

GOVERNMENT TECHNOLOGY®

SOLUTIONS FOR STATE AND LOCAL GOVERNMENT

VOL 23 ISSUE 10 » OCTOBER 2010

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2010 Digital States Survey

Reality Check:

Is Apple's iPad ready for government?

Boston Mobile:

City serves citizens on the go

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Seattle CTO
Bill Schrier

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ALTERNATIVES TO BIG ERP

ANAND DUBEY,
director of enterprise
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COVER STORY

Rethinking ERP

State and local officials explore streamlined and more customizable ERP solutions.

BY DAVID RATHS

Cover photo by Clark James Mishler



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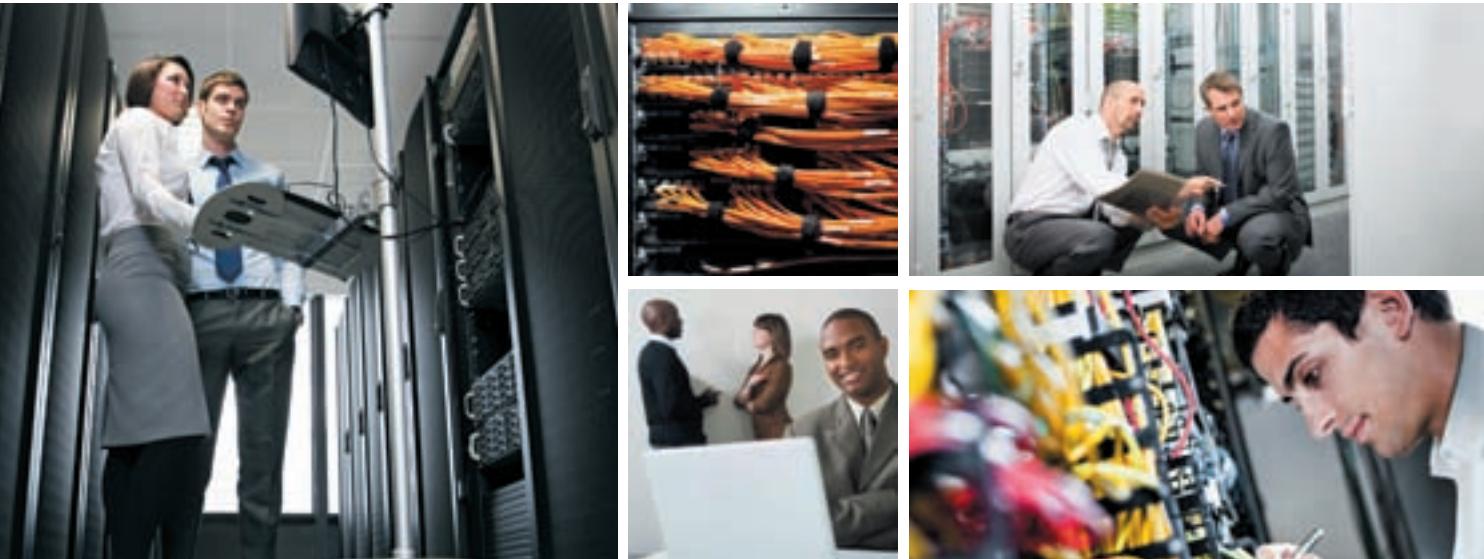
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Hopey, Changey

Next month the political landscape could undergo a significant upheaval. More than three dozen gubernatorial seats and a large number of key congressional seats are up for grabs. If current polls (as of early September) are to be believed, the overwhelming success that Democrats ushered in just two years ago may crumble into ruin as economic and foreign policy issues weigh heavily on the American public. Indeed, the outlook for the left is so bleak that the long-time U.S. senator from California, Barbara Boxer, may lose her seat to former Hewlett-Packard CEO Carly Fiorina — a political novice whose rocky tenure at HP would seemingly spell an easy victory for Boxer in the left-leaning Golden State.

Given the economic turmoil, the oil spill disaster in the Gulf and the lack of progress in Afghanistan, it's easy to become caught up in the moment and lose perspective, to delude ourselves that the crises we face are greater than any that have come before. But the pendulum always swings from bad times to good and back again — and from left to right. And for many, the closing months of the year are a time for renewed hopefulness. Whether this hope springs from a political change in November or a personal change come the new year, if you look hard enough

you can usually find a reason to be hopeful — or at least avoid succumbing to despair.

