GOVERNMENT TECHNOLOGY
SOLUTIONS FOR STATE AND LOCAL GOVERNMENT
VOL25 ISSUE6 | JUNE 2012

INSIDE:

Smart City:
California community ranks among the world's technology elite

PLUS:

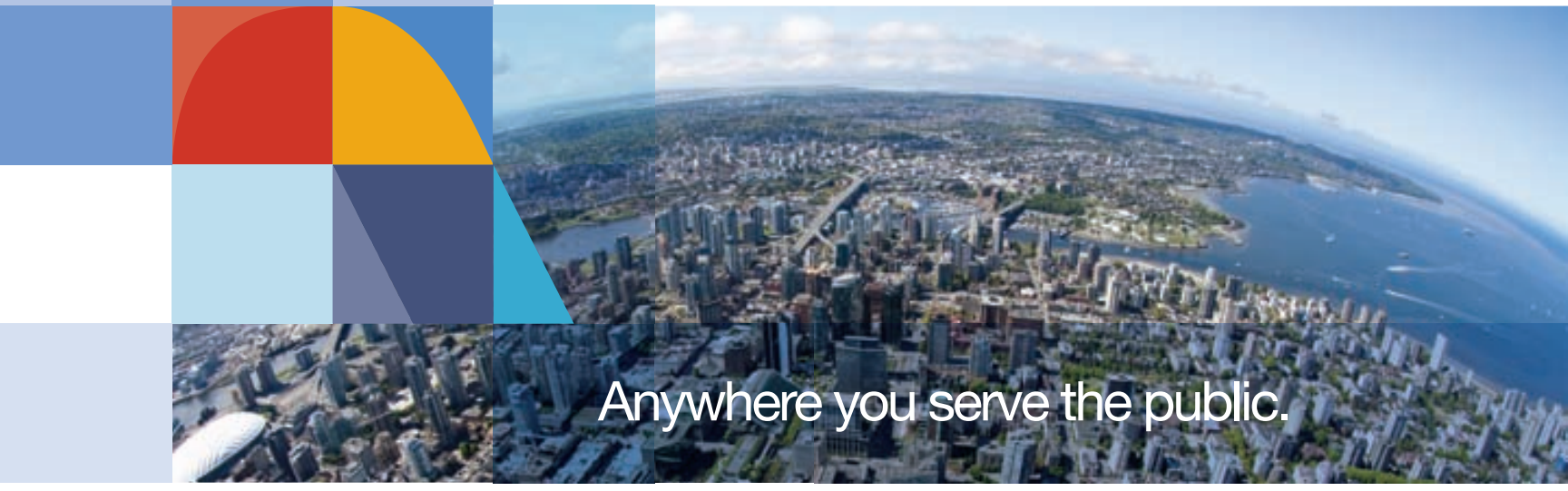
Digital Communities Quarterly Report

DOLLARS FOR DIALING

CITIZENS LOVE 311 SERVICES, BUT CITIES **WANT TO CUT THEIR PHONE BILLS**

A PUBLICATION OF e.REPUBLIC govtech.com

Introducing NTT DATA Americas.
Your Innovation Partner.



Coming together as one NTT DATA Americas team.

Empower Solutions I Keane I MISI Company I The Revere Group

Every day around the world NTT DATA helps governments reduce costs, stretch resources, and better serve constituents. We put innovation to work for you by applying proven processes, technology, and insights to achieve the goals of the public sector.

We deliver impactful results. Not endless timelines, overblown budgets, or unattainable promises.

- Consulting
- Application Services
- Infrastructure Services
- Cloud Services
- Business Process Outsourcing
- Strategic Staffing

NTT DATA
Global IT Innovator

Learn more. www.nttdata.com/americas

www.govtech.com

CONTENTS

Government Technology (ISSN# 1043-9668) is published monthly by Government Technology, 100 Blue Ravine Road, Folsom, CA 95630. Periodicals Postage Paid at Folsom, Calif., and additional offices. POSTMASTER: Send address changes to: Government Technology, 100 Blue Ravine Road, Folsom, CA 95630. SUBSCRIPTIONS: Subscription inquiries should be directed to Government Technology, Attn: Circulation Director, 100 Blue Ravine Road, Folsom, CA 95630, 916/932-1300.

COVER PHOTO BY DONNELLY MARKS

NEW YORK CITY'S 311 SYSTEM HANDLES MORE THAN 20 MILLION CALLS ANNUALLY.

DONNELLY MARKS

Digital Communities Quarterly Report

SHUTTERSTOCK.COM

COLUMNS

NEWS

DEPARTMENTS

FOLLOW US ON

IN OUR NEXT ISSUE:

Great Equalizer
Some say social media and other tech tools will bring new blood to local elected offices.

Disenfranchised?
How outdated voter registration systems waste money and undermine confidence.

Under Attack
Why candidates and their digital platforms are a tempting target for cybercrime.

WWW.GOVTECH.COM

The cloud at your command.

AT&T cloud solutions for government are designed to flexibly follow your commands.

In here, capacity adjusts and, just as easily, readjusts.
What you pay is in sync with what you use.
You never have less capacity than you need.
Or more than your budget allows.

And you control what gets in.
And what stays out.

In here, government infrastructure is flexible and highly secure.

To learn more, visit att.com/govcloud

Rethink Possible®

By Steve Towns / Editor

Real Life + Virtual Life

Last month, I was reminded how firmly social media has woven itself into the fabric of our society. I was in a group of prospective jurors for a criminal case in the Sacramento County Superior Court. The judge warned us that, if chosen for the jury, we were not to tweet or post to Facebook any information revealed during the trial.

About the same time I was in that Sacramento courtroom, *The Boston Globe* reported on a Massachusetts Appeals Court ruling that said trial judges need to ensure jurors understand that the standard warning against discussing court testimony with outsiders also applies to information sharing via social media. It seems that for many people, tweeting or posting events of their daily lives — including jury service — have become so automatic that they don't even realize they're violating court rules.

"Jurors must separate and insulate their jury service from their digital lives," said the appeals court, ruling in a case where jurors commented on Facebook during a trial.

I wasn't selected for the jury, but the experience made me think. While courts necessarily are trying to separate jurors' real lives and digital lives, other areas of government are adapting to the idea that physical and virtual activities are closely intertwined for many citizens. Recently I interviewed state and local IT officials on social media's future, and a few things stood out.

San Francisco CIO Jon Walton said social media — particularly the city's popular 311 Facebook app — has become a key channel for citizen service requests. "Most people in San Francisco are logged into their Facebook account 24/7, and that's how they want to interact with us," he said.

And in Utah, social media channels are challenging the dominance of email for citizen-to-government communication, said Bob Woolley, the state's chief technical architect. "Right now we aggregate nearly 2,000 social media feeds into our state portal, and those seem to be things that get a lot of traction — YouTube, Flickr, Twitter, Facebook. Those seem to be things that are speaking to our audience, so they're important to us."

Survey data from GovTech Exchange, our online community of senior-level state and local IT professionals, also shows that social media is making inroads in government offices. Almost 60 percent of respondents said their agency permits use of LinkedIn at work; 45 percent allow YouTube and Facebook usage; and 41 permit use of Twitter. Opinions were mixed, however, on social media's usefulness. Nearly 60 percent of respondents rated social media as somewhat to very useful, while 32 percent said it's not very useful or not useful at all.

The latter piece of data probably reflects the reality that governments are still figuring out how to apply social media to central tasks like delivering services and improving outcomes. But that's OK; we're getting there. GT

RAISE YOUR VOICE

Your opinions matter to us. Send comments about this issue to the editors at **editorial@govtech.com**. Publication is solely at the discretion of the editors. *Government Technology* reserves the right to edit submissions for length.

A Better Solution
for Your Local Government

New World Systems understands that underlying technology matters just as much as surface layer functionality. That is why we use the best and most current technology to keep long-term costs low and performance high. Built using Microsoft.NET framework and tools, New World's unified suites of Public Safety and Public Administration solutions simplify maintenance, provide time-saving workflow and integrate with applications local governments and public safety agencies use every day.

The technology foundation behind New World's solutions provides local governments and public safety agencies the ability to:

- **Enhance decision making with dashboards and more intelligence from your software.**
- **Save time and money by empowering citizens, vendors and employees with anytime, anywhere access to information.**
- **Increase efficiency and eliminate silos of information with enhanced interoperability between applications, departments and municipalities.**

Aegis™ fully integrated Law Enforcement/Fire/EMS solutions for:
Dispatch | Records Management | Corrections Management | Mobile Computing | Information Sharing | Decision Support & Dashboards

Logos.NET™ fully integrated solutions for:
Financial Management | Payroll & Human Resources | Community Development | Utility Management | eGov
Decision Support & Dashboards

See what the technology behind our solution can do for you.

See why more than 1,000 local government organizations nationwide trust the public sector expertise and advanced technology behind New World's unified suites of Aegis™ Public Safety and Logos™ Public Administration solutions to run their mission critical operations:

www.newworldsystems.com

New World Systems®
The Public Sector Software Company

Growing Interest in Pinterest

With its current rank as the third most popular social networking site — behind Facebook and Twitter — **Pinterest can no longer be dismissed as simply a forum** for exchanging recipes and decorating ideas. Cities like Tyler, Texas, are creating a presence on the bulletin-board-style image sharing website.

WHO SAYS?

"The public will be really pleased with this service, however, it's also my opinion that there will be a certain amount of misunderstanding ..."

www.govtech.com/public-safety/National-Emergency-Alert-System-Goes-Live.html

Wind-Powered Traffic Lights

Nebraska researchers will begin real-world tests this month of wind- and solar-powered traffic lights. The project, launched by the University of Nebraska-Lincoln, will explore the feasibility of linking energy generating traffic signals to the power grid, and determine if signal-mounted turbines will distract drivers. Researchers are already monitoring a 30-foot wind turbine connected to a traffic light in Lincoln.

96

The percentage of lost cellphones that will suffer a data breach, according to security firm Symantec.

TOP-TWEETED STORIES

The Best Social Media Cities — Local GovernmentsR anked — 298 tweets

Why Big Sites Run Drupal — 276 tweets

Should Kindergart-ners use iPads in the Classroom? — 136 tweets

HOT OR NOT?

Most read stories online:

Why Big Sites Run Drupal
5,544 VIEWS

National Emergency Alert System Goes Live
4,949 VIEWS

Pinterest for Government: A Recipe for Success?
3,002 VIEWS

Least read stories online:

Mobile Tech Center Ready to Roll in Kentucky
357 VIEWS

State CIOs, Budget Officers Partner on 'Shared Agenda'
348 VIEWS

Iowa Voter Data Portal Offers Real-Time View
284 VIEWS

reader/**comments:**

"No normal person would accept the terms of service for most social media. It's clear that society is made up of neurotic, self-obsessed and mentally challenged sufferers of ADHD who are constantly in search of the next fad.

***OptOut in response to* Pinterest for Government: A Recipe for Success?**

"Government and corporations have been in the habit of storing all their digital data over the past 20 years. The day has come to begin the process of cleaning up the digital landfill. You can't cut down the data breach potential until you reduce the incentive to breach. Get rid of data that is no longer needed and can present a danger to the organization.

***Alan Steinberg in response to* Dark Clouds Over Technology: Pondering Action After Recent State Government Data Breaches**

"Now, if they could just create a "truth" meter for each candidate — that would be useful.

***Dave in NC in response to* Voting Information Project Takes Aim at Open Data, Social Media**

"Smaller reactors of a size typically used on nuclear aircraft carriers, [which are basically floating cities] should be the norm since our military already has several decades of experience operating the military versions. Stationary reactors should be easier to operate safely than ones on moving ships. The real "fly in the ointment" will be fuel reprocessing. We cannot continue to accumulate spent fuel rods.

***SoutheastUS in response to* New Nuclear Technology May Debut in Missouri**

"Since when should a prisoner have a "right" to communicate with whomever/whenever s/he pleases? Isn't that part of the punishment; deprivation of freedoms: speech, life, liberty, pursuit of happiness?

***RW in response to* Cellphone Blocking Moves Ahead in California Prisons**

30% of state and local IT officials think that tablets will eventually replace desktops and laptops.

What do you think?

Share Your Expertise on GOVTECH EXCHANGE

JOIN HERE
govtechexchange.com

GARDENSBYTHEBAY.ORG.SG

Singapore's Supertrees

An ambitious project in Singapore is converting 250 acres of waterfront property into a horticultural recreation area. The first section, Bay South, opens this month, and boasts a forest of "supertrees" — 18 of them, in fact. These supertrees are 80 to 160 feet tall, and the concrete and steel tree trunks are covered with vertical planters that hold more than 162,000 plants. Seven of the supertrees have solar panels, which will collect electricity to light the trees at night.

Carlos Ramos

CIO, California

JESSICA MULHOLLAND

Carlos Ramos was appointed California CIO by Gov. Jerry Brown in 2011. He's spent more than two decades at various state agencies, including several years leading California's Office of System Integration.

1 Why does the governor's 2012-2013 budget proposal shift the California Technology Agency into a consolidated administrative agency that handles procurement, IT and human resources? The proposal has to be looked at in the larger context. The governor is trying to group together like functions and organizations across state government. So he has proposed to move our agency into a large agency called the Government Operations Agency, which would consolidate departments that do cross-cutting governmental administrative operations. The idea is to make government more effective and efficient. In terms of functions, mission and authority, that really doesn't change. We'll have all the power we need to continue to do our job, and the head of the organization will still be the state CIO. I think it makes it easier to align some of the external factors that often are critical to the success or failure of an IT operation.

2 Brown also slashed the number of cellphones used by state employees in 2011. Is he anti-technology? You'd have to be a casual observer of what's going on in California government to come to the conclusion that he is anti-technology. He is not. The governor sees technology as a driver of California's economic competitiveness. He's made trips to Silicon Valley to meet with tech companies and gets very involved to see that they have the government support they need to be successful. The things that he laid out as challenges for me were to use technology to make government more effective, efficient and responsive to consumers, so I think that he very much sees the potential and the promise of technology.

3 Your predecessor, Teri Takai, is a rock star in the government CIO business. Where will you put your stamp on California's IT organization? Teri had the right idea about what needed to happen: consolidation, centralization, making better use of technology across the enterprise, and leveraging and reusing components. Now that the train is on the track, my job is to see that it gets all the way to the station. I am trying to put in place a collaborative governance structure and a collaborative policy and standard-setting process — and really engaging the tech community to make sure they buy into the concept.

4 What are you doing today from a technology perspective that you never would've imagined two or three years ago? We are going hard and heavy into the mobility space. We have developed and launched a resources kit for public-sector agencies where we have a template for ready-made application launching, so folks can develop stuff in a couple of hours. It leverages social media and some of the cloud technologies that are out there for mapping. It's location-aware and free. So we are moving into the space rapidly. GT

— Steve Towns, Editor

Today, government agencies rely on optimized connectivity. We get it. With dedicated account managers, solution architects and partnerships with leading vendors , we can help you design and build a solution that's fast, flexible and secure. One network, reliable, with bandwidth and communication for all.

