental doesn’t see workplace renovations as universal remedies for civic innovation. Success required a concerted effort before the walls came down. Palo Alto had already cultivated a vibrant community of civic innovators, citizens, companies and nonprofits that were waiting when the doors opened. Likewise, on the inside, staff members were ready to apply entrepreneurial innovation strategies. If leadership and staff aren’t in a place to utilize such a space, Reichental said, it won’t work. Similarly, without a community of citizen collaborators, civic tech is just tech.

“I think the No. 1 thing is first you have to have a vision,” he said. “What is it that you’re trying to do? What’s the end game look like?”

What this shakes out to are real-world questions, organizational questions and questions that influence resources and aims. Reichental suggests that officials ask themselves — media hype aside — if their leadership, department heads and staff are sincerely committed to working like a startup. This means taking risks, experimenting and applying urgency to concepts like iterative design, open workspaces and user-centric development.

“You can’t just say, ‘Oh I like the look of it, I’m going to do it.’ Really, you’ve got to have a compelling story,” Reichental said. “What I was able to say was, I’m here because this is the birthplace and heart of Silicon Valley, and we can’t just be another government IT shop. We ought to be doing innovative things and reflecting the community we serve.”

jshueh@govtech.com
Hitting the road to drive innovation

STATES ALONG THE ROUTE:
Alabama  Mississippi
Arizona    Missouri
Arkansas   Nevada
California New Jersey
Colorado   New York City
Florida    New York
Georgia    North Carolina
Hawaii     Ohio
Illinois   Oregon
Indiana    Pennsylvania
Kentucky   Tennessee
Maine      Texas
Maryland   Utah
Massachusetts Virginia
Michigan   Washington
Minnesota  Wisconsin

ATTEND/SPONSOR:
govtech.com/events

Attendance is FREE for government.
CIO Debbie Cotton explains how shared services represent the future of IT in Arizona’s capital city.

From her “humble beginnings” in the heart of Chicago, Debbie Cotton has risen through the ranks to become the CIO of Phoenix. Her down-to-earth style and ability to bring others up to speed with city initiatives has made her an invaluable part of a local government that has its eye on providing long-term, cost-effective solutions to constituents. Public CIO caught up with Cotton to talk about her career and the direction she sees the nation’s sixth largest city moving in the coming years.

By Eyragon Eidam

Q: Tell us what brought you to Phoenix. It’s strikingly different from Chicago. What was the draw?

I consider myself essentially an urban person by nature. When you grow up in a big city like Chicago, you’re just a big city kind of person in terms of having the benefit of all that Chicago had to offer: arts, museums, culture, theater, all that kind of stuff. I had exposure to all of that as a young person. I just had a normal childhood living in the city of Chicago, which is unusual. Most people you talk to from Chicago are from the suburbs. I’m actually from the city and was part of the Chicago Public Schools system. [It was] just a great life, humble beginnings, but it proves that it’s not where you are from, it’s where you are going.

I love Chicago, but it’s cold and I never liked snow and winter and all of that, so I actually started to migrate west. I landed in California in the Los Angeles area for a couple of months, but couldn’t find a foothold there and ended up in Phoenix, getting a job and meeting many great people and wonderful mentors.

Q: You’ve worked for a number of departments within the city of Phoenix. How did you end up overseeing IT?

I landed my first professional job about six months after I got here. I worked for Xerox for a number of years, and that was how I started working in technology — in a corporate setting, working with large clients, like Motorola, Honeywell and the aerospace industry. [I got] a lot of wonderful training in technology, customer relationships, understanding how to solve problems and working with people at a variety of levels in many organizations.

After leaving Xerox, I worked for the Resolution Trust Corporation as a network administrator for a couple of years and then transitioned to the city. I tried working in the Parks Department, I did a stint in the IT Department working with SAP as a systems administrator, transitioned to the Public Transit Department as a technology administrator and then became the interim director of the Public Transit Department. It was a totally different industry. I was in transit altogether about 10 years. Then I
went to the convention center, where I was the director for a couple of years. And then I was asked to come back and be the CIO.

Q: What do you see on the horizon for IT in Phoenix?

Our model is really a federated one. We have a central IT department and then we have a number of departments that have their own technology staff. One of the initiatives we are working on is a shared services initiative. We are a city of 14,000 employees and 26 lines of business, so we are really a government corporation. We are really a large conglomerate if you think about it in business terms. We have many, many systems, and what we are going to be working on is, for example, if you need a solution for asset management, we’re going to all use the same asset management system. If you need a system for project management, we’re going to all use the same project management system. If you need to do licensing, we’re going to all use the same licensing system because licensing is licensing. Why do we need multiple systems?

Our departments’ core mission is not to deliver technology. Our core mission is to provide public housing, public transportation and airport services, and deliver clean water, pick up sanitation, etc. The thing that we are expressing to people is to focus on your core business and let us do the technology piece.

Q: Like most states, Arizona was hit hard by the economic downturn of 2008. How has Phoenix adapted to a limited budget while still providing vital services?