For many CIOs the future is uncertain. Then again, internal numbers might suggest the future — good or bad — is quite certain. Regardless, change is coming and it will prove disappointing to some, while providing new opportunities for others.

As of this writing, we at *Government Technology* are undergoing yet another change. If you're reading this online, you've hopefully noticed the much-needed face-lift our website has received. Over the last year, several of my colleagues and I worked closely with our IT staff to give input on how we thought our site could be improved. We put on brave faces and diligently acted as if we understood most of what we were being told. In the end, the odds were probably 50-50 that we did as much harm as good when it came to the website redesign. But despite our involvement in the process, the newish site nevertheless exists and is seemingly functional.

If you haven't been to govtech.com in a while, I hope you'll give it a look. And if you're a regular visitor, I hope you enjoy the changes we've made. Someone once asked, "How's that hopey, changey stuff working out for ya?" To everyone on both sides of *Government Technology*, may the answer be "very well." **GT**

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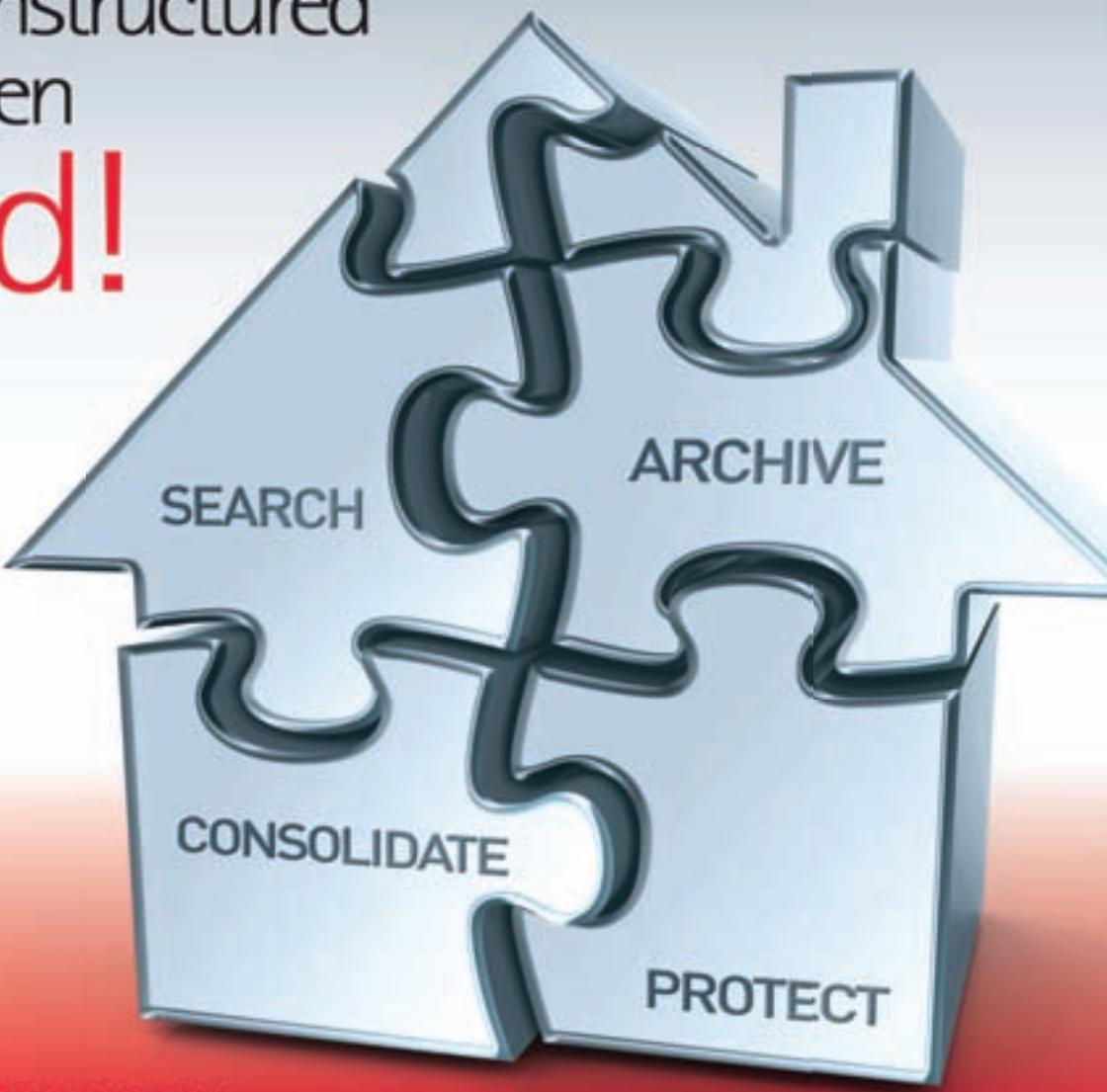
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Is Google Earth Eyeing Your Pool?