Get things moving at CDWG.com/networking

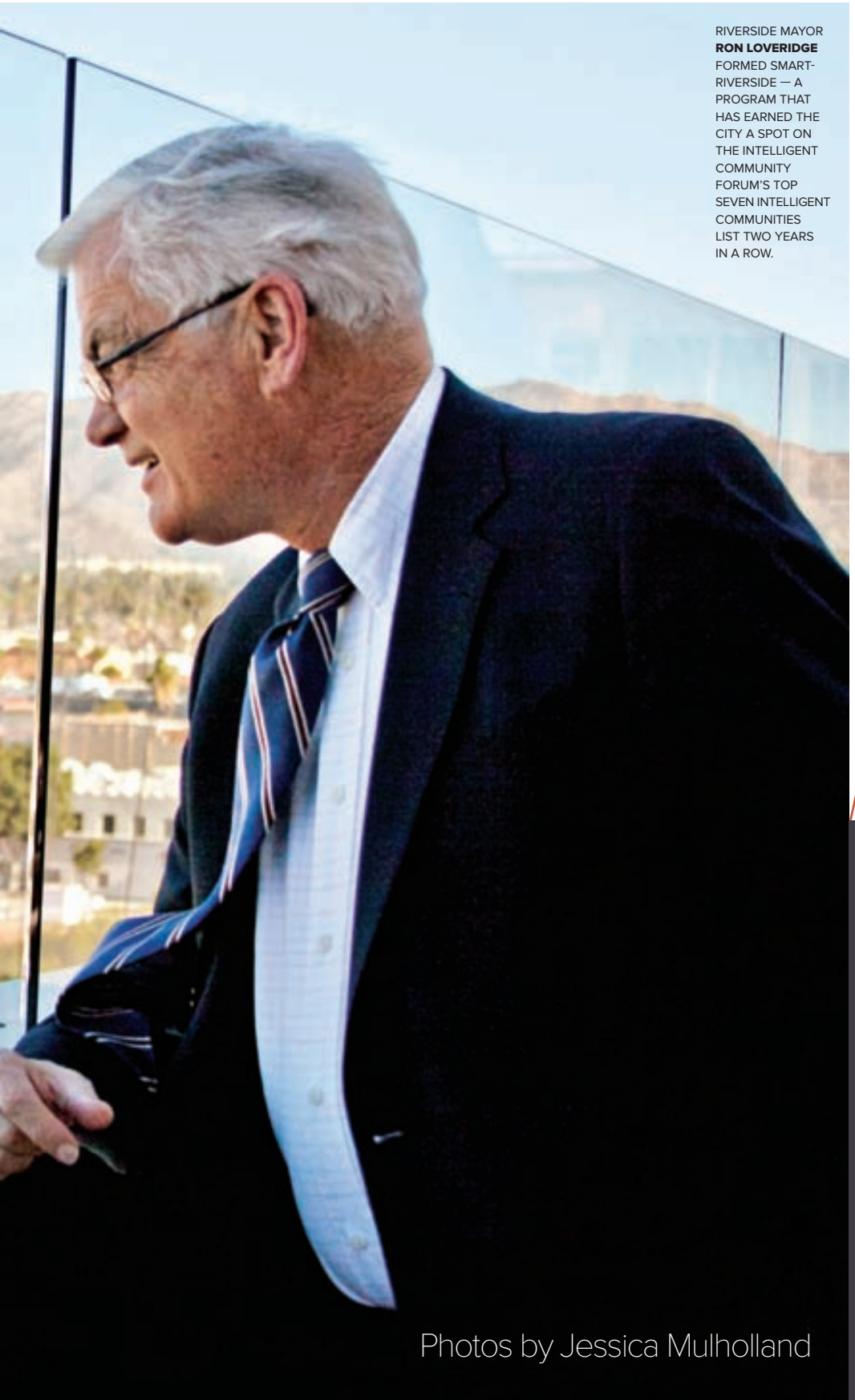
CDW·G® PEOPLE WHO GET IT™

TECH-RICH RIVERSIDE

HOW THIS SOUTHERN CALIFORNIA CITY'S EFFORTS TO **CLOSE THE DIGITAL DIVIDE AND ATTRACT EMPLOYERS** LANDED IT AMONG THE WORLD'S TECHNOLOGY ELITE.

By Sarah Rich | Staff Writer

WATCH A VIDEO
Learn more about SmartRiverside @
www.govtech.com/videos



RIVERSIDE MAYOR **RON LOVERIDGE** FORMED SMART-RIVERSIDE — A PROGRAM THAT HAS EARNED THE CITY A SPOT ON THE INTELLIGENT COMMUNITY FORUM'S TOP SEVEN INTELLIGENT COMMUNITIES LIST TWO YEARS IN A ROW.

Photos by Jessica Mulholland

In the late 1800s,

the Southern California city of Riverside was the richest city per-capita in the United States. A few years earlier, a handful of orange trees had been planted in the fertile soil of the young town, giving birth to the California citrus industry. Spurred by cutting-edge technologies like refrigerated rail cars and innovative irrigation systems, the industry — and Riverside — thrived.

Over time, however, international competition crowded out Riverside's orange growers. Pressure from population growth took its toll, making smog and traffic severe problems. An IT outsourcing plan delivered more benefits to the vendor than to the city, according to Riverside officials. And police operations were in such disarray in the early 2000s that the federal government threatened to intervene. By 2004, resident satisfaction with city agencies was at an all-time low.

So, nearly 150 years after Riverside's rise, city leaders again looked to technology to turn things around.

In 2005, the city hired its first full-time CIO, Steve Reneker, and it launched SmartRiverside, an ambitious plan to attract and retain technology companies. The plan created free citywide wireless Internet access, technology literacy and digital inclusion activities, and new programs to foster technology innovation and use. A year later, the City Council addressed physical infrastructure needs by approving Riverside Renaissance, a $2 billion effort to improve traffic flow; replace aging water, sewer and electric infrastructure; and expand and improve police, fire, parks, library and other community facilities.

"We've done a number of things that have changed Riverside to make us competitive," said Mayor Ron Loveridge.

It's this dedication to high-tech and digital inclusion that, for two years, has earned Riverside a place as one of the Intelligent Community Forum's (ICF) Top Seven Intelligent Communities of the Year. The ICF, a New York-based think tank focused on the digital economy, says the Top Seven communities represent international models of economic and social transformation in the 21st century.

Shortly after SmartRiverside's launch, a group of local business owners approached Reneker, who also serves as SmartRiverside's executive director, with a plan. "They said, 'One of the things we think we need is free wireless so we can attract and retain more tech companies in our technology park,'" Reneker said.

By 2007, the city had completed a Wi-Fi network called Wireless Riverside, consisting of 1,600 access points across 86 square miles. The original contractor, AT&T, transferred the network to the city in 2009 at no cost, citing a lack of paying customers. Riverside now owns the equipment; Time Warner Cable is its current service provider; and US Internet services and maintains the network. The city pays $5.48 million annually to US Internet under its current contract, and the network provides residents with 786 Kbps Internet access.

While the network was being built out, the program's leaders decided they also needed to help low-income residents boost their computer literacy. Thirty percent of Riverside residents earn less than $45,000 a year, and 70 percent of the student population is signed up for a free or reduced lunch program.

So in 2006, with help from a Microsoft grant, Riverside started the Digital Inclusion program, which focuses on teaching low-income residents computer skills and giving them free refurbished computers. Individuals who earn less than $45,000 qualify for the program and can sign up by calling the city's 311 information line. Those who are interested are enrolled in classes, most of which last about eight hours, Reneker said. Instructors from Riverside Unified School District provide the training, which typically takes place on evenings and weekends. Once a student completes the class, he or she receives a refurbished computer.

The program's popularity has grown significantly since its inception. Last October, a survey by the nearby California State University, San Bernardino, showed that the program had graduated its 5,000th family. A few months later, the program had an additional 400 participants and currently serves 100 to 150 families per month.

Reneker said Wireless Riverside has been a key to the Digital Inclusion program's success, allowing low-income

DONATED COMPUTERS ARE BROUGHT TO RIVERSIDE'S E-WASTE FACILITY TO BE REFURBISHED. THROUGH SMARTRIVERSIDE'S DIGITAL INCLUSION PROGRAM, COMMUNITY MEMBERS WHO COMPLETE A COMPUTER CLASS ARE GIVEN A REFURBISHED COMPUTER.

INTELLIGENT COMMUNITY FORUM:

The Intelligent Community Forum (ICF) is a think tank that "studies the economic and social development of the 21st-century community," according to the forum. Each year, the ICF names the top seven intelligent communities from around the world based on data and metrics submitted by each community. Forum members visit each community and, to conclude the year, the No. 1 community is chosen. Riverside, Calif., has been nominated for two consecutive years. If Riverside wins, it will be the third victory for the U.S. since 2000.

RIVERSIDE CIO **STEVE RENEKER** OVERSEES THE SMARTRIVERSIDE PROGRAM.

families free Internet access on their refurbished computers. The free Wi-Fi also helps local businesses — residents can use the Internet while dining at restaurants or shopping at stores.

Putting refurbished computers in the hands of Digital Inclusion program participants requires a constant flow of used equipment, which is made possible by donations from businesses, schools and the general public. Digital Inclusion staff members rebuild the donated computers.

These staff members are hired through a separate city program called Project BRIDGE (Building Resources for the Intervention and Deterrence of Gang Engagement), Reneker said, which is run by the city's Department of Parks, Recreation and Community Services. The program places at-risk youth in various jobs and professions throughout the city.

The Project BRIDGE members who are employed as Digital Inclusion staff work on site at the city's e-waste collection facility where they wipe hard drives and configure the equipment with a Windows XP Professional operating system and Microsoft Office Suite.

Jesse Guzman, manager of the Digital Inclusion program, is a Project BRIDGE graduate who became a staff member in 2007. "Since I came from the Project BRIDGE program, I know how to speak to all of our employees and encourage them to get back into school and to get a better job," Guzman said.

He said the goal for the staff coming from Project BRIDGE is to teach them basic computer technician skills and help them get proper certification to advance onto another job as a computer technician. One of the program's major successes was a participant who used the free Wi-Fi and an available computer to take online college courses, which eventually earned her a bachelor's degree.

Computers that don't meet the program's standards for refurbishment are disassembled and recycled at the e-waste facility, which helps offset SmartRiverside's operational costs.

JESSE GUZMAN IS A GRADUATE OF THE CITY'S PROJECT BRIDGE PROGRAM AND NOW SERVES AS A PROGRAM MANAGER FOR RIVERSIDE'S DIGITAL INCLUSION INITIATIVE.

ENTICING TECH COMPANIES:

SmartRiverside's Tenant Improvement program provides $20,000 in start-up grants to technology companies that either started in Riverside or have recently relocated there.

CIO Steve Reneker said the money can be used for rent or lease abatements, but the intent is for the companies to fund some type of "high-tech" upgrade to their facility so that future tenants can benefit from it.

Along with free Wi-Fi and digital literacy initiatives, SmartRiverside includes incentives for businesses to add technology to their facilities. The Tenant Improvement program offers Riverside-based companies starter grants of $20,000 to make improvements.

Reneker said the money can be used for rent or lease payments, but the intent is for the companies to use the funding to add some type of "high-tech" feature to the buildings they occupy so that when the next company moves into the facility, it can take advantage of that feature. Since the Tenant Improvement program started in 2005, SmartRiverside has distributed more than $500,000 in improvement grants.

So what does it take for other cities to move ahead with community technology programs like SmartRiverside? Reneker said cities considering such a step must have elected officials on board with the idea and must be committed to carrying out the program. Through collaboration with the private sector and schools, programs like SmartRiverside can be deployed inexpensively.

"I would encourage everybody that's thinking about [developing a program] to just go ahead and build it," Reneker said, "and they'll be surprised at what it will do for your community."

In the future, Reneker said Riverside hopes to start other programs that expose the community to technology. Until then, the city is waiting to see if it will be named the world's No. 1 intelligent community. GT

srich@govtech.com
twitter@sarahrichforGT

DOLLAR$ FOR DIALING

When Baltimore became the first city to introduce a dedicated 311 call center for nonemergency government services in 1996, no one was sure what kind of response it would get. But once constituents caught wind of the new service, it took off — the call center now handles nearly 1 million calls a year. Many other cities have followed suit, introducing 311 call centers that allow citizens to ask questions or report everything from public safety and quality of life concerns to health and sanitation complaints.

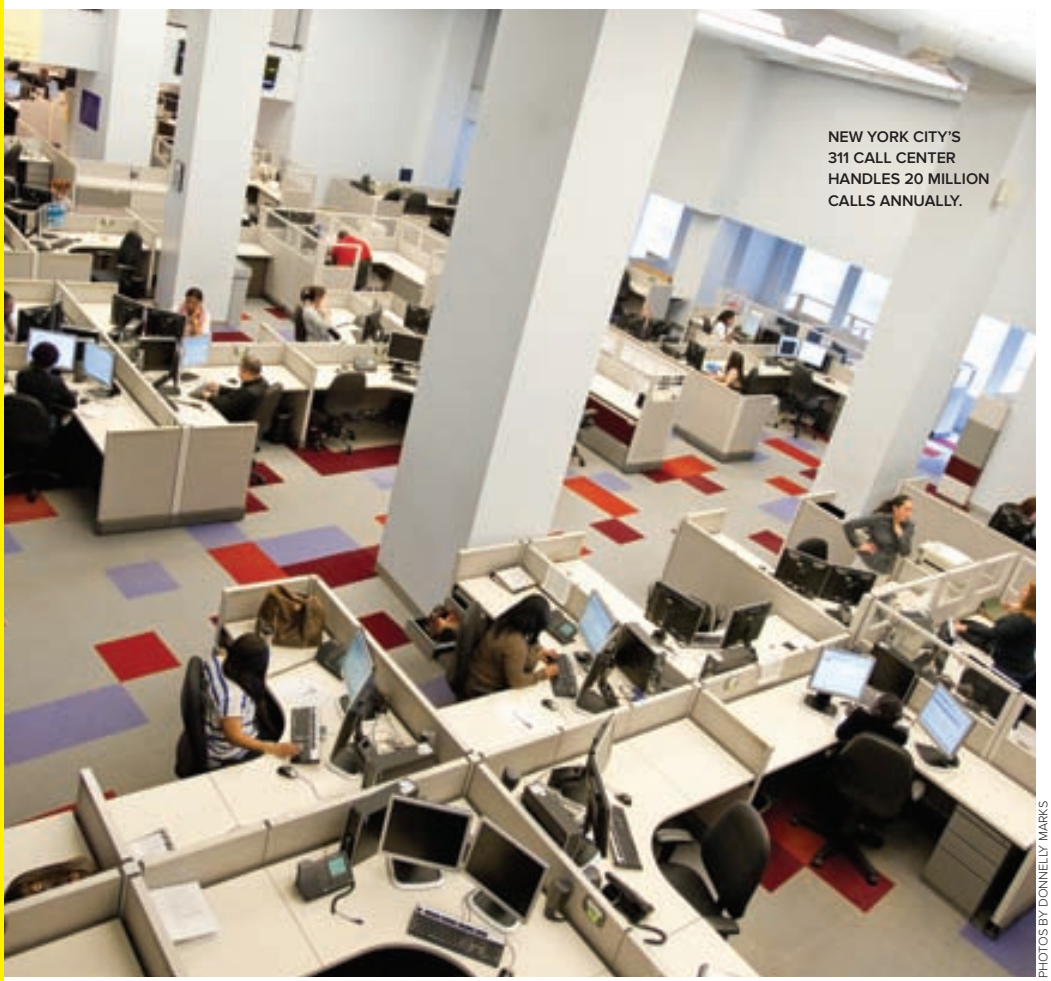
But with the recession squeezing city budgets, all expenses are under scrutiny. And 311 systems, despite their popularity with both city managers and constituents, are no exception. Over the past couple of years, the costs of 311 calls and 311 call centers have received a closer look, and some of the results have been surprising. A recent 15-city study of 311 by the Pew Charitable Trusts found that the average cost per 311 call is $3.39. Detroit came in with the highest cost per call at a whopping $7.78. Given that many cities handle hundreds of thousands — if not millions — of calls per year, those costs add up dramatically, causing some to question whether constituent convenience is worth the cost.

BY JUSTINE BROWN | CONTRIBUTING WRITER

JOSEPH MORRISROE, EXECUTIVE DIRECTOR OF NYC 311, WORKS WITH A STAFF MEMBER IN THE CITY'S CALL CENTER.

DONNELLY MARKS

Budget belt-tightening has put the cost of 311 calls under a microscope. And while few cities would contemplate pulling the plug on these popular systems, many are ***looking for ways to rein in expenses.***



NEW YORK CITY'S 311 CALL CENTER HANDLES 20 MILLION CALLS ANNUALLY.

PHOTOS BY DONNELLY MARKS

"We consider 311 one of the most used and most critical city services, but there is considerable cost involved. At a time when budgets are tight, it's a concern," said Joseph Morrisroe, executive director of NYC 311, the nation's largest 311 system.

311 call centers were originally expected to save cities money by prompting agencies to operate more efficiently. But that hasn't necessarily played out, according to Spencer Stern, who has spent more than 10 years as a 311 consultant. "Most localities have not undertaken methodical cost benefit analysis of 311," said Stern, president of Stern Consulting. "I think part of the reason they haven't is they are worried that it could be negative."

But why are 311 calls so expensive? According to Stern, 70 to 80 percent of a call center's cost is tied to employee compensation. The next highest costs typically are attributed to software or hardware. Complicating the issue is the fact that cities have different ways of accounting for 311 costs, and some include things that others do not, making an apples-to-apples comparison impossible. Yet in the majority of cases, it's clear that providing 311 services isn't cheap. Given ongoing budget challenges, are there better options for delivering nonemergency services?