We were right there with Las Vegas in terms of the housing collapse. Our real estate market was really that bad. The other opportunity and challenge that we have is that our revenues are largely sales-tax-dependent, primarily in construction sales tax. This region was the innovator behind air conditioning and behind building single-family homes in mass quantity. That’s how we have grown so much in the past 40 years. When you have an economy that’s built on growth and your growth stops – not only stops but stops via a knee-jerk reaction – the tax base changes. Our revenues have not recovered. This is why our shared services initiative is so important.

Q: Are all of the departments on board with this unified idea?

We are fortunate in that we have executive-level buy-in from our city manager and his cabinet, so to speak. They understand the value of [a unified approach]. We’ve put the numbers to it, we’ve done analysis and it just does not make sense [for every department to run their own systems]. Everyone cannot be an expert in multiple fields.

We are working with departments; some are quicker to come on board than others, but that’s normal. Change is a constant, but change is hard. So we meet people where they are. We’re going with the willing first, then we will circle back and gather up the rest. It’s a journey, it’s a marathon. But one of the things we have done to continue this process is that we have developed, in the industry it’s called IT governance, but we refer to it as business investment. … It’s not our goal to beat people over the head, but what we’re talking about is starting the conversation around “What are your department’s strategic business drivers and how can we help you get there?”

We’re trying to change the conversation. It’s really about solving a business problem, it’s not about buying a thing.

Q: How is Phoenix working with partners throughout the state?

Our state passed a law a few years ago to have all of the sales tax collected at the state level as opposed to at the local level. As you can imagine, for cities and towns in Arizona that is quite bothersome. What we are doing to help our partners, at their request, is using our Oracle tools and suite of [business intelligence] solutions so that we can understand the level at which cities are collecting taxes today. We are putting together a solution so that the city of Phoenix can understand its current sales tax collection and past trends, and all the other cities in Maricopa County and our region are partnering with us on this and looking to us to provide a solution they can use so that we can have our own data. No one wants to be dependent on someone else for tax data. People really want to understand this for themselves.

We are being asked more and more to talk about the business solution we put together for our Public Works Department. We used them as the model for how we get your information out of the silo and how you can turn your data into actionable information. People are coming to us to understand how we’ve leveraged these tools and what are some of the efficiencies. Our Public Works Department has been able to make their routing more efficient for trash collection, and they’ve been able to remove trucks from the street. This means they will not necessarily lower their costs, but keep them from escalating in the future.

Q: How has the city partnered with the technology industry to improve its IT efforts?

Last November we held a technology summit and partnered with a dozen to 15 individuals from the private sector and talked to them about the state of our technology, where we are and some of our pain points. We actually got them to give us some recommendations and findings in a report, which we presented to our elected officials, and they are really acting on those items.

Q: Looking ahead, what are some of the opportunities you want to make sure Phoenix is ready for?

We’re continuing to leverage and expand our business intelligence environment to get more departments to unlock their data and make it actionable. We are also looking toward how we can be more digital; how can we have more of our data out there for our public to take advantage of? I mean, it is their data.
NASCIO is the Resource for What’s Happening in State IT

Visit www.NASCIO.org where you can access survey reports and issue briefs on topics such as cybersecurity, IT workforce, unmanned aerial systems, IT accessibility, enterprise architecture and more.

Follow us @NASCIO to stay informed on our newest research
Customer-Minded Estes Returns to Private Sector

AFTER SERVING North Carolina as state CIO for three years, Chris Estes has returned to the private sector. He is credited with leading the development of the state’s Innovation Center, which provided state agencies a try-before-you-buy approach to IT procurement. Estes also spearheaded several projects, including centralizing the state’s IT systems and expanding the work of the Government Data Analytics Center. Gov. Pat McCrory stated that Estes’ leadership has been invaluable, and his customer-first attitude has enhanced the relationship between government and citizens. Estes will return to a previous employer, consulting firm PricewaterhouseCoopers, where he will support private-sector clients in the Carolinas. Deputy CIO Keith Werner will act as interim chief information officer.

Country’s Capital Finds a CTO

After a six-month vacancy in Washington, D.C.’s CTO role, Mayor Muriel Bowser announced Jan. 12 that Archana Vemulapalli would fill the position. Vemulapalli will head the recently announced open data initiative, which will consolidate data for public, academic and entrepreneurial use in order to spur innovation. This is her first role in the public sector; previously she was CTO for Pristine Environments, a facilities maintenance firm, and CEO of a consulting firm. Last year Vemulapalli was recognized as one of the Washington Business Journal’s Women Who Mean Business.

Massachusetts Hires Boston’s Data Scientist

BOSTON’S PRINCIPAL DATA scientist, Curt Savoie, announced a job switch via his Twitter account on Feb. 11. In mid-February, Savoie joined the Massachusetts state IT department, Mass IT, as principal data scientist. Speaking with Government Technology while still working for Boston, Savoie said public-sector data science positions are about data literacy, walking city managers through the basics of what data is and why it matters. “If I throw a bunch of numbers at a manager, they might not know how to interpret those,” he said. “Sometimes you have to guide people along the path.”