Riverhead, N.Y., officials had been using Google Earth's detailed satellite images and identified about 250 swimming pools whose owners hadn't completed paperwork certifying that their structures were safe and up to code. But objections from privacy advocates flooded the Long Island town as critics claimed the high-tech method erodes privacy rights.

WWW.GOVTECH.COM/POOL

Top-Tweeted Stories

California to Deploy Nation's First Mass Mobile Alert System

WWW.GOVTECH.COM/ALERT



Maryland Social Media Campaign Rules Take Effect

WWW.GOVTECH.COM/MARYLAND



California Cities and Counties Mandated to Disclose Public Employees' Salaries

WWW.GOVTECH.COM/SALARIES



Web Comment of the Month

“By attempting to manage the technology projects without first leading the people, Texas and Virginia all but guaranteed failure. Lead the people; then manage the project.”

By Paul Flanagan, Christopher Technology Consulting, on Aug. 23 in response to our story *Texas Says It Will Seek New Data Center Contractors*.
www.govtech.com/texas

HOT DETERRENT

The Los Angeles County Sheriff's Department unveiled the Assault Intervention Device, a 7½-foot-tall nonlethal weapon that transmits a focused, invisible beam at a specified target, causing an unbearable burning sensation that forces individuals to recoil. The device debuted in August at the Pitchess Detention Center for the launch of a six-month operational evaluation to see if the tool will help stop or lessen the severity of inmate assaults.
www.govtech.com/painbeam

Who Says?

“To Jane Q. Public, I would have seen that and said, ‘Why the heck is Louisville [Ky.] spending \$50,000 on alcohol?’”

www.govtech.com/whoamioctober

Hot List

Here are the 10 most popular stories from Aug. 6, 2010 to Sept. 5, 2010.

- 1 Is Google Earth Eyeing Your Pool?** After privacy questions, Riverhead, N.Y., stops using the free satellite imaging service to find pools lacking proper permits.

- 2 Calif. Cities and Counties to Disclose Public Employees' Salaries** State Controller's Office expands reporting requirements, wages to be posted online this November.

- 3 Virginia Governor Orders Review of Computer Outage** Damaged storage area network was fully repaired as of Sept. 2, according to vendor.

- 4 CIO Sam Nixon Tries to Fix Va.'s IT Outsourcing Effort** New CIO talks about what went wrong with the IT outsourcing and how he hopes to right the course.

- 5 Melodie Mayberry-Stewart Blazes Trail** The first black female CIO of New York state went from living in housing projects to launching statewide IT projects.

- 6 N.C. Murders Spur Creation of a Tracking Dashboard** Problems with probation system prompt the state to create a dashboard to address issues.

- 7 L.A. County Jail to Heat Up Misbehaving Inmates With Target Wave Technology** Device transmits invisible beam to create temporary heating sensation, which lets jail officials intervene in brawls sooner.

- 8 2010 Best of the Web Winners** Center for Digital Government's 2010 winners announced for state, county and city websites.

- 9 Texas Says It Will Seek New Data Center Contractors** State will likely break massive consolidation services deal into multiple parts.

- 10 3 Reasons Why Smartphone Security Is Neglected** Could smartphones be the next target for cyber-criminals?

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50-State Report Card

The Digital States Survey is the nation's only sustained assessment of state government use of digital technologies to improve service delivery, increase capacity, change cost structures and reach policy goals. The 2010 edition is the ninth Digital States Survey in 13 years.