Several cities recently have launched online options. In September 2011, Baltimore expanded its 311 services through a mobile app that lets citizens use their smartphones to report problems and request services. New York City also launched online alternatives. "We've started to work in the social media channels, primarily Twitter," Morrisroe said. "We realized we needed to shift more traffic online, because answering voice calls is expensive. This gives us another option."

NYC 311 handles 20 million calls a year, sometimes more than 200,000 calls per day. So far, the online options haven't slowed the call center volume much, according to Morrisroe. Part of the reason may be inherent in the name. "Because our name is 311, people tend to call."

FLICKR/DANIEL LOBO

311 of the Future – Three Trends Worth Watching

As technology evolves, new possibilities arise for using 311 systems in more sophisticated, intelligent ways. Here are three trends 311 vendors see developing today and in the future.

1 / Mobile Technologies and Social Media Smartphones and apps are giving citizens the ability to interact with government instantly, on the go. Apps that allow problems to be reported instantly are appealing to both citizens and government.

"Young people especially want to use apps — they want to be able to submit requests in real time, take pictures and send them in while they are out on the town and see problems," said Kenny Leverett, national sales director for Motorola's Public Service Applications. "Such apps allow cities to get information they didn't have before and to reach a new population that's not interested in waiting until they get home to make a phone call on a landline."

Ben Berkowitz co-founded SeeClickFix, a portal that enables residents to report, monitor and even fix problems in their neighborhoods online or with a mobile phone. Governments can then monitor and interact with citizens by acknowledging problems and discussing possible solutions.

"There is no question that in the last few years there has been a real trend toward customer service in general, and social media is a big part of that," said Berkowitz. "SeeClickFix was designed to help bridge those two areas to make positive change happen more quickly and efficiently."

2 / Enterprise Approach Many cities have multiple call centers handling different issues using different processes. Collaborating better within a city and taking more of an enterprise approach to 311 can minimize transfers and improve efficiency.

"We've seen cities that take more of an enterprise approach save a lot of money and become much more efficient by having just one source of information for the entire city, with universal call takers that can pull information from all departments at once," said Scott Frendt, vice president of sales for Oracle North America.

Frendt said smaller cities and counties also are starting to look at partnering to provide 311 service. Cobbling several small cities or counties together to launch a regional 311 system lets them share resources and infrastructure costs.

3 / Integrated 311 and 911 Although 911 and 311 are distinctly different systems, when it comes to disaster preparation and recovery, more jurisdictions are considering how the two systems might work better together. "We are seeing a lot around integrated command and control using 911 and 311 together to help plan for and manage disasters," said Leverett. "911 gets overloaded during an emergency, but utilizing 311 as well in those circumstances could help a great deal. We are seeing more and more cities start to think about integrating the two systems."

A MESSAGE ON A BALTIMORE BUILDING DIRECTS CITIZENS TO THE CITY'S 311 SYSTEM.

FLICKR/PETER CIGLIANO

But online alternatives may be helping to accomplish another goal: reaching an audience that's much more comfortable using mobile apps and smartphones than landlines. "This kind of self-service channel is a win-win for the tech-savvy constituent and for us," Morrisroe said. "The constituent gets the information delivered in the manner they prefer while the costs are much lower for us. We are reaching a new set of customers, but not necessarily reducing call volume."

Stern agrees. "These other channels often attract more constituents but won't necessarily reduce calls," he said. "While mobile self-service use is growing, I think it's reaching a new and different, more tech-savvy audience that probably wouldn't use the phone in the first place. But if you take a look at the call volumes, the primary way citizens are connecting with their government is still via phone. The concept of the call center is not going to go away regardless of how many other channels become available."

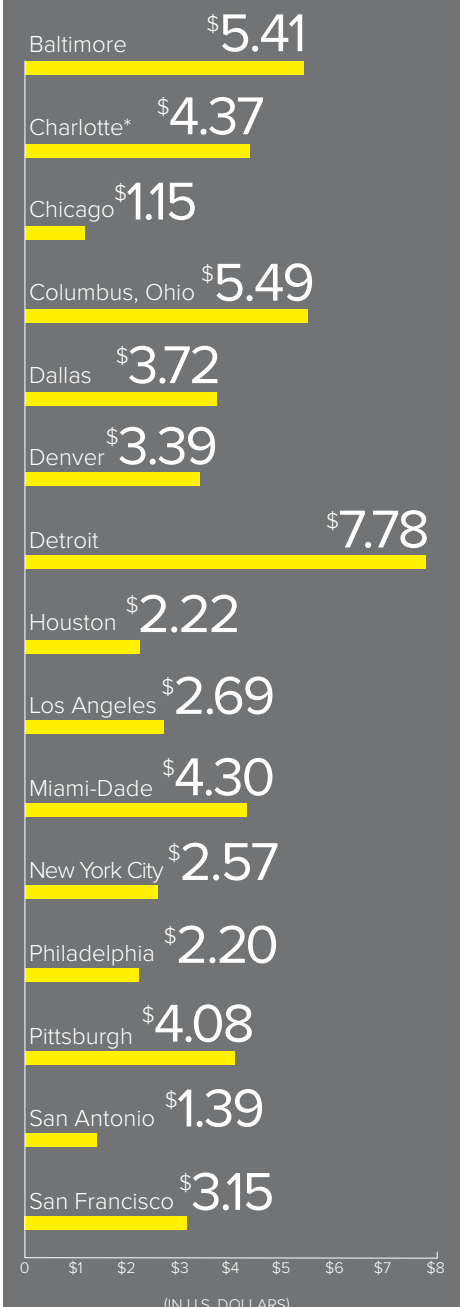
Still, online alternatives to 311 calls generally are very inexpensive to launch, giving cities little to lose. "There are almost zero barriers to entry," said Morrisroe. "There isn't a lot of capital needed to offer online options. Because we already had 311 Online, we had our resource data available so it was very easy to dip into that for texting and using Twitter."

While online interaction may not be the solution cities are seeking to reduce costs, other forms of technology are helping streamline or automate some 311 processes.

"Some municipalities are looking at ways to reduce the cost of calls by using interactive voice response (IVR) systems, providing more information while people are on hold so they don't have to talk to someone live," said Stern. "These are quite common when there are things like snow emergencies, or when a special event is going on. IVR systems have been successful in giving the citizens what they want quickly without using a live operator."

Price Per 311 Call

The average cost of a single call to 311 is $3.39, according to a study by The Pew Charitable Trusts. Detroit holds the No. I spot for most expensive cost per call at $7.78, but because personnel and technology costs vary widely among 311 systems, Pew says that city-to-city comparisons should be made with caution.



*CHARLOTTE CENTER ALSO COVERS MECKLENBURG COUNTY, N.C.

In addition, the use of computer telephony integration (CTI) in some cities has helped decrease 311 costs. "CTI allows call takers to capture names, email addresses, etc., automatically, which can enhance data quality and cut down the per-call cost," Stern said. "Capturing that information automatically reduces the amount of time needed on the phone. CTI is expensive but it can be worth it."

Customer relationship management (CRM) tools also are being widely used to improve efficiency. "CRM has really been a success for us in terms of efficiency and managing the intake process," said Kim Wilson, assistant commissioner of IT for Cleveland, which launched its 311 system in 2009. "By using CRM to identify the most critical type of services that have the biggest impact on citizens, we were able to improve service levels. The communication between the intake process and back-end process is working very well, allowing field workers to focus more specifically on the work they need to do out in the field and making them more efficient and effective."

Other technology-based tools help constituents locate information on their own. In February 2011, New York launched NYC 311's Service Request Map as part of the NYC Simplicity effort to make government more customer-focused, innovative and efficient. The map gives the public access to location-specific information about 311 complaints filed across 15 major categories. It shows all open and recently closed service requests lodged across the city over the past year. Users can view a list of the service requests at a location and the steps taken to resolve the issues.

New York also uses technology to manage and optimize call-taker schedules. "The budget issues have challenged us, but they haven't caused us to lower our standards," Morrisroe said. "We don't subscribe to hurrying the call along, or similar tactics some others do. Instead, we figured out how to adjust to less staff and to use technology to optimize the way we run the business."

Morrisroe said 311 demand in New York City fluctuates as the seasons change, and those shifts can happen very quickly. "In the winter months, we get more early morning calls. In the sum-

VERIZON HAS THE EXPERIENCE, NETWORK AND STRATEGIC ALLIANCES TO HELP YOU ADVANCE YOUR PROGRAMS.

VERIZON SOLUTIONS FOR GOVERNMENT

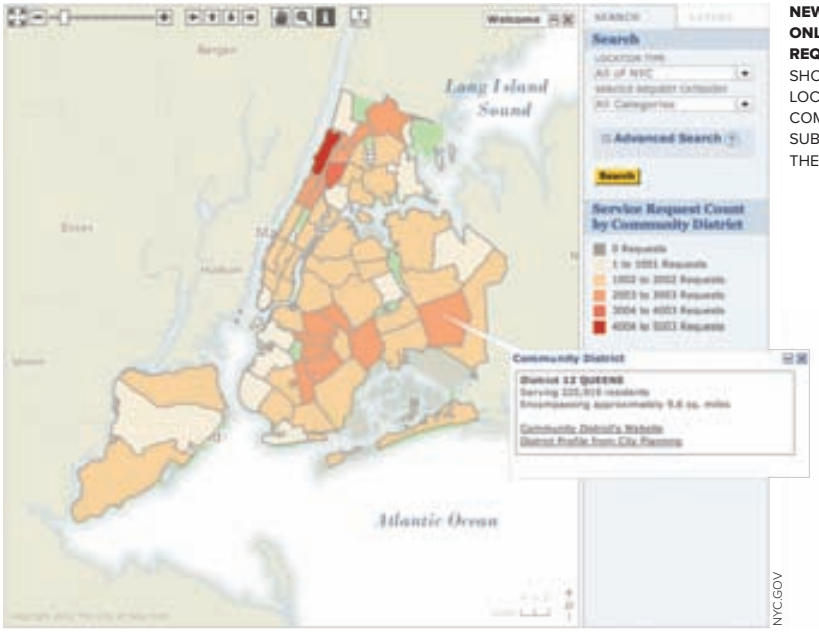
Verizon enables innovative machine-to-machine solutions, including Monitoring and Control, to help state and local governments remotely observe and manage critical assets, properties and traffic. Verizon technology can help you enhance surveillance and keep citizens safe. With a full suite of government solutions and the security and reliability of America's largest 4G LTE network, Verizon helps you operate more efficiently than ever before.

Start making a difference for your agency.
Visit: verizonwireless.com/government

verizon

mer, we tend to get calls later, like noise complaints," he said. "We've been able to adjust our way of staffing, leveraging technology to meet the quality and accessibility standards we set for ourselves."

Scrutinizing the information that call takers supply to callers also can help. "We have more than 4,000 different pieces of information we can offer customers," Morrisroe added. "When the budget cuts took effect, we reviewed that information and improved and streamlined the language call takers were using. We wanted the language to be lean and easy to understand, which also resulted in shorter talk times."



NEW YORK CITY'S ONLINE SERVICE REQUEST MAP SHOWS THE LOCATION OF COMPLAINTS SUBMITTED TO THE 311 SYSTEM.

Despite the high costs, cities don't appear to be slowing their migration to 311. In fact, many are pushing forward with faith that the increased efficiency, streamlined processes and customer satisfaction they achieve will ultimately pay off.

"Before we started working on 311, there were more than 200 city phone numbers in the Yellow Pages," said Shaun Yunt, community relations supervisor for Tempe, Ariz., whose 311 system is currently in the pilot phase. The city's 311 went live in early May, Yunt said, and the mobile app will launch in July. "One thing we heard from residents is that the city provided excellent service when they get to the right place. But it was often tedious for residents to get to the right place, and they were often transferred a lot. 311 will help us provide the kind of efficient customer service we want to be known for."

Tempe's 311 call center was born at the same time the city was reorganizing, providing an opportunity to centralize services. "Because we were downsizing, we really needed to become more efficient in how we delivered services," Yunt said. "By grouping the calls into one place and grouping the administrative tasks under the 311 umbrella, we found we could do more with less."

Yunt said Tempe plans to offer online options as part of the new system, such as Web-based submissions and a mobile app. "We are not cutting edge, but we are definitely interested in trying to provide as many different options for our community as we can," he said. "Diversity is a big factor for us. We have a huge university here with a lot of young people who demand mobile options."

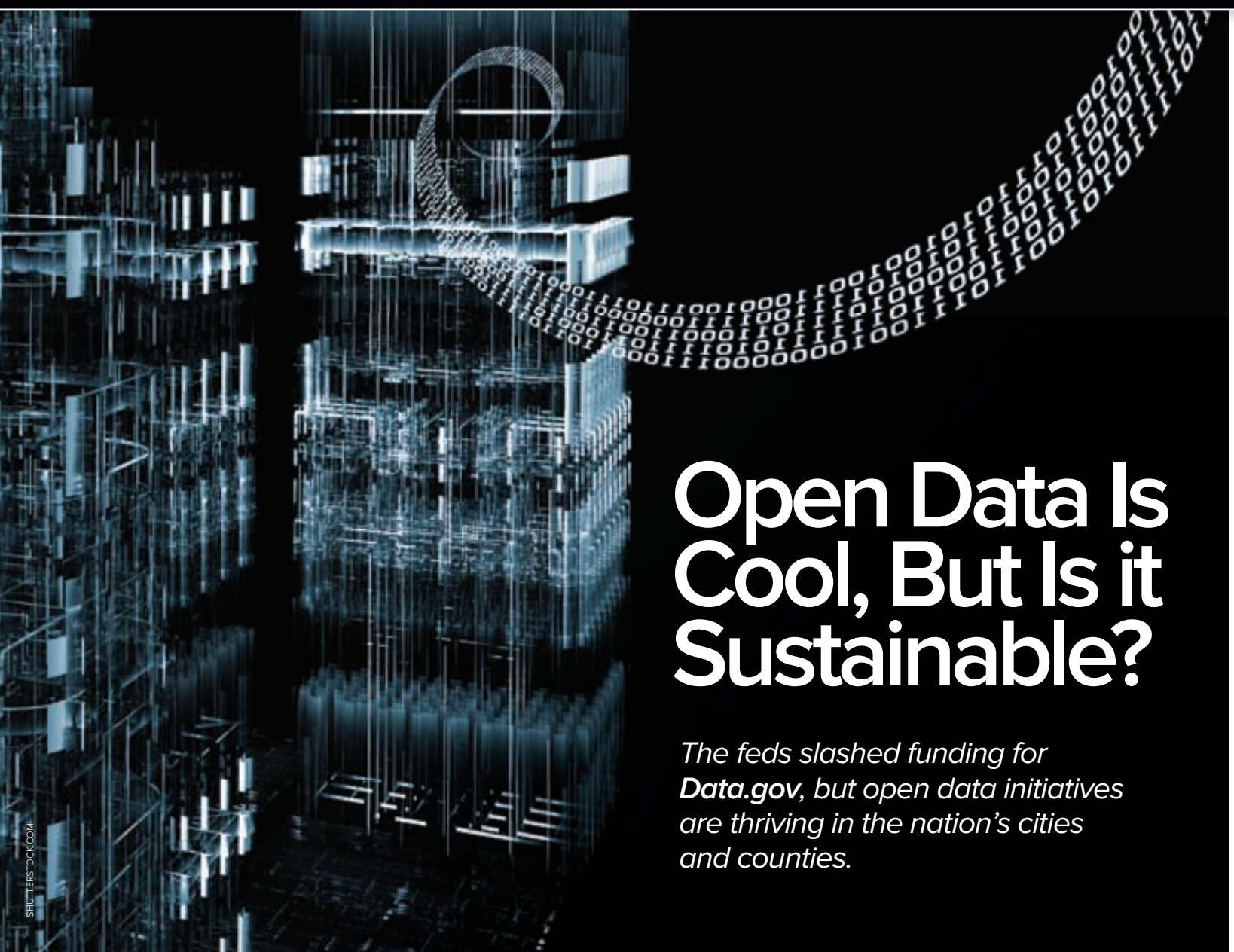
> "WE CONSIDER 311 ONE OF THE MOST USED AND MOST CRITICAL CITY SERVICES, BUT THERE IS CONSIDERABLE COST INVOLVED.

Wilson in Cleveland agrees that 311 has been worth the costs thus far, despite the fact that the city launched its service during what may have been the lowest point in the economic slowdown. "The cost is relative to your budget and what you expect," she said. "Our feasibility study showed the cost would be $1 million and that it would take 15 call takers to support about a million calls citywide. Right now, we are at seven call takers and 400,000 calls. Fortunately we purchased software that was scalable so we have actually spent less than expected so far."