Bates Torn to Step Down as Alaska CIO

Jim Bates is bidding adieu to his position as Alaska CIO and director of Enterprise Technology Services in mid-March. After serving the state for the last three years, Bates said it’s a part of his DNA and he is torn to be leaving the role. He was crucial in leading an IT infrastructure upgrade, centralising the state’s IT procurement systems and implementing other cost-cutting measures. Bates plans to focus on his consulting firm, Alaska’s information technology officer, Jim Steele, will lead the CIO office on an interim basis.
In the early days of Alabama CIO and Secretary of Technology Brunson White’s tenure, the government was far from being on the same page, lacking understanding of what types of technology could be used to its advantage. In a recent interview, White noted that establishing a central IT policy framework and building up the state’s cyberdefenses are among his greatest accomplishments. He said he is proud of how far Alabama’s IT has come and is excited for his next chapter working as a consultant on human capital management and technology matters.

Joanne Hale, a professor of management information systems for the Culverhouse College of Commerce at the University of Alabama, was appointed acting secretary of information technology by Gov. Robert Bentley on Jan. 4. During her more than 20 years with the University of Alabama, Hale led more than 180 developers in the IT solutions delivery organization and managed an annual portfolio of up to 50 projects.

PHILADELPHIA IS IN THE MARKET for a new chief innovation officer — the city announced Dec. 30 that Adel Ebeid was resigning. After being appointed in 2011, Ebeid embarked upon upgrading the city’s core technology functions through a $120 million initiative and building its first innovation team. Ebeid was named a White House Champion of Change for his work bringing governments and people closer together. Additionally he was recognized in 2014 by Government Technology as one of its Top 25 Doers, Dreamers and Drivers. Before joining Philadelphia, Ebeid served as New Jersey’s chief information and technology officer, and previously was the CIO and chief operating officer for the Motor Vehicle Commission. On Jan. 11, he joined consultancy firm Green Diamond Solutions as its president of innovation and technology.

Joanne Hale, a professor of management information systems for the Culverhouse College of Commerce at the University of Alabama, was appointed acting secretary of information technology by Gov. Robert Bentley on Jan. 4. During her more than 20 years with the University of Alabama, Hale led more than 180 developers in the IT solutions delivery organization and managed an annual portfolio of up to 50 projects.

PHILADELPHIA IS IN THE MARKET for a new chief innovation officer — the city announced Dec. 30 that Adel Ebeid was resigning. After being appointed in 2011, Ebeid embarked upon upgrading the city’s core technology functions through a $120 million initiative and building its first innovation team. Ebeid was named a White House Champion of Change for his work bringing governments and people closer together. Additionally he was recognized in 2014 by Government Technology as one of its Top 25 Doers, Dreamers and Drivers. Before joining Philadelphia, Ebeid served as New Jersey’s chief information and technology officer, and previously was the CIO and chief operating officer for the Motor Vehicle Commission. On Jan. 11, he joined consultancy firm Green Diamond Solutions as its president of innovation and technology.

Kansas City, Mo., Hires New Innovation Officer

Army veteran Bob Bennett has taken over as Kansas City, Mo.’s second chief innovation officer, focusing on projects around smart city initiatives. After serving 24 years in the Army overseeing operations in Africa and the Middle East, Bennett most recently worked as an instructor at the U.S. Army Command and General Staff College at Fort Leavenworth. “Bob’s experience leading process improvement strategies and efficiencies at the highest military levels will renew efforts throughout city government to make Kansas City more effective for all citizens,” said Mayor Sly James in a statement.

Kansas City is a leader in smart city initiatives, including a program to increase broadband access, developing a streetcar line and expanding the number of electric-vehicle charging stations. The chief innovation officer position was left vacant last July by Ashley Hand.

Richard Culatta has moved from the U.S. Department of Education to Rhode Island to become the state’s first chief innovation officer. Culatta has worked in education for the better part of 20 years in both private and public capacities. During his time with the federal government he helped pioneer new approaches for using technology to engage with citizens, according to former Secretary of Education Arne Duncan. Culatta returns to his home state to help create more opportunities for economic advancement, improve government services and use data to increase transparency. His approach to the position is a bit different from other state innovation officers. For starters, his office is based out of Rhode Island College, where he plans to collaborate with faculty and students, and tap into a research community that shares common goals with state government.
Government has changed. Facing growing budget constraints, government organizations are turning to advanced technology to modernize citizen services, reduce waste and streamline operations. While demand on government networks has grown exponentially, the networks themselves haven’t kept pace. Comcast Business Enterprise Solutions offers a new kind of network that’s built for the government of tomorrow. Our Ethernet can scale up to 10 Gbps to meet the rapidly evolving needs of government, with volume, security and speed. And our secure and reliable nationwide backbone enables the seamless access to and sharing of data by agencies, citizens and field offices alike. Visit business.comcast.com/government or call 866-429-2241 to see what Comcast Business can do for you.