A A-



B⁺



B



GRADE A

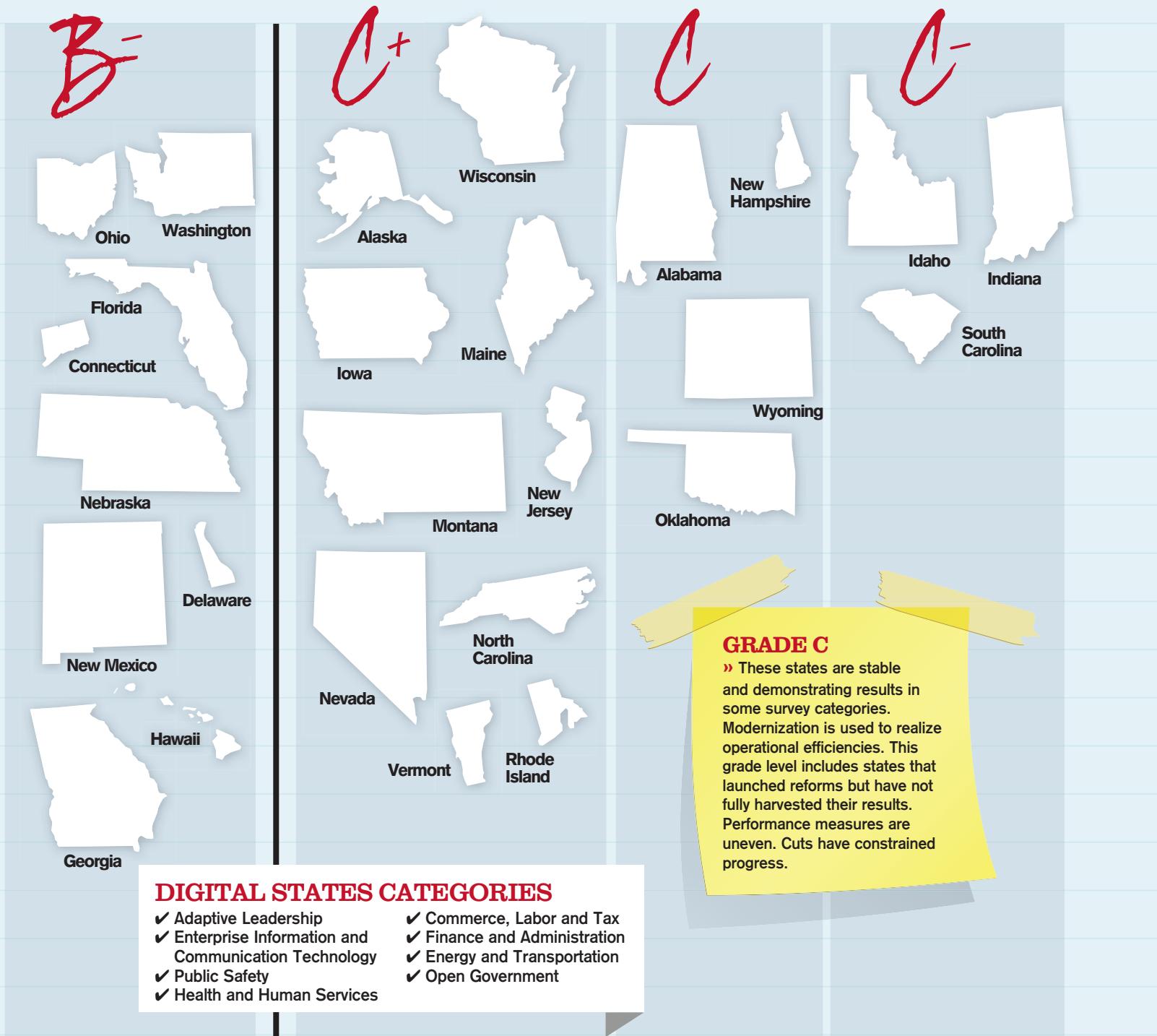
» These states are trending sharply up. They show results across all survey categories. Modernization is used to realize operational efficiencies and strategic priorities. They show evidence of meaningful collaboration. Performance measures and metrics are widely adopted. Cuts tend to be made strategically.

GRADE B

» These states are trending up. They show results in many categories. Leadership uses modernization to change entrenched practices and prepare for more sustainable operations. Collaboration incentives are in place. Measures are used in key areas. Cuts tend to be made across the board.

This year, our traditional linear rankings were replaced with letter grades for all 50 states. The new survey is focused on results over process in eight broad areas (see Digital States Categories) — a particularly high bar as states contend with the Great Recession's lingering effects,

budget cuts, a lagging recovery and increased demand for services. Against that backdrop, the injection of federal stimulus funding may have helped states stabilize, do more and do their work better.



Source: Center for Digital Government

Bill Schrier

CTO of Seattle

Seattle CTO **Bill Schrier** plans to deploy Long Term Evolution (LTE) wireless functionality throughout the city, which will give law enforcement higher priority for mobile communications traffic. Schrier expects the network to give public safety professionals more reliable communications and possibly reduce hardware costs. Schrier has served under multiple Seattle mayors as CTO and manages the Seattle Department of Information Technology. He has long been a passionate advocate of expanding municipal fiber networks.