Cleveland also didn't find it necessary to build out a new facility for their call center. "Often the 311 costs figure in a new facility," she said. "We were able to build within ITS, so for us those costs were less than anticipated."

Regardless of cost, most city leaders agree that 311 call centers act as a proverbial "front door" to their city, and finding a way to fund them even in tight times is an undertaking well worth the effort. Stern said the desire to offer human interaction to constituents via a live 311 call center is a common theme. "Technology is an important tool, but everyone I've worked with — from city managers to county executives — is also very much focused on human interaction," he said. "They realize having that human touch is important to their constituents — no matter what the cost." GT

Justine Brown is a veteran journalist who specializes in technology and education.
Email her at justinebrown@comcast.net.



SHUTTERSTOCK.COM

Open Data Is Cool, But Is it Sustainable?

*The feds slashed funding for **Data.gov**, but open data initiatives are thriving in the nation's cities and counties.*

Introduction

BY WAYNE E. HANSON | EDITOR, DIGITAL COMMUNITIES

OPEN DATA MAY BE COOL, as some tech publications put it, but is it useful, sustainable, cost effective? After all, with an Internet full of data and information, how many people really are interested in machine-readable data sets of city or county expenditures, or the locations of public toilets, boat ramps or building footprints?

Most Americans first heard of open data a few years ago when President Barack Obama put stimulus finances online to avoid some of the problems that arise when tax money starts gushing into government programs opposed by political opponents — and thus subject to intense scrutiny, spin and the making of political hay.

About that time, Vivek Kundra — then-CTO of Washington, D.C. — decided to democratize district data, saying — in a *Government Technology* article — that he did it for several reasons: "No. 1 was to drive transparency; No. 2 was to engage citizens; No. 3 was to ensure that we were lowering the cost of government operations." Kundra put hundreds of data sets onto the city's website so the general public could easily access real-time feeds — in XML and other formats — of everything governmental. The district also sponsored the Apps for Democracy contest, which gave prizes to contestants who integrated the data feeds into useful apps. New York City and other cities followed suit, and open data seemed like a big deal.

Kundra took open data with him when he moved from the district in 2009 to become the federal government's first CIO, and Aneesh Chopra — Virginia's secretary of technology and another enthusiastic government transparency advocate — was named federal CTO.

But developments begin to cast doubt on open data's sustainability. While Kundra launched the federal government open data site Data.gov, his successor in the District of Columbia announced that Apps for Democracy may be "more cool than useful" to citizens of the district, and so the program would be allowed to drop off the twig.

And even though the federal government's Data.gov expanded to include more data sets, the lights dimmed in 2011, when funding for the program was slashed by 75 percent. So it evidently wasn't high enough on the priority list to weather the nation's budget crisis. Of course, teachers, police officers and many others across the country suffered a similar fate, so the jury is still out on what really matters. And while they left a legacy of transparency and IT innovation, both Chopra and Kundra moved on to other things.

According to Data.gov — which may be a bit outdated now after its funding was cut — 31 states and 15 cities maintain open data sites. Are they still "engaging citizens, driving transparency and ensuring we are lowering the cost of government operations" or are they doomed to fade into the sunset like so many other cool ideas?

We pick up the story there, as the U.S. emerges from the recession, and the baton passes from Kundra and Chopra to local governments infused with an enthusiasm for transparency, open government and open data.

About This Report

This report is based on the activities of the Digital Communities program, a network of public- and private-sector IT professionals who are working to improve local governments' delivery of public service through the use of digital technology. The program — a partnership between *Government Technology* and e.Republic's Center for Digital Government — consists of task forces that meet online and in person to exchange information on important issues facing local government IT professionals.

More than 1,000 government and industry members participate in Digital Communities task forces focused on digital infrastructure, law enforcement and big city/county leadership. The Digital Communities program also conducts the annual Digital Cities and Digital Counties surveys, which track technology trends and identify and promote best practices in local government.

Digital Communities quarterly reports appear in *Government Technology* magazine in March, June, September and December.

Your information is in good hands.

There's no such thing as information overload with cloud solutions delivered on the AT&T network.

In here, massive fluctuations of constituent data that local governments deal with every day can be tamed and harnessed, securely. And all that carefully managed data is just as carefully protected.

The flexibility of the cloud provides both economy and access. When your cloud is the AT&T cloud, you pay for only what you use... and have what you need when you need it.

In here, AT&T cloud solutions adapt to local government needs, no matter how much those needs fluctuate.

To find out how, visit att.com/municloud

OVERWHELMING

UNDER CONTROL

Rethink Possible®

Download the free scanner app at http://scan.mobi and scan this code to learn more.

Trust and Transparency

In a cynical age, in a highly polarized political climate, under the duress of a recession, trust in government has fallen to historic lows. Recently, according to *The New York Times,* trust in the federal government dropped to single digits. Public trust in state and local government is a bit better, according to a Gallup poll, but in such a climate, reports of government secrecy and abuse of power strike an ugly chord that can resonate broadly.

In 2010, for example, it was discovered that the city of Bell, Calif. — a Los Angeles suburb with about 40,000 residents — paid a $1.5 million annual compensation package to its city manager and enormous salaries for several other officials. Angry residents besieged City Hall. Staff members were recalled and indicted, and California now requires all city and county governments to report employee salaries, which are then posted on the Internet.

Contracts — in which taxpayer funds are used to purchase goods and services — have been another contentious issue that begs for transparency. According to an OMB Watch report last year, states are leading in that regard, while an audit of 10 federal agencies showed that none disclosed the terms of contracts. On the other hand, local jurisdictions like Frederick, Md.; Cook County, Ill.; and Louisville, Ky., have gone so far as to upload even their checkbooks to public view.

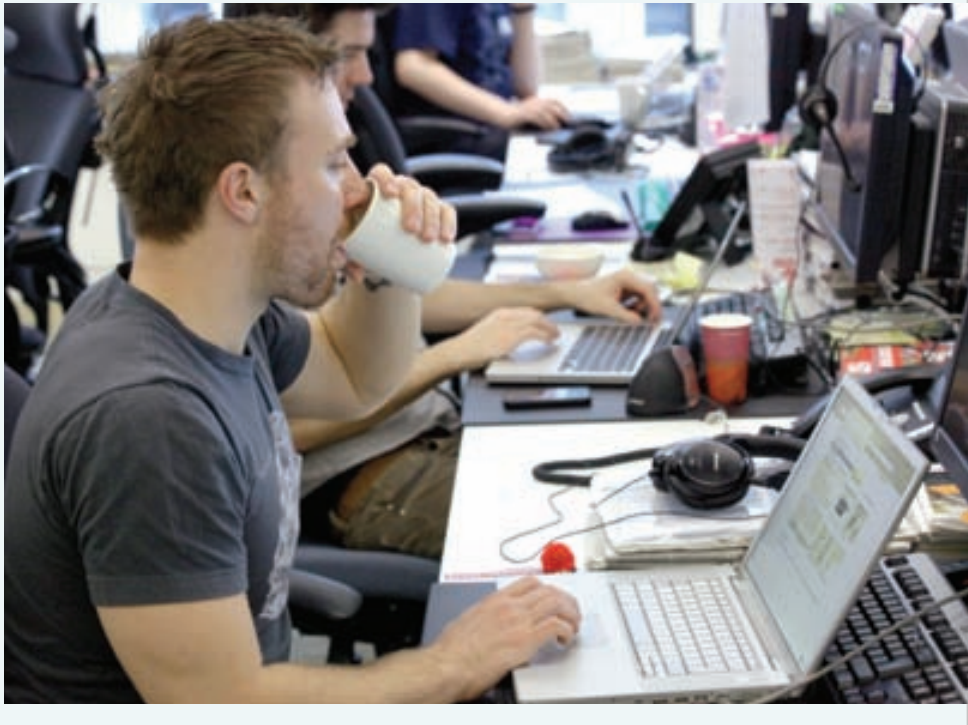
But building trust is only the first level of engagement for transparency. There is utility in data once it's made available, and nothing beats utility like open data that can be captured, manipulated, compared, graphed, mapped and so on. Just as used items can be recycled into new products, data captured for one government purpose can be extracted, evaluated and compared, resulting in new ideas that reveal opportunities and problems heretofore overlooked. And there is even a higher calling for open data: democracy itself.

"The people of America need to start thinking of themselves as citizens again," said Jennifer Pahlka, executive director of Code for America. "And if you're a citizen, it's not just about the benefits you get, but also about the responsibilities."

For instance, Pahlka cited an open source software app that helps citizens

SAN DIEGO GETS RESULTS FROM 24-HOUR HACKATHON

Pet lovers, allergy sufferers and fitness enthusiasts are just some of the groups that stand to benefit from a 24-hour hackathon held in March in San Diego, aimed at encouraging software developers to come up with the next great city app. The hackathon was one component of the broader AT&T San Diego Apps Challenge, launched by Mayor Jerry Sanders. Developers competed for a share of $50,000 in prize money donated by challenge sponsors, including San Diego Gas & Electric, CONNECT and CleanTech San Diego. " [The Apps Challenge] fits right in with San Diego's entrepreneurial, innovative spirit, and we know our tech-savvy population will make it a huge success," said Sanders when he announced the contest in January. *— Noelle Knell*



FLICKR/HARRYMETCALFE

Today, government agencies rely on optimized connectivity. We get it. With dedicated account managers, solution architects and partnerships with leading technology vendors, we can help you design and build a solution that's fast, flexible and secure. One network, reliable, with bandwidth and communication for all.

Get things moving at CDWG.com/networking

CDW·G® PEOPLE WHO GET IT™

CODE-A-THON TACKLES HEALTH-CARE IT

Developers descended on Blacksburg, Va., in April to compete for cash prizes at the Hokie Health Code-a-thon. Home to Virginia Tech, this region in southwest Virginia also boasts many prominent health-care organizations. The two-day event challenged teams of student and professional software developers to come up with the next great innovation to improve health care. The Code-a-thon was part of a series from Health 2.0, which hosts similar events throughout the United States, Europe and Asia. At the event, former U.S. CTO Aneesh Chopra headlined a panel of experts delivering presentations relating to the role of technology in modern health care.

FLICKR/EDBURY

locate and dig out fire hydrants when they are covered with snow. "Hawaii modified the app to use for testing tsunami sirens and Seattle is going to use it to clean leaves out of storm drains. Other cities are going to roll it out for a variety of things."

Pahlka points out that one Code for America volunteer said: "I'm a citizen by choice here. We're immigrants, and this country has been good to me and I believe the skills that I have as a Web developer are what I should be giving back to my country."

From Electronic to Engaged

"E-government" has a long history in government, from the first websites modeled after the telephone book, to today's sites with archived videos of city council meetings, searchable legislation, online payment, email contact information, even the jurisdiction's checkbook register listing specific expenditures and salaries. The data is viewable with any Web browser, and can be copied, pasted or printed.

Open data is a more technical approach to government data with some big advantages. A programmer, for example, can dip into the content of an open data site, and instead of just copying and pasting data from it, can use an application programming interface (API) to link to live data sets on the site. These open data sets — because of the API — are machine-readable, meaning they can be manipulated by computer, merged with other data sets, mapped, etc., revealing new information and insight — like how many minutes it will take for the next bus to arrive, or even such complex subjects as cross-linking political contributions with successful lobbying and legislation efforts.

For instance, Seattle's open data site contains information on Fire Department emergencies, which has been turned into useful applications by citizen developers. "One application takes the fire feed and shows on a smartphone where the fires are," said former CIO Bill Schrier, who now directs e.Republic's Digital Communities program. We had a couple of one- or two-day hackathons where developers used the data and built those applications." Schrier suggested looking at http://dev.socrata.com/gallery — a gallery of applications — to see several examples built using data feeds from data.seattle.gov, hosted by Socrata, a Seattle-area company.

Many law enforcement sites carry photos of sex offenders and their approximate addresses. Through open data applications, this information can be linked to Google Maps to display offenders' proximity to parks and schools. Google Maps was built with an API and is thus very useful for open data applications. The federal government's Data.gov site, along with Data.seattle.gov and other state and local open data sites also are built with APIs. It's an approach that makes it easier for agencies to share their data.

"Government has enterprise data management systems optimized for collecting and capturing and processing data in a course of

STREET READY DATA

LEX 700
MISSION CRITICAL HANDHELD

TURN INFORMATION INTO ACTION

When seconds count, information is your advantage. Powered by a Motorola Public Safety LTE network, the LEX 700 runs apps specifically built for the demands of the street. It's designed for easy, reliable deployment and data security, and it's tough enough for the harsh conditions first responders face.

MOTOROLA

motorolasolutions.com/LEX700

DAVID KIDD

conducting business," said Socrata founder and CEO Kevin Merritt. "Open data is the opposite side of the same coin, which is basically making that data useful and acceptable to people who can extract value from it."

Those people include programmers who prefer a "programmatic interface" to information, said Merritt, as well as researchers, journalists and others who have systems to deal with masses of information.

Individuals who want to look something up or who want to make sense of government data, but are not technically sophisticated, are the beneficiaries of open data applications that deliver information in usable form. For example, users may be homebuyers who want to evaluate neighborhood schools and crime rates, or people who want to track voting records of their elected officials or watch government spending.

Another advantage of open data is that it can provide real-time information, such as when the next bus will arrive.

"If you think about the evolution of software development, over the last five years, most modern Web developers will tell you that the majority of the work they do is in mashup development," Merritt said. "They are cobbling and stitching together applications by weaving APIs from disparate sources and disparate applications. Google maps is the most common mashup out there and the reason it is the most common is that it led with an API strategy long ago. And developers are recognizing now that, 'Hey if you wrap an API around this data, I'll start to build some interesting things with it.'' Open data done right, he added, can tell a story about what that data means.

John Wonderlich, policy director for the Sunlight Foundation, said open data is helping to reshape e-government. "There have been a lot of efforts in e-government in the past decade and a half. Efforts to index information or get it to show up on Google search, and there was a lot of 'let's get more things online, because we want it to be visible to the Web.' So it's not brand new," he said. "I think the newer thing is the way in which this information can be reused, analyzed and republished, and not just by specialists, but also by amateur or nonprofessional developers who are making tools or websites to use public information. So the new and disruptive thing is that there is suddenly a lot more use and appreciation for the kinds of reuse that are possible by putting things online."

San Francisco CIO Jon Walton agreed. "Back when we started focusing on e-government in the late '80s and early '90s, it was about automation," he said. "Taking manual systems or maybe old mainframe

TAKE AIM AT OPEN DATA, SOCIAL MEDIA

This November, voters in 37 states will have an easier time finding election information via social media and mobile devices, thanks to the Voting Information Project (VIP), an initiative of the Pew Center on the States, Microsoft, AT&T, Foursquare, Google, state elections offices, media partners and others. VIP takes state election information, translates it into an open programming format and organizes it into application programming interfaces (APIs), so that developers can create a user-friendly apps from the data. "There's polling place information, there's what's on the ballot, and before the November elections there will be location-specific 'rules of the road,'" said Pew Senior Associate Matthew P. Morse. "Voters retrieve information specific to them through their addresses." *— Wayne Hanson*

Connecting with other agencies and organizations, without limits or borders

Cisco is committed to helping public-sector agencies and organizations become more agile using a secure network to better support citizen-centric initiatives. Our advanced solutions enable state and local government entities to more efficiently achieve mission objectives by improving communication, speeding decision making, and elevating citizen satisfaction.

Visit www.cisco.com/go/s+cc to discover the powerful advantages of Cisco government solutions.

welcome to
the human network.

CISCO

systems, and trying to come up with a website or an automated way to do it. That was e-government ... open data for me is not just about automating manual processes, but is an example of how you engage with the citizen. 'E' before was 'electronic.' E now is about 'engagement.' That's the contribution I think that technology now provides to government."

Open Data in the Big Apple

In March, New York City Mayor Michael Bloomberg signed open data legislation, saying that the NYC BigApps 3.0 open data competition had created dozens of useful programs to help New Yorkers do everything from pick a restaurant to find a parking space. "At the contest's core is a simple premise," said Bloomberg. "This data belongs to the public, and if we make it accessible to everyone, the possibilities are limitless."

The city's open data site — which now gets 2,000-3,000 visits per day in addition to those accessing data through the APIs — grew from about 100 data sets to nearly 1,000 in the last 2.5 years, and now includes a data set of nearly 20 million requests to the city's 311 nonemergency service system from 2004 to 2011, showing the date, time, originating agency, location, status and contextually relevant details about each 311 request.

While detailed government data may give notoriously cantankerous New Yorkers more ammunition, former CIO Carole Post said transparency and openness of government are essential. "There's now legislation in place, and I don't see this going anywhere but continuing to advance and to evolve."

SAFETY DATA COMMUNITY

As this magazine went to press, the Obama administration was preparing to launch safety.data.gov, a "safety data community," designed to "develop and deploy a range of digital tools and mobile applications to enhance public and product safety." An introductory blog said the site would be a "one-stop shop for government safety data," creating a "cross-sector, collaborative safety portal that better fulfills the needs of the public, private, and civil sectors."

This increased coordination and transparency is intended to make it easier to compile safety information from multiple federal sources, including Justice, Labor and Occupational Safety and Health Administration, Health, the Consumer Product Safety Commission, and others, focusing on incident data, enforcement actions, product safety and exposure data. The site will operate on principles of open data and will have social functionality like blogs, forums, wikis and rating systems.

The open data site also will create "a one-stop shop for analytical software and decision support tools that agencies make publically available," according to the blog.

"For example, the site links to the Pedestrian and Bicycle Crash Analysis Tool from walkinginfo.org. This tool is designed to assist state and local pedestrian/bicycle coordinators, planners and engineers with improving walking and bicycling safety through a comprehensive database of crashes between motor vehicles and pedestrians or bicycles.

"Another tool linked through Safety.Data.Gov is the FRA Web Accident Prediction System," continued the blog, "which provides access to railroad safety information, including accidents and incidents and highway-rail crossing data. From this site users can run dynamic queries and view current statistical information on railroad safety."

According to the administration, potential uses for the site and the data include:

1. Finding ways to visually inspect satellite imagery for roadway characteristics at fatal crash sites.
2. Calculating economic costs of transportation safety issues, especially in terms of system safety.
3. Enhancing bike safety reporting with a crowdsourcing tool to self-report bike crashes or dangerous conditions.

Infor10 Public Sector—

Changing the way over 1,100 state & local government agencies do business.

To manage effectively in the public sector environment, you need tools designed to achieve efficiencies in every aspect of your business. You get that with Infor10 Public Sector—a complete solution suite that provides all the functionality you need to run a more efficient, more consolidated, more profitable agency.

Meet the full spectrum of your responsibilities with Infor10 Public Sector:

- Better manage costs and revenue.
- Comply with the constantly growing list of regulations and requirements.
- Improve service to your citizens.
- Improve how you engage with and develop your employees.
- See clearly into all areas of your agency.
- Provide public transparency.
- Operate more efficiently.
- Provide improved decision support.

For more information, visit: www.lawson.com/ps

INFOR™

Lawson

www.lawson.com

New York City modeled its data and apps contest after Washington, D.C.'s Apps for Democracy. But city officials say New York deserves "pioneer status" given the city's size, scale and complexity. And though the city could have been satisfied with posting static PDFs, the decision was to use APIs to make the data live and breathe.

The city may be a pioneer in another respect as well. According to Nicholas T. Sbordone, spokesman for New York's Department of Information Technology and Telecommunications (DoITT), the first deliverable under Bloomberg's open data legislation is a data set policy and technical standards document. "In the spirit of open data," said Sbordone, "what we're doing is opening up the process of developing those standards via wiki, available at www.nyc.gov/datastandards." The city also organized three related events during Internet Week in May.

San Francisco Opens Up

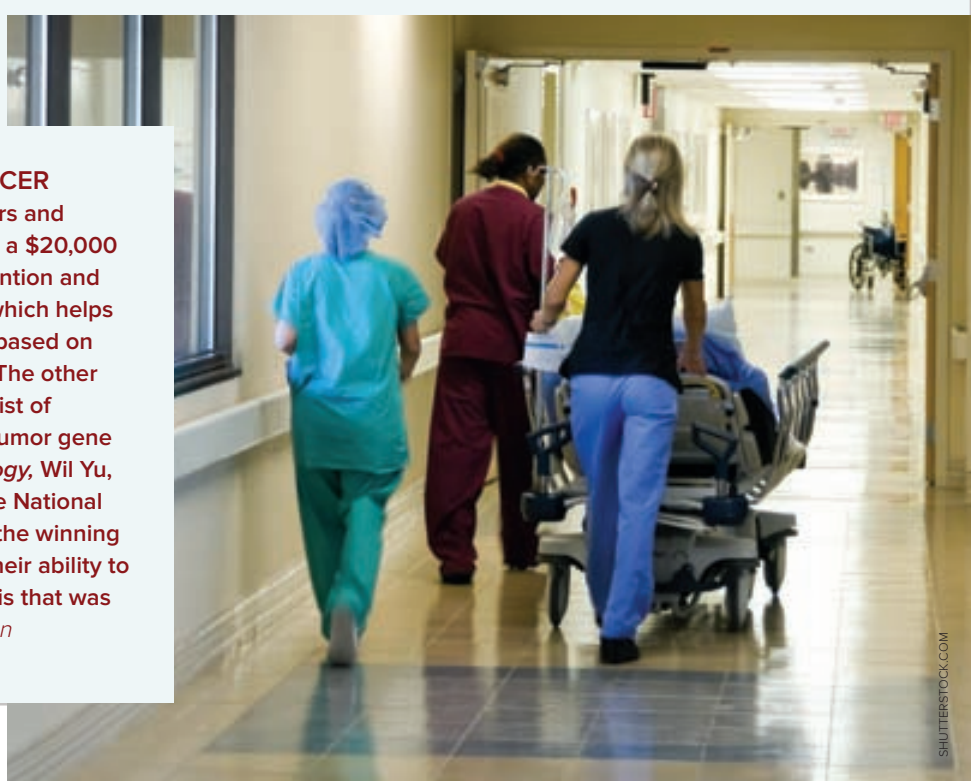
Walton said that San Francisco's open data program was launched to address two problems. First, the public was frustrated at a perceived lack of openness and transparency. And second, the city's data was simply hard to find.

"A lot of data was already available but it was available on paper, or in a specific format or a CD which has limited use, and other times, it was just hard to find — we're a very large organization and every department had its own website, who to call and how to drill down on the website. So even if the data was available, it was challenging.

"So initially, open data was just to organize and open our data to the public," Walton said. "We just created a portal, we surveyed all the departments and said 'What data are you already providing and can you provide that in digital format rather than printing it out?' If so, we're going to post it on this simple portal in machine-ready format." Those basic actions began the process of expanding public engagement, he said.

"We did things like creating a form where [citizens] could ask us questions about the data if they didn't understand it. A lot of the public knows their own piece of the data, and they could give us feedback on when they thought the data was incorrect. Then they might say, 'I looked at all the data sets and there's this one piece of data that's valuable, can you make that one available as well?' So that allowed us to become the facilitator to the public.

"A lot of data was already available but it was available on paper, or in a specific format or a CD which has limited use, and other times, it was just hard to find."



SHUTTERSTOCK.COM

APPS HELP PATIENTS, DOCTORS BATTLE CANCER

Two health IT applications designed to help doctors and patients stay a step ahead of cancer each took home a $20,000 prize in a January challenge to develop cancer prevention and treatment apps using public data. Ask Dory, an app which helps users find information about clinical trials for cancer based on data from ClinicalTrials.gov, was one of the winners. The other finalist, My Cancer Genome, allows doctors to see a list of therapeutic options for cancer, based on a patient's tumor gene mutations. In an interview with *Government Technology,* Wil Yu, special assistant for innovations with the Office of the National Coordinator for Health Information Technology, said the winning apps stood apart from other submissions based on their ability to manipulate cancer data and provide a level of analysis that was both accurate and significant to users. *— Brian Heaton*

SAFE NEVER SLEEPS™

Safe is advantage.
Safe is profit.
Safe is outright liberating.

But safe doesn't come easy.
Especially when the dark forces are plotting night and day.

It requires that delicate combination of brains and obsession.
A brutally effective, global team that can snuff out danger
before it gets dangerous.

That's McAfee, the world's largest dedicated security company.

We live and breathe digital security. Our job is to stay one step ahead.

We know that today real security isn't about "where," it's about everywhere.
Every device, every connection, every location, every second.

It's because we never sleep, that you can sleep better.

McAfee®
An Intel Company

www.mcafee.com/safe

WIKIPEDIA.ORG

It opened up the dialog and made it much more collaborative."

Walton said he thought open data would become more sustainable over time but was surprised at the immediate interest. "I knew people would use the data. I didn't realize community groups and small startup firms would take that data and use it as a building block of part of an application. I was amazed. We put up 200 data sets, and almost immediately applications were being generated."

Ordinarily, if the public demanded a certain application, the city would have done an RFP, asked for money and hired a consultant, Walton said. "And two years later, maybe we would have had an application." Now, the city is providing the tools to the public to meet its own needs.

Transit data is online, for example, so a programmer can link public transit timetables and routes with GPS data and create an app. A quick glance at the iPhone app store shows many San

STATES AND LOCALITIES FEAR DATA ACT'S COSTS

State and local government officials are finding themselves the odd men out on a popular piece of bipartisan legislation designed to increase transparency and accountability of federal spending. State and local officials, and the organizations that represent them, say they don't oppose those goals — but they don't like the way Congress is trying to achieve them.

In April, the U.S. House passed the DATA Act, which would essentially take the enhanced reporting requirements that came with stimulus spending — which many observers credit with creating a new era of accountability in Washington — and extend it across all federal contracts, grants and loans.

The bill would require any recipients of federal funds (including state and local governments) to report at least quarterly how they used those funds to a newly created Federal Accountability and Spending Transparency Board. That board also would be charged with developing standards for which information should be reported, and it would help create a searchable platform for federal spending and reporting data that would be the successor of USASpending.gov.

To help watchdogs identify potential fraud and waste, data from recipients would be compared to each federal agency's expenditures to ensure they correspond.

Passage of the House legislation, sponsored by Rep. Darrell Issa, R-Calif., has been praised by organizations that advocate for open government — like the Sunlight Foundation, OMB Watch and the Project on Government Oversight.

But state and local leaders are frustrated that the DATA Act doesn't provide money to help them comply with the new requirements. "We don't have the capacity, at this time, to implement this," said Cornelia Chebinou, head of the Washington office of the National Association of Auditors, Comptrollers and Treasurers. "Without funding, it's just not a possibility."

States and localities didn't get money to pay for the enhanced reporting requirements that came with the stimulus act either. But that was essentially free money for states and localities, and it only represented a fraction of federal spending. The change would be a significant shift that state and local leaders say they can't afford.

CONTINUED ON PAGE 40

Introducing Sprint Direct Connect.

Push-to-talk and enhanced data finally found each other.

Sprint Direct Connect is the next-generation network that offers an improved data experience. Stay connected with your important contacts with the push of a button, and never worry about the meter running with an Unlimited data plan that allows you to text, push-to-talk and call any mobile as much as you want. All while on the Sprint network. Push-to-talk and enhanced data have come together to create a communication match made in network heaven.

Sprint

Sprint®
direct connect®

Motorola® ADMIRAL™ Push-to-talk powered by Android™

$79.99 per month

Unlimited *data, text, push-to-talk and calling to any mobile with a Business Advantage℠ Messaging and Data plan.*

*Get it all while on the Sprint network. Requires a two-year Agreement per line. Other monthly charges apply–see below.***

sprint.com/sprintdirectconnect
8-SPRINT-BIZ (877-746-8249)

Monthly charges exclude taxes, Sprint Surcharges (incl. USF charge of up to 17.9% [varies quarterly], Administrative Charge [up to $1.99/line/mo.], Regulatory Charge [$0.40/line/mo.] and state/local fees by area [approx. 5–20%]). Sprint Surcharges are not taxes or gov't.-required charges and are subject to change. Details: sprint.com/taxesandfees. Phone requires a new-line activation (or an eligible upgrade) and a two-year Agreement. GPS reliability varies by environment. International services are not included. **Sprint Business Advantage Messaging and Data:** Offer ends 7/14/12. **Talk Plan:** Additional Anytime Min.: $0.25/min. Includes a $10/mo. Premium Data add-on charge (no discounts apply). Nights: Mon.–Thurs. 7pm 7am; Weekends: Fri. 7pm–Mon. 7am. Partial min. charged as full min. **Any Mobile, Anytime:** Applies when directly dialing/receiving standard voice calls between domestic wireless numbers as determined when the call is placed using independent third-party and Sprint databases. Standard roaming rates/restrictions apply. Only available with select Sprint plans and while on the Nationwide Sprint or Nextel National Networks (excludes calls to voicemail, 411 and other indirect methods). **Voice/Data Usage Limitation:** Sprint reserves the right, without notice, to deny, terminate, modify, disconnect or suspend service if off-network usage in a month exceeds (1) voice: 800 min. or a majority of min.; or (2) data: 300 megabytes or a majority of kilobytes. Prohibited network use rules apply. See in-store materials or sprint.com/termsandconditions for specific prohibited uses. **Messaging:** Includes text, picture and video for domestic messages sent or received. International messages sent or received from the U.S. are $0.20/msg., and from outside the U.S. are $0.50/msg. SMS voice messages may incur an additional data charge of $0.03/KB. **Data:** Premium content/downloads (games, ringers, songs, certain channels, etc.) are an additional charge. Texts to third parties to participate in promotions or other may result in additional charges. Sprint Radio includes access to select radio channels and song downloads (cost varies). Sprint TV® includes select channels. **Direct Connect:** Nextel and PowerSource devices operate on the Nextel National Network. Sprint devices operate within certain EV-DO Rev. A coverage areas on the Sprint 3G Network. Group Connect (21 max. participants) currently operates between parties on the same push-to-talk network platform. International Direct Connect is not included. Android and other marks are trademarks of Google Inc.

Focus on driving

CONTINUED FROM PAGE 38

The Congressional Budget Office — the nonpartisan agency that analyzes the cost of federal legislation — says the DATA Act "would impose no costs" on state and local governments. But that's according to Congress' narrow definition of an unfunded mandate. All the major organizations representing state and local governments say it will come at great expense. To say otherwise is "out and out wrong," Chebinou said.

At a time when the scandal over the General Service Administration's lavish spending at a conference continues to generate national scorn, accountability is a popular, bipartisan issue for federal lawmakers to champion. That has made it difficult for state and local officials to state their case.

Ali Ahmad, a spokesman for Rep. Issa, says the legislation would standardize and streamline some of the reporting processes. That could make the reporting process more efficient — and less costly.

State and local governments haven't been able to quantify exactly how much the changes may cost them. But whatever that figure may be, said Lars Etzkorn of the National League of Cities, it comes at a time when state and local governments are still struggling financially.

Etzkorn also said the federal government hasn't provided data indicating that the benefits taxpayers may get from the legislation justify its cost.

Earl Devaney, the widely respected former chair of the recovery board, has attributed the minuscule rate of fraud among the hundreds of billions of stimulus dollars to enhanced reporting requirements, suggesting that the effect is largely preventive.

State officials also believe that the switch is being implemented too quickly, and it could be executed more effectively if it was gradually phased in, said Michael Bird, senior federal affairs counsel for the National Conference of State Legislatures. *— Ryan Holeywell*

Francisco transit applications including "Routesy" in both free and pay versions that track routes and schedules with station arrival times.

"That's an amazing thing, an empowering thing," Walton said. "And users are self-selecting what's important. You're not having to predetermine that or guess. So now we have links to some 60 applications that have been developed. I think there are a couple of challenges going forward, to complete the journey, but even if we stopped here, I would call it a success. And I think it is sustainable as a model. As with anything, the more data you make available, the more useful the open data initiative is, the more applications you can generate."

One challenge that worries Walton is if a company that developed a popular app stopped supporting it, and the app becomes unavailable or stops working and 100,000 users get angry. "What's my responsibility as the CIO? I feel that if there is an application that is shown to be a benefit to the citizens, I need to try to make that sustainable over the long run. Do you subsidize it, find a way to partner with them, do you buy the code from them?"

One solution for improving sustainability of open data apps may lie in multi-government partnerships. An informal group of big-city CIOs — known as the G7 (for group of seven) — is launching a website that will house standardized data from member cities, making it easier for them to share applications. These multicity applications could be attractive to investors, said Walton, eliminating the need for government support.

"We've started trying to formalize our data between cities ... to agree on data schemas, data models, so that when someone writes an application for San Francisco that same application will work in all the other six cities," he said. "We think that's a step in the right direction, as that will create a much broader enthusiasm base."

The G7 — Chicago, Los Angeles, New York City, San Francisco, Boston, Seattle and Philadelphia — also intends to standardize the domain as city.data.gov. "The cities continue to do what they do best, innovate locally and push their data, but at the same time, have an eye to how this benefits cities and counties all over the country," Walton said.

The group intends to prototype one or two applications that will work across all the cities. Then the plan is to get developers together to start building applications.

Open Data — Value Delivered?

Open data is seen as a partnership between the jurisdiction, the public and developers. Not surprisingly, civic engagement and collaboration are nearly always cited as the primary value. But are there tangible benefits as well? And what are the costs?

Peter Threlkel from the Oregon Secretary of State's Office was looking for a way to make the state's trademark information available online. Staff investigated a proprietary database

Don't just talk about the cloud.
Put it to work.

IT thought leaders and over 1 billion end users benefit from clouds built on a NetApp storage foundation. To make sure your storage architecture is designed to deliver all the rewards the cloud has to offer, visit NetApp.com/BuiltOn.

Go further, faster®

Valuable clouds are built on **NetApp**®

solution, but instead decided to leverage the state's existing open data site.

"It's a small program with about 5,000 active trademarks registered and about 30 new filings a month," Threlkel said, "so we could not justify spending half a million dollars on the Oracle solution. We used to make the trademark information and images of the filings available as a public records request on CD-ROM for $100 a month to a handful of customers. Now the Socrata solution at data.oregon.gov allows us to make the trademark information available and searchable online for free, so our customers and the public can access the data and images at their convenience."

Early e-government efforts had to cope with analog records that needed to be run through optical character recognition equipment and then cleaned up for use. Since most government records are now born digital, that's no longer the case said Socrata's Merritt. "Now, the mechanism to get that data from the business system out to a public-facing open-data portal is straightforward and cost effective."

site is externally hosted and involved minimal costs.

The return on investment is mostly intangible, although city officials said there is an economic development side of it. The key, however, is citizen engagement, accountability and transparency.

Neither San Francisco nor New York City had hard evidence of a decrease in Freedom of Information Act (FOIA) or discovery requests as a result of open data initiatives, but anecdotal evidence was obtained through discussions with public-sector and nonprofit advocates to the effect that discovery filings were often not necessary since the data was easily available online.

Seeing the Future

What might the future hold for open data initiatives? "I see a lot of struggle around influence and security as contentious issues that will take a lot of work to sort out what should be public and what should not," said Wonderlich, of the Sunlight Foundation. "Those lines are not drawn appropriately as it stands now. Beyond that struggle, I think is better, more rigorous decision-making around information management. Looking at all the information an agency has and making good decisions about what should be public and what shouldn't, rather than just a response to a FOIA request. I'm hoping we end up in a place where information is managed, just like HR is managed, or anything else. We make good decisions about what is public and what isn't, not because of the interest of the department but because there's a strong and clear public interest behind good decisions about what to make public."

"We're on the eve of a period of time in which every government will have an open data portal just like they have a website," said Merritt. "This is a trend initiated by the District of Columbia and their citywide data catalog, and by the federal government in Data.gov. We now see open data portals in many cities and counties like Baltimore, Austin, New Orleans, Seattle, San Francisco and Chicago; states like Illinois, Oregon, Oklahoma, Washington, Maryland and Hawaii are all sharing their data."

In a move that some think could signal a revival of Data.gov, and others dismiss as a campaign-year stunt, the Obama administration on March 8 launched ethics.data.gov, which, according to a White House release, "fulfills a campaign promise to centralize ethics and lobbying information for voters." Jessica McGilvray, the American Library Association's director for the Office of Government Relations — while mourning the demise of the Statistical Abstract of the United States, whose funding disappeared in the 2012 Census Bureau budget — saw the launch of data.ethics.gov as a sign of progress.

> "We're on the eve of a period of time in which every government will have an open data portal just like they have a website."

THE NUMBER OF OPEN DATA SITES IN THE U.S.

States: 31
Cities: 15
Federal Agencies and Subagencies: 172

Source: www.data.gov/opendatasites

New York City's experience seems to align with that assessment. DoITT's Director of Research and Development, Andrew Nicklin, and Open Data Coordinator Albert Webber were shifted into the open data program. Nicklin, Webber, a small team of city employees and a few support staff did the whole thing in the back office. The

With secured and shared broadband communications, we enrich life with more intelligent connections among devices and citizens - at the speed of ideas.

Is human value created when machines talk?

alcatel-lucent.com/government

Alcatel·Lucent

AT THE SPEED OF IDEAS™

digital communities

THREE REASONS TO VISIT

WWW.DIGITALCOMMUNITIES.COM

1. Learn how other local government jurisdictions are handling the same technology issues you are.
2. Download free white papers and other assets specifically for local government.
3. Join Digital Communities to engage in conversations with other local government leaders.

100% LOCAL GOVERNMENT

Alcatel·Lucent

CDW·G

cisco

KANA.

KOFAX

INFOR Lawson

McAfee An Intel Company

MOTOROLA

NetApp Go further, faster

NIC the people behind eGovernment 20 YEARS

perceptivesoftware

QUEST SOFTWARE PUBLIC SECTOR

ShoreTel Brilliantly simple

Sprint

SUNGARD PUBLIC SECTOR

Symantec

Building 21st-Century Communities

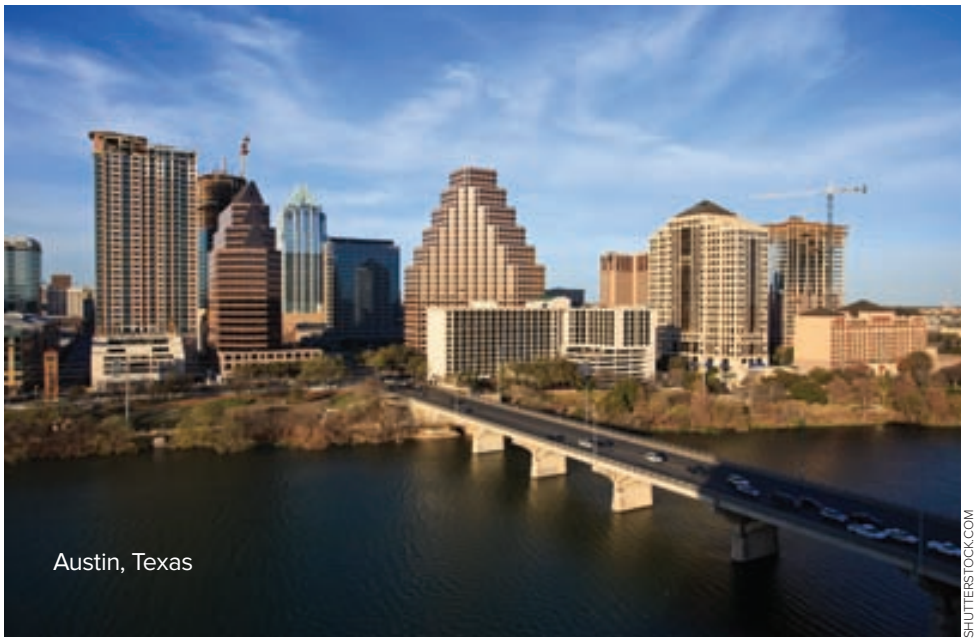
Digital Communities are real places that understand and value the transformative power of broadband connectivity, core computing technologies and interoperable applications to improve the way government conducts business and interacts with citizens. The Digital Communities Program showcases solutions from leading technology companies that are specifically designed for communities and local governments that want to exceed the expectations of their citizens. In addition, the program provides a collaboration forum where community officials discover and share emerging best practices and innovative community technology deployments.

SHUTTERSTOCK.COM

CASE STUDY

Texas Transformation

A five-year contract with AT&T improves the state's network and security.



Austin, Texas

SHUTTERSTOCK.COM

Texas believes in technology. The state's Department of Information Resources (DIR) provides a wide variety of IT and communications services for its many and varied customers.

In 2011 the state signed a five-year contract with AT&T to help DIR provide advanced voice and data services. The agreement will improve numerous technologies for the state — including robust services in security, networking, cloud technology, wireless and much more.

DIR provides services for state agencies, cities, counties, government councils, independent school districts, institutions of higher learning and assistance organizations. More than 600 entities could potentially benefit from the state's relationship with AT&T.

The arrangement will give the state better access to current and emerging technologies, improving efficiency and reliability. DIR's customers will have access to technologies they might not be able to afford on their own. The state will have access to services as needed — and those services will be fully supported.

"Between the new contract with AT&T and our Network and Security Operations Center (NSOC), we've improved the posture of our telephony service delivery," said Carl Marsh, chief operations officer of DIR. "And we're better serving our customers with access to good generational technologies, with price points that are saving real money for our agencies and the citizens of the state."

Karen Robinson, executive director of DIR and CIO of Texas, said state agencies and other DIR customers are looking forward to using the technologies to better serve the state's citizens. "Not only are we excited about the new technologies, but the customers are extremely excited too," she said. Marsh agrees. "With the economic environment today, cost savings is a huge thing. So our customers are embracing the cost savings," said Marsh.

Stronger Security

AT&T is providing much assistance to the state around network security. In 2007, the company developed the state's first NSOC. In 2011, the state and AT&T worked together to provide the NSOC with next-generation capabilities. AT&T is also enhancing the state's Security Incident Event Management platform, giving the state a deeper view into potential threats. And it's helping the state move such services from its premises to a cloud environment.

As the state moves to AT&T's Security Event & Threat Analysis (SETA) service, it can take a more aggressive approach to security. SETA will provide the state with a broader, richer view of its network by correlating data collected from devices across the network.

"It allows us to analyze the traffic on our network against lots of net flow that goes through ATT's SETA platform, so it gives us a more thorough and intrinsic analysis of our traffic," said Marsh. "It also gives us eyes on our traffic 24/7. And because it's in the cloud, it's an elastic solution."

AT&T can take DIR's network traffic and data logs, and compare those to what it's seeing on its global network. This gives the state a stronger security posture, allowing it to identify more patterns, trends, anomalies and threats. It also speeds up remediation when problems are found. And because it's AT&T's responsibility to keep the platform up to date, the state doesn't have to worry about staying current with the technology.

AT&T carries a huge amount of Internet traffic, giving it a unique understanding of current security threats. This knowledge benefits DIR and its customers. And AT&T security people sit alongside DIR personnel at the NSOC, as the teams work

"Between the new contract with AT&T and our Network and Security Operations Center (NSOC), we've improved the posture of our telephony service delivery."

Carl Marsh, Chief Operations Officer, DIR

SHUTTERSTOCK.COM

together to analyze network traffic and identify threats.

DIR also develops security policies and best practices; maintains a 24/7 security alert and response system; and promotes security awareness through training. The state also conducts controlled penetration testing, or ethical hacking, where highly skilled security experts try to hack into the state's systems. That can lead to discovering vulnerabilities, which can then be fixed.

Texas is taking an enterprisewide approach to security. "Our customers are looking for enterprise solutions," said Robinson. "And around security, we have big initiatives going on." Those initiatives cover a range of security issues, and include a study of cybersecurity throughout the state; cybersecurity education for young people; economic development and jobs creation around cybersecurity; and creating the Statewide Information Security Advisory Committee.

Network Transformation

DIR is also working with AT&T to improve its network. DIR has established IP-based cloud services, using multiprotocol label switching (MPLS) technology. This advanced approach gives DIR customers access to:

- **Core network services** — data transport, voice over IP (VoIP) services, video services.
- **Wireline/wireless convergence** — wireless access to state data networks, wireless backup.
- **Network-based services** — network-based firewall, spam/Web filtering, managed services.
- **Access to cloud services** — VoIP in the cloud; SETA, data center services.

AT&T is positioning the state to take advantage of next-generation cloud technology, enabling DIR customers to pay for services as they need them. The IP/MPLS technology — along with the use of AT&T's MPLS network — provides the state with many new opportunities.

"It really gives us the tools to provide good generational telephony to our customers," said Marsh. "It also provides us the flexibility with emerging technologies, and agility with the introduction of new products and services for the state."

Robinson sees benefits from her perspective too. "The price will be much better, and there will be a lot more flexibility," she said. "We have the core network services, the addition of video services, wireless backup, firewall, and Web and spam filtering services. There is a wide array of additional opportunities for our customers."

Providing better service for the state's citizens is what it's all about. AT&T is pleased to help. "AT&T — the world's largest telecommunications company — is headquartered here in the state of Texas," said George Spencer, AT&T director of sales for Texas. "We really value our relationship with the state. We partner with Texas, and help the state support its agencies and fulfill its mission."

AT&T

For more information, please visit www.att.com/stateandlocal

Brighter Future

A large school district leverages software to improve IT productivity, teaching and learning.

Knox County Schools, based in Knoxville, Tenn., is a district on a mission. In 2009, the Knox County Board of Education adopted a five-year strategic plan that set ambitious goals — and the district is already seeing results. Graduation rates have climbed and test scores have improved in reading, math, science and social studies.

Knox County Schools is building a brighter future for its students and for the region. To help support teaching and learning, the district is using eight products from Quest Software, including ActiveRoles Server (ARS) and Quest One Quick Connect, which both improve the value of the district's Active Directory (AD) from Microsoft.

The tools from Quest helped the district create a central directory of its computer users — students, teachers and support staff. "We needed something that would provision user accounts, and Quick Connect allowed us to provision about 60,000 user accounts in very little time. And it performs maintenance or updates to those user accounts on a daily basis," said Bill Parker, director of technology for Knox County Schools.

The district, which covers grades pre-K through 12, has about 56,000 students and 8,000 employees. Facilities include 50 elementary schools, 14 middle schools and 14 high schools. The district began the central directory project in 2009, starting with the high schools, followed by the middle schools. The district is currently working on connecting the elementary schools, district offices and special locations.

Eventually 65,000 users will be connected to the directory, so the district needed tools that could ease the workload for its small IT staff. "We were very limited on what we could do on manpower. So we had to have something that was quick and reliable to give us the functions that we needed," Parker said. "The Quest software has made the job easier."

KNOX COUNTY SCHOOLS

Knox County no longer has to install software at every machine. This reduction in workload for technicians is a tremendous benefit for the district's IT staff.

Raising Efficiency

The district also uses Quest Defender (two-factor remote authentication), Quest Authentication Services (QAS) (for enterprise-wide access), Password Manager (self-service password resets), Spotlight on Active Directory Pack (graphical representation of IT environment) and Recovery Manager for Active Directory (granular restore of AD objects).

QAS Group Policy for Mac helps the district manage its many Mac OS X computers along with its Windows-based PCs. Of its 20,000 computers, the district has a 50/50 split between Macs and Windows clients.

Parker said the Quest products have helped the district in many ways, including software deployment. "Our ability to push software to a specific classroom or school, or district-wide, has really lightened the technicians' workload," he said. "They don't have to go to every machine to do the install. The remote access also makes the troubleshooting process much quicker."

Freddie Cox, a systems administrator for the district, has seen the benefits as well. "This is the first time we've had every user or stakeholder in Knox County in a single group for authentication, email and managing the computers," Cox said. "We have two managers as far as Group Policy, being able to push software and managing the devices. As much as technology is changing and growing,

there's no way we would be able to keep up with all this if it weren't for some of these Quest products."

Quest helps the district's technicians manage the end-user experience — support, repair and any other tasks that need to be done at the desktop level. In fact, Cox said Quest allows the district's technicians to handle 2,000 machines each, a ratio that's much higher than in most for-profit entities.

Macs Also

Quest also helps the management of both the Mac and Windows environments. "With QAS, being able to manage both platforms from a single console is a benefit, since there are only two of us for a domain of 20,000 machines and 65,000 users. It not only saves time, but also our sanity," said Cox.

Quest enabled technicians to manage the Macs without having to learn a new system. The district originally thought it would have to run two separate domains because of the Macs, but QAS made it possible to include both Macs and PCs in just one domain.

Systems Administrator Billy Ellis cites Quest Defender as being especially helpful. Defender gives secure access to the district's remote users with dual authentication, using a token and a virtual private network. "Users being able to log in from anywhere has helped us tremendously," said Ellis. "Students aren't logging in with generic student accounts anymore; they're actually logging in with their own student IDs. Without Quest, that couldn't happen."

Because students can log in from anywhere, they can start a project in class and finish it from a computer at the library or at home. Once they log in with their student ID, they have access to their data, storage space, Internet, Word, Excel, PowerPoint and more. And teachers can reset student passwords when needed, so technicians can focus on larger issues.

> *"We couldn't have accomplished what we did without Quest. I can't imagine how we would have allocated the work."*
>
> **Bill Parker,** director of technology, Knox County Schools, Tenn.

Quest has reduced maintenance time in other ways too. "We've seen less downtime on machines, because now we can manage the security of those machines, the antivirus — we can do all that centrally," said Cox. "In the past we would have teams running around with antivirus CDs, trying to keep the threats at bay. We've had a decrease in outbreaks since we deployed all of this. The machines are just healthier, and that's because we can manage them now."

Good Relationship

The Quest tools have helped on many fronts. Quick Connect helped the district create shared storage space for the 60,000 users at the same time it created their accounts. Spotlight on AD monitors domain controllers and every aspect of the domain, giving the district greater visibility into its AD environment. Recovery Manager for AD gives the IT staff the confidence to quickly restore AD objects to prevent system downtime. And with Password Manager, every staff member in the district can reset any student's password, a feature that's taken a tremendous workload off of technicians.

In addition to the software, the district is also happy with the working relationship it's had with the company. "The engagement we had with Quest, from the very first onsite visit, could not have been any better," said Parker.

"We've gotten great support from Quest," added Cox.

Parker said the district could have connected only a portion of its users without the tools from Quest. "We did not have money to spend on additional personnel," he said. "We couldn't have accomplished what we did without Quest. I can't imagine how we would have allocated the work."

CASE STUDY

Thinking Ahead in Calgary

Canadian city's broad IT vision positions it to thrive in the future.

SHUTTERSTOCK.COM

Calgary, Canada's most wired city, recently experienced an economic boom that drove the city's population up over 40 percent in less than 10 years. This resulted in an explosion in demand for services which, coupled with a parallel rise in technology usage, accelerated the City of Calgary's (City) need to modernize its Information Technology (IT) infrastructure.

"To meet the change in demand, we needed to lay the foundation for future growth and innovation. Our strategy is to leverage our strategic assets to build a robust and sustainable network," said Heather Reed-Fenske, Manager of Innovation and Collaboration.

"The [old] infrastructure served us very well over the years," said IT project manager Vin Bhola.

But change was necessary — and the City was ready for it. "Timing was perfect," said Doug Hodgson, Chief Information Officer. "We had fully amortized our investment and were well-positioned to re-architect and design our network to support the explosive growth in demand for services."

Storm-Proofing

To "future-proof" the City's IT infrastructure going forward, the IT team made the bold move in 2010 to completely revamp the existing network architecture. Not content to simply bring things up to speed with the needs of the moment, the team wanted to secure the network's viability for the foreseeable future. "There was an opportunity to define the vision and architecture that we believed was needed for the City, that will allow us to evolve over the next decade," said Doug Hodgson.

Requests for proposals went out later that year. In the end, the City contracted with Alcatel-Lucent. "We've had a good relationship with Alcatel-Lucent for over 15 years," said Vin Bhola. "The collective knowledge and support within the Alcatel-Lucent organization was quite significant."

"They understood our overall vision," added Heather Reed-Fenske.

To revolutionize the City's network infrastructure, IT planned a multi-phased approach to be executed over a two-year period.

Step one was the upgrade of the City's network core switches. The switches — critical pieces of infrastructure providing channels to all applications and services — provide the foundation for the City's enterprise network, and had been in place for almost eight years. It doesn't sound long, but technologically speaking it's a lifetime.

Building a Solid Foundation

To initiate the transformation in order to support the overall vision, the City started

at the core of the network — replacing its current enterprise network core switches with next-generation technology. "The enterprise network core switch upgrade was the foundation and framework to support a number of initiatives within the organization," said Bhola. "[It] was the first piece of the puzzle."

To ensure the upgrade went smoothly, the IT team planned extensively. The biggest challenge: finding a good time to physically transition to the new core with minimal impact to the corporation and citizens. "City operations are 24/7," said Bhola. "So you can imagine no time is a good time."

The upgrade was executed flawlessly. The total elapsed time, from system shutdown to core replacement and back to system availability, was 12 hours. Months of preparation were culminated in half a day. "The transition went very smooth," said Bhola.

Broad Vision, Real Benefits

The City's IT infrastructure modernization constitutes a broad vision of creating a common network infrastructure for the City — increasing security and efficiency while reducing costs. "The beauty of this design, as we move into the future, is that it's going to be a single architecture that we can leverage and manage together," said Hodgson. "We've got about 250 different sites, and certainly the plan for the future is high-speed connectivity for our workforce at all those locations and beyond. So it's one success building on another. We've got a pretty significant vision for this thing."

Officials are particularly excited about the network security implications, particularly those related to public safety personnel. "We simply can't buy what we need for this corporation privately, because it's all shared infrastructure," said Hodgson. "We have a strong need and desire by our public safety and first responders' business units for high-availability, business resiliency and a highly secure network." The new architecture will provide that necessary level of resilience and security.

"We've had a good relationship with Alcatel-Lucent for over 15 years. The collective knowledge and support within the Alcatel-Lucent organization was quite significant."

Vin Bhola, IT Project Manager, Calgary, AB, Canada

Pressing Forward

The City of Calgary continues to be positioned as a strong, viable and sustainable municipality for decades to come. "We see this as a positive move into the future, and recognize the challenges around technology, but also the advantages that it can bring with the right vision and execution," said Hodgson. Alcatel-Lucent and the City of Calgary are committed to this network transformation, which has only just begun.

Canada Olympic Plaza, Calgary, AB, Canada

SHUTTERSTOCK.COM

A Simpler Way to Buy

Arkansas' online procurement system saves the state time and money.

By Hilton Collins / Staff Writer

Kurtis Markish breathes easier these days. As a buyer in the Arkansas Office of State Procurement (OSP), his work has been simplified, thanks to the state's online contract and amendment submission application, an electronic workflow that saves agencies time and money when compared to the previous paper-based system.

"If there was ever a question, you had to manually search through file cabinet after file cabinet of archives to find out what you had," he said. "It just got to the point, with the increase of growth and government, that we needed a far superior way to see this process off."

State law requires professional and consultant service contracts of more than $25,000 to be reviewed by the Arkansas Legislative Council, but pushing paper to handle roughly 2,000 contracts annually became too laborious. The new system, which went live in spring 2010, lets state agencies submit online contracts and supporting documents in PDF and Microsoft Word or Excel format. The agencies can log into the system to track a document's status and receive digital approvals.

The OSP estimates that the electronic workflow cuts paper usage by 117,000 pages a year, and reduces Professional Consultant Services (PCS) contract processing time from three months to less than six weeks.

Before the PCS process went online, state agencies had a tough time tracking contracts. "They never knew the status of the contract. There were so many unanswered questions," said OSP Director Jane Benton.

A Time-Saving Process

Today, more than 200 government entities can access the online submission application. Contracts worth less than $25,000 that don't require legislative review can be examined and approved within minutes. Larger contracts are automatically routed through an electronic workflow. Agencies enter required information on a Web application form, which is reviewed first by the OSP, and then routed to other appropriate reviewers. Each reviewer may reject, approve or flag the application for further study. Reviewing agencies are emailed when a contract or amendment is ready for them, and they can reject a submission before the legislative council ever sees it. When contracts go before the council in the final step, council members review the submission within 30 days of receipt and notify the OSP.

Users can click a link on Arkansas Department of Finance and Administration website to search for contract data. The application lets them view text information or generate spreadsheets.

"They just download a data file and it's imported into their database where it just takes a few seconds. Now they have all the information at their fingertips," Markish said.

Improvement On the Past

Neither Benton nor Markish could comment on a specific dollar amount Arkansas had saved because of the new process, but they know that the old way required more cost in employee time; paper, envelope, messenger and postage expenses; filing space; and storage. The new system has reduced envelope usage by 97 percent.

CONTINUED ON PAGE / 55

SHUTTERSTOCK.COM

spectrum

More research, more science, more technology.

WATCH SPECTRUM AT
www.govtech.com/spectrum

TABLET HABITS

In a survey of 2,000 tablet users between the ages of 18 and 64:

62%
use their device daily

15%
said they'd give up their car for a year in order to keep their tablet

91%
use their tablet in bed

SOURCE: YAHOO

$20,000

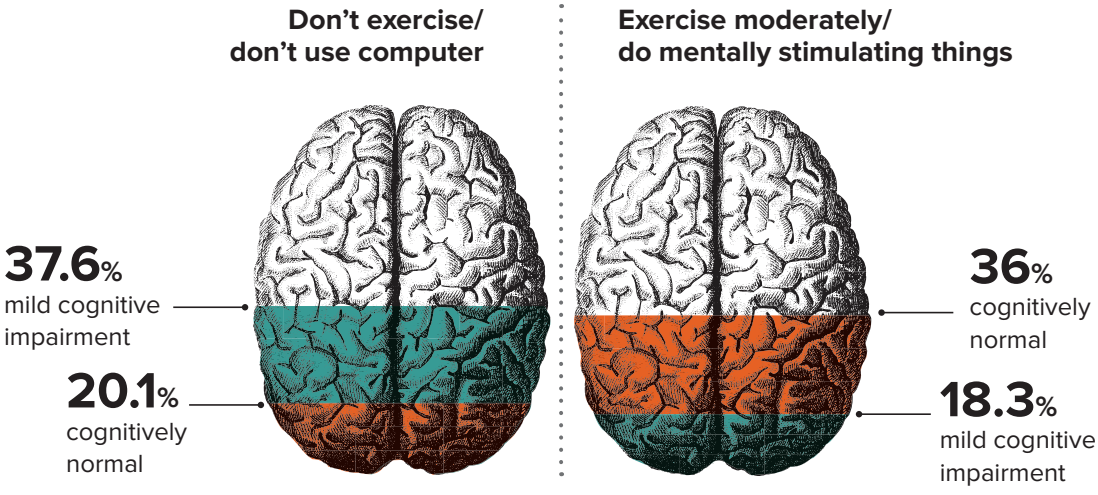
The value of a 17-gram asteroid found by a California woman who was walking her dog. Scientists confirmed that the rock is 4-6 billion years old.

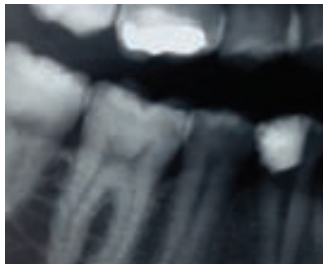
"I want to REFRESH my mind, DELETE all my problems, UNDO all my mistakes, and SAVE those amazing moments."
@partyofsunshine

COMPUTER MEMORY:

Computer users who skip a rigorous workout needn't feel guilty. According to Mayo Clinic research, people who use the computer and moderately exercise are less likely to experience age-related memory loss compared with those who don't use the computer (or perform mentally stimulating activities) or exercise.

Participants: **926** Ages: **70-93** Length of study: **1 year**





A Reason to Smile

Researchers at the University of Maryland have created the first cavity-fillers that also kill bacteria and regrow layers of tooth. The researchers made a cavity-prepping mouthwash, a filling and a filling cement that include tiny, nanosize particles of silver and calcium that have a diameter roughly 1/1000th as wide as a human hair. The university's tech transfer office now has patents pending for the new materials and is open to licensing. If a company takes up the offer, it will probably test the inventions in people and try to earn U.S. Food and Drug Administration approval to use the inventions widely.

SOURCE: LIVE SCIENCE

Send Spectrum ideas to Managing Editor Karen Stewartson, kstewartson@govtech.com, twitter@karenstewartson

Georgia Debunks E-Procurement Myths

An electronic purchasing system may seem like an ideal way for states to save money, but beware of the roadblocks.

SHUTTERSTOCK

By Brian Heaton / Staff Writer

Electronic procurement systems are often touted as a way for state and local governments to save money and improve purchasing efficiency. While that's true for some governments, demonstrating financial savings can be more complicated than it sounds. Just ask Georgia.

The state's purchasing arm deployed Oracle's PeopleSoft Enterprise applications in 2011 as a replacement for its paper-based purchasing system. Although the transition isn't complete, Georgia has already made strides with better data access and a shorter purchase-order cycle. But translating those improvements to budgetary figures has been difficult for purchasing officials.

Leslie Lowe, assistant commissioner for procurement in Georgia's Department of Administrative Services (DAS), said one of the myths associated with e-procurement is that it will be easy to prove a return on investment.

"Even though we have studies and benchmarks that say a paper purchase order costs this much in time and handling versus doing it electronically, they just don't buy that," Lowe said, referring to Georgia lawmakers. "They want hard-dollar savings, so we had to stop calling it 'savings.'"

Instead, the DAS now calls the efficiency gains "benefits" to avoid the perception that agency budgets can be cut thanks to streamlined purchasing. Lowe added that the situation is "a tough balancing act" because the DAS is the business adviser to state agencies, but the department must also report to the state Legislature, which is looking for more areas to cut funding.

Lowe said another myth associated with e-procurement is that every agency will embrace new technology and that the tech itself is a cure-all for the purchasing process. She explained that state agency customers that are entrenched in their own paper processes can be a tough hurdle to overcome.

From the frontline personnel making the purchases to stakeholders and legislators, not everyone feels that technology makes things better.

"[You've] really got to convince them and show them how and why it is better," Lowe said. "It's not just a given that everybody is going to jump on board and say, 'Yeah, more technology!'"

Despite the challenges, e-procurement technology has resulted several benefits for Georgia. It helped shorten the average purchasing cycle from more than six days to less than four days, and moving to electronic purchasing greatly reduced paper use and streamlined the requisition process.

The Oracle system replaced homegrown procurement systems and provided a unified view of spending, enabling the state to negotiate better contracts and volume discounts.

Lowe said the first step in her department's implementation strategy was to find a senior-level person in each state agency who could see the long-term benefits and champion the move to e-procurement.

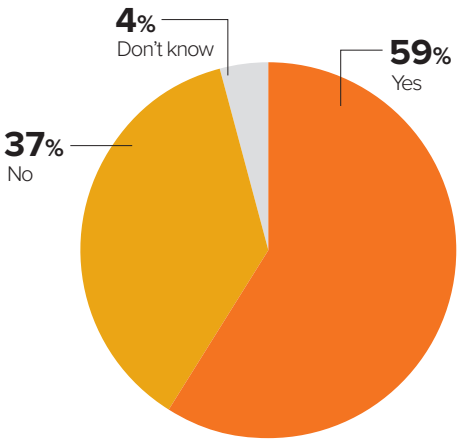
"You make your argument and convince that first level why this is a good thing and why this is going to help the state and their agency. Once you have that executive sponsor, that sponsor plays a key role in marshaling the rest of the forces," Lowe said.

"If that person is not on board, the whole thing is going to flop [or] it is going to be very difficult," she added. "So I think we did a good job identifying who that key sponsor was going to be and working hand-in-hand with [them]."

Long Road

Georgia's e-procurement project began in May 2005, when the state decided to go with Oracle's PeopleSoft applications. It was another two years before CherryRoad Technologies was selected as the implementation partner and actual work began in fall 2007.

Approximately two years later, the DAS and two of the more complex state agencies — Georgia's departments of Human Resources and Corrections — went live



IS PROCUREMENT KILLING INNOVATION?:

Nearly 60 percent of respondents to a new *Government Technology* survey call the public procurement process a significant barrier to innovation. Many said government procurement rules make it tough to adapt to changing requirements and adopt cutting-edge technologies while others pointed to difficulties in making financial commitments beyond one fiscal year or engaging in cross-jurisdictional shared services. The results are based on responses from 51 members of the GovTech Exchange, an online community of senior-level IT professionals from state and local government.

with the e-procurement technology. By late 2010, seven of the eight top-spending agencies in Georgia were on the new system, making up about 80 percent of the state's procurement.

The last major piece of Georgia's e-procurement implementation is the state's technology college system, which comprises 24 campuses and a central office. Lowe likened it to doing rollouts at 25 different agencies. Three waves of implementation are set for fiscal 2013, and a final three waves will happen in fiscal 2014 to complete the project.

The state's transition to e-procurement is taking some time, however. Lowe said the delays experienced by Georgia could pose a third myth — that moving to an e-procurement system will happen quickly.

While the project has taken years, Lowe felt securing the funding to ensure implementation happens as scheduled instead of piecemeal was an important element of the process. She added that Georgia was very deliberate in its move to e-procurement, transitioning agencies in waves where personnel undergo training before the actual implementation date occurs.

"In my opinion, there is no way to fully [move] over all state agencies on one day. That is just impossible," Lowe said. "From the first idea to now completing absolute implementation for the stage agencies, it has been a long journey."

bheaton@govtech.com
twitter@govtechbrian

CONTINUED FROM PAGE / 52

In the old days, the vendor and an agency signed a contract, someone copied the document and any attachments, and both copies were mailed or sent by courier to the OSP. An amendment to an existing contract created even more paper: People completed an amendment form, copied it and any attachments, and sent a copy of that amendment and all previous amendments to the OSP.

The reduction in envelope use by the state procurement office.

The procurement office reviewed each original copy and amendment for accuracy and entered pertinent data into 25 fields on a spreadsheet. Staff sent copies of the contracts to the Bureau of Legislative Review: a hard copy each of the original contract, every amendment and the history of those amendments. Bureau employees entered data from this material into their own database, and the contract awaited legislative review for approval. A contract was labeled "executed" if approved. After the review, contracts and amendments were returned to the OSP, and the office filed executed contracts and amendments while the originals were returned to the agency that originally submitted them.

Benton has worked for Arkansas for six years, and this process was firmly in place when she started the job. "There was so much time spent chasing paper. They spent an inordinate amount of time just looking for things instead of actual work," she said.

But today's electronic process overhauled that workload, and it's eliminated the need to repeatedly re-enter the same data, so there are fewer clerical errors. "Every time you rekey something, not only is it a waste of time, but the error margin also increases," Benton said. "There were three or four steps where people were rekeying the same data."

Various groups teamed up to develop the online submission system in-house. The Department of Finance and Administration's IT group worked with the Information Network of Arkansas and NIC, the provider of the Arkansas.gov portal. They developed the tool in PHP on a MySQL database, and the data is stored on the Arkansas.gov server. Developers designed it to integrate with EMC Documentum ApplicationXtender, so documents are transferred via XML for content management and storage purposes.

Markish is thankful for the changes. The room for mistakes was just too large in the old days. "So many chances for error, from lost contracts to mistyped information," he said. "There just had to be a faster way to do things."

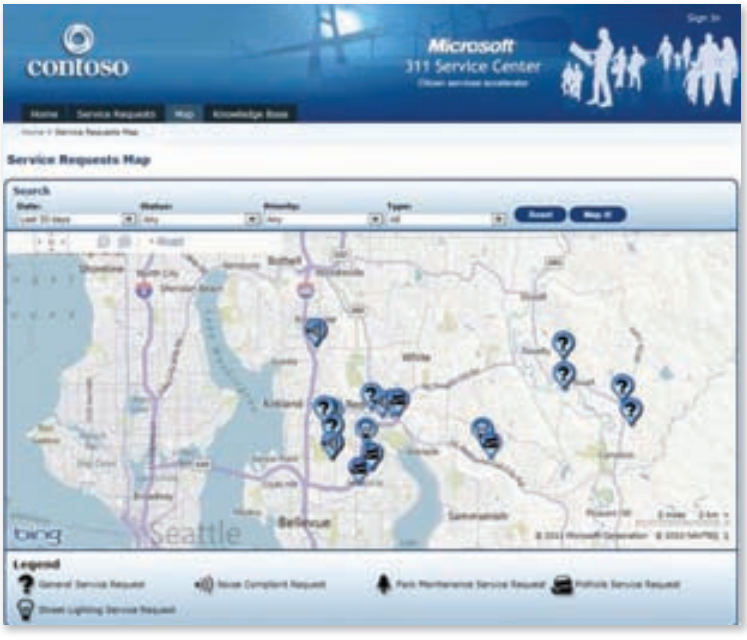
hcollins@govtech.com
twitter@hiltoncollins

Government citizen services with the 311 Service Center accelerator

The Microsoft 311 Service Center accelerator is an integrated citizen services framework that helps to streamline the processes in a citizen service center. It provides a framework to service citizen requests, provide information, manage back office processing, and utilize resources efficiently. The 311 Service Center accelerator is built on the fully integrated Microsoft Dynamics CRM and Windows Azure platforms, providing both on-premises and online delivery models.

Citizen services and management tools for local governments

The 311 Service Center accelerator is an extensible and customizable framework designed to allow local governments to expand and tailor it to their own requirements and needs. It helps streamline your citizen communications channels along with the back office management processes. The accelerator, which integrates with legacy systems, incorporates a cloud-based model to enable citizens to interact with their local government, receive services, and have instant access to their service request status and other information.



Immediately after deployment, you can use the accelerator to:

- Start a new service center or upgrade an existing center.
- Deploy a self-service citizen web portal with a map function.
- Establish case management, with service requests, work orders, workflow, routing, and assignment details.
- Provide access to customer service via mobile phones.
- Generate management summary reports through business intelligence tools.
- Use a sample of interactive, agent-oriented call scripts.

Self-service citizen web portal

The 311 Service Center accelerator delivers a citizen web portal that is fully integrated with the back office customer-relationship-management-based (CRM-based) system through a metadata-driven design. Service center managers can control, extend, and manage the web contents through Microsoft Dynamics CRM configurations.

Citizens can self-register, submit requests, view the status of open cases, read announcements, follow Twitter feeds, and search a knowledge base repository for information used to resolve issues quickly—without the need for agent assistance.

Web-based mapping component

With the 311 Service Center accelerator, citizens can interact with a web-based geographical mapping component designed to enhance the visualization of service request type, location, priority, and status, along with other relevant data. The full integration between the geographic information system (GIS) and existing service-related data at the back end helps in the publication of high-fidelity information reflecting the current state of the service center. Additionally, publishing easy-to-view geospatial information to all interested constituents can result in increased transparency and expanded communication.

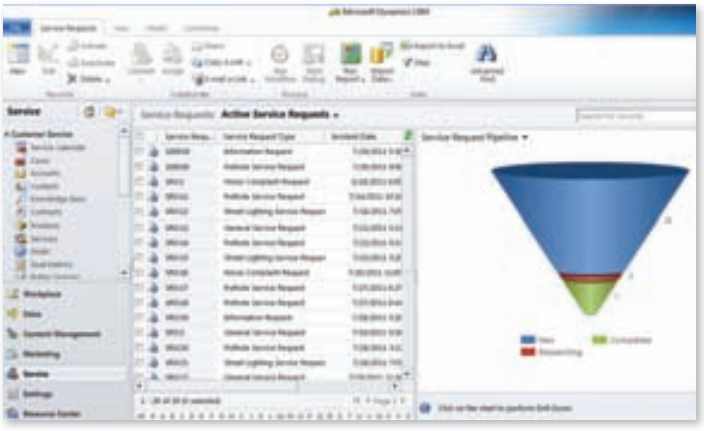
Improved citizen services experience

The 311 Service Center accelerator provides public sector organizations with an interactive and services management framework designed to enhance the quality and consistency of citizens'

experiences across all departments and divisions. This includes providing the highest level of service and information to citizens across multiple access channels, such as phone contact and all web-enabled devices, helping citizens through self-service transactions.

Case management and workflow

The 311 Service Center accelerator supports the complete life cycle of case management through an extensible service request engine which features sample requests accompanied by the appropriate workflow for each service type. It fully automates and simplifies the processes of creating, tracking, and managing service and information requests.



Management dashboards and reporting

To improve efficiency and cost-effective service delivery, the 311 Service Center accelerator provides a powerful variety of management dashboards and reports to enhance performance tracking and accountability. Service center managers can quickly view interactive summary data that helps them prioritize workloads, verify request status, and analyze trends in citizen requests. They can access, view, aggregate, compare, and analyze statistics to help them monitor service level agreements and to establish long-term planning.

Agent-oriented call scripts

The 311 Service Center accelerator provides an easily expandable sample of service request call scripts. The framework includes interactive, agent-oriented, step-by-step dialog scripts to handle inbound calls and requests based on service type. These scripts can help reduce the number of agent mistakes, provide a uniform experience for the citizen, and improve efficiency and accuracy.

Mobile platform and telephony

Mobile HTML portal views that work across all browser-enabled devices are part of the 311 Service Center accelerator. Citizens can submit requests from mobile phones, and mobile workers can update the status of requests from the field. Telephony integration can be accomplished through connectors, as an extension to this accelerator.

311 service center benefits

Comprehensive citizen-centric accelerator. The accelerator provides cities and counties with a citizen-centric solution to manage, track, and report on major 311 service center requirements.

Extensible platform using well-known development tools. You can tailor the solution accelerator to meet specific and changing requirements. Because it is based on the Microsoft development platform, you can be sure of wide technical support from a large software development community.

Cloud-based computing model. With the 311 Service Center accelerator, you can embrace the cloud-computing model with a citizen-facing portal and back end management solution deployed on the Microsoft Dynamics CRM and Windows Azure platforms.

Multi-tenant architecture. With Microsoft Dynamics CRM multi-tenant deployment, local governments can run multiple instances on a single server. Cities can provide services to smaller neighboring communities through a shared service center, which can help reduce costs for local authorities.

Easy to adopt and learn. By taking advantage of the excellent usability and familiar interface of Microsoft products, you can drive user adoption quickly and support the solution more easily because users don't have to learn new software.

Geospatial capabilities. With the 311 accelerator, you can map service data points to communicate geographic information and services status at a glance.

Integration with popular Microsoft applications. The 311 Service Center accelerator easily integrates with popular applications, including Microsoft Outlook, Microsoft Word, Microsoft Excel, and Microsoft SharePoint Server.

Microsoft®

Contact your Microsoft representative for more details, or visit **http://www.microsoft.com/gov311**

By Paul W. Taylor

Strategic IT Plan, Reconsidered

Focusing on the "I" in IT will help develop next-generation strategic plans.

Strategic planning is an act of optimism about an organization's future. For an era in which uncertainty is common and optimism hard to find, it's notable that 28 states have refreshed or rewritten their strategic IT plans over the past few years.

At the other end of the spectrum are 17 states whose plans date back to 2006. Five other states have successfully hidden their plans on their websites (and from search engine algorithms) to thwart even a guess as to their ages. Technology plans age about as well and as quickly as technology itself. That isn't to throw stones at these 22 states. Rather, I'm suggesting they may have a chance to leapfrog the conventional wisdom and map technology investments to outcomes that matter beyond the four walls of government.

Technology plans are anchored by a core set of objectives around "identify(ing) future statewide technology needs and information resource management issues" (Alabama, 2011), including agility, capacity and security (Alaska, 2010). Many include an aspirational quality — with seemingly obligatory nods to transformation and transparency.

Paul Taylor is the chief content officer for e.Republic, *Government Technology's* parent company.

California may be the furthest along in articulating an expansive vision of IT's role in state government. In the 2012 iteration of it's IT strategic plan, the California Technology Agency lays out a handful of crisply worded goals:

1. accessible and mobile government;
2. leadership and collaboration yield results;
3. efficient, consolidated and reliable infrastructure and services;
4. information is an asset; and
5. capable IT workforce.

But what does it mean to treat information as a yieldable asset? That may be the unpaid bill of the public-sector IT community insofar as our attention has historically been weighted toward the "T" in IT, sometimes treating the "I" as silent. That said, capital "I" information — sometimes called "data" by its friends — is instrumental as the focus expands from a narrow view of what IT does to a definition that includes the important work of producing the results people want from government.

If the citizen is the common decision point in how government functions and what government does, it seems right to redouble our efforts to group and measure outcomes related to doing the public's business in ways that reflect people's experiences with government.

Consider this first cut at a seven-bucket framework that could help reinvigorate discussions around what should be called out in the next generation of strategic IT plans:

1 / Responsive and anticipatory — indicators of improved service delivery and greater citizen engagement.

2 / Trustworthy — measures of transparency, privacy and security.

3 / Available — government services through all channels — mobile, social, Web, physical — all supported by IT systems and networks.

4 / Fast — the speed of connections via a robust broadband infrastructure that lets people live, work and interact with their government online.

5 / Strong and flexible — demonstration that IT has increased government's capacity to meet growing demand for service at less cost.

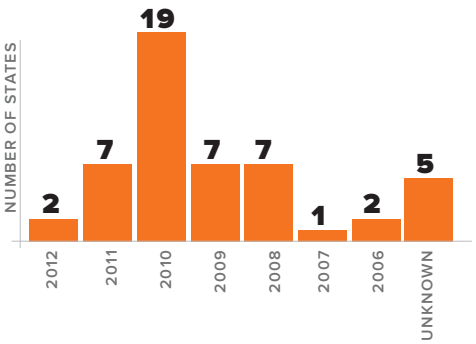
6 / Affordable — demonstration that IT has been used to cut cost structures and deliver services cheaper than conventional means.

7 / Catalytic and collaborative — demonstration of how technology is being used to foster collaboration across boundaries and with private and nonprofit sectors.

Planned and measured in these terms, IT becomes inextricably linked with the things elected officials care about and the public wants. If IT becomes more fully understood for its results, governors, mayors and county executives may even get to the point that they want to be seen in public with their CIOs.

50-state survey:

Year of the last refresh/rewrite of state IT strategic plans. SOURCE: CENTER FOR DIGITAL GOVERNMENT



Coping With Bad Math

What to do when more work and fewer people doesn't add up.

Recently I sent out a short survey to 100 GovLoop members asking them what their biggest challenge was. The resounding answer: being asked to do more with less.

In cities, counties and states across the country, agencies are being asked to deliver more services and meet heightened citizen expectations — with fewer resources and people at their disposal. Budgets are being cut and staff members are being furloughed or not being replaced when an individual retires.

So what is one to do when faced with this bad math equation of being tasked to do increasing work with fewer resources?

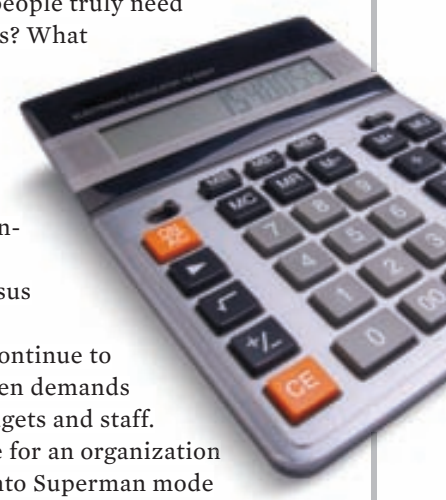
Here are a few ideas:

1 / Get (free) outside help. A bigger workload can't just land in your staff's hands — you need outside help. If you can't afford consultants, build relationships with local schools and volunteers. Professors and students are always looking for real-world experience that makes a difference. Local volunteers (from developers to passionate citizens) are happy to make a dent if you give them a clear task and show them a little love.

2 / Outsource to free. When budgets are tight, it's time to outsource to free. A number of companies provide "freemium" services (where they make their money on the back-end, transactional or advertising fees). NIC creates amazing state government websites for free while sharing revenue on transactional feeds. YouTown provides local governments with free mobile applications as part of a freemium approach. The same is true in the emergency management and department of motor vehicles markets.

3 / What can you stop? At Twitter it's required that for every feature that's added, one is subtracted. This prevents "feature bloating" and doing too many things poorly. Apply this approach to local government. For every new project, is there a legacy project you can shut down? This would eliminate processes that aren't worth the extra time or effort.

4 / Adjust to 2012 needs. Every business has the same issue: many conflicting customer demands that all can't be met. For example, in the ideal world, your bank would be open 24/7, have the best mobile apps and websites, have well-paid, in-person staff members and customer service, and mail and email you your statements monthly. Guess what? They make tough choices based on data and return on investment. Do the same with your government agency. Do people truly need printed statements? What building hours do people really need? Can you save money by focusing citizens on lower-cost channels (encouraging self-reporting versus a phone call)?



Agencies will continue to face growing citizen demands and shrinking budgets and staff. While it's possible for an organization and staff to step into Superman mode for a few months, it's not sustainable. Take a hard look at ways for help, new funding models and what to cut. You should be on a better path to sustainability. And your staff will be happy to get time back. GT

Steve Ressler is the founder and president of GovLoop, a social networking site for government officials to connect and exchange information.

Index

Panasonic
ideas for life

Toughpad A1

Get the job done in less time, for a lower total cost.
The NEW Android™-powered Panasonic Toughpad™ A1 tablet. Providing a cost-effective, secure, fully-rugged and reliable solution for state and local inspectors is how we're engineering a better world.

panasonic.com/business-solutions

TOUGHPAD

SOLUTIONS FOR STATE AND LOCAL GOVERNMENT