PHOTO BY DAVID KIDD

1 Why can't law enforcement just use the commercial connectivity already in place in Seattle?

We've got approximately 1,500 wireless modems that are used in police cars, fire engines, electric utility trucks and by building inspectors. The trouble with that commercial network is it works fine for most things, but there is no priority. Your iPhone here in Seattle has the same priority as a computer in a police car in terms of access to the wireless network.

2 How might an LTE network save Seattle money?

The good thing about LTE is it's for both commercial and government. All of our voice networks use standards like Project 25, which is a government-only standard for wireless networking. The LTE network is going to be used by Verizon, AT&T and T-Mobile for consumer networks as well. That means if we use the same technology on the government network, the cost of everything will be cheaper. The cost of the handheld devices and modems for police cars — they'll be mass-produced by the manufacturer. [My] BlackBerry right now uses a commercial network, but will be able to use LTE.

3 How will the public react to the tall poles necessary for an LTE network?

Poles are a big problem in suburban communities. People don't want a cell tower in front of their property, whether it's a government or commercial cell tower blocking their view. Seattle is covered with a lot of trees. It's not flat — there are a lot of hills and valleys; there are a lot of buildings. For us, it's still an issue if we want to site a cell tower. There is still stuff you've got to go through, and neighbors object.

4 How might you avoid those conflicts?

I'm going to use Seattle Housing Authority buildings, which are already six or eight stories tall, or fire stations. We're going to use those sorts of sites, which already exist so we won't have to create them. I think we'll need to only site three or four cell towers. Most neighborhoods have some sort of Seattle Housing Authority building. **GT**



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Rethinking

ERP



State
and local
officials
explore **streamlined**
and more **customizable**
ERP solutions.

BY DAVID RATHS » CONTRIBUTING WRITER
PHOTOS BY CLARK JAMES MISHLER



ANAND DUBEY,
Alaska's director of
enterprise technology
services (right), created
a homegrown ERP system
for less than \$100,000.



Dubey says the five-screen Virtual Manager performs just as effectively as a multimillion-dollar ERP system.

"The smallest ERP system known to man." That is what Anand Dubey, Alaska's director of enterprise technology, calls the home-grown alternative to an enterprise resource planning (ERP) application he created and dubbed the Virtual Manager.

ERP is often defined as an architecture that supports the distribution of enterprisewide information across all functional units of a business or service organization. Dubey is on a mission to get officials in his state to rethink the traditionally expensive and complicated ERP implementation in favor of a system he created for less than \$100,000 to track his Enterprise Technology Services (ETS) Division's service catalog and personnel costs.

"States can do \$200 million ERP implementations and not know whether they are lowering their total cost of ownership or offering better service," he said. "There is a real danger that you have acquired a monster asset that is bleeding you dry. What good does it do to automate if you aren't necessarily providing better service or saving money? All you are doing is converting file clerks to programmers and IT support people."

Dubey is not alone in seeking out alternatives to traditional ERP offerings. Even in the private sector, there's a recognition that these deployments often fail to achieve their

objectives. A 2010 survey by Denver-based Panorama Consulting Group found that 57 percent of ERP implementations take longer than expected; 54 percent go over budget; and 41 percent of organizations surveyed failed to realize at least half of the business benefits they expected from their ERP systems.

Squeezed by budget cuts, some public-sector officials are looking for cheaper, faster-to-implement and more customizable ERP solutions.

"With the budget issues they face, officials wonder how they can afford huge capital outlays and manage the risk of these deployments going awry over three or five years," noted Rishi Sood, Gartner vice president and head of public-sector programs.

More states, cities and counties are becoming receptive to new ERP ideas. At the state level, Sood is seeing more interest in total application outsourcing. He points to a recent deal Maine announced that involves CGI Group Inc. hosting and maintaining the state's AMS Advantage ERP implementation in CGI's cloud environment, which Maine officials say offers the state a more predictable cost structure in the long term.

In smaller and mid-sized cities and counties, Sood expects to see increased use of software-as-a-service platforms, which

are less customizable than the application outsourcing involving CGI and Maine, but provide economies of scale.

Also on the horizon are shared services through demand aggregation. For instance, the Canadian province of Ontario and several cities within it work with an ERP vendor on a combined solution. Smaller municipalities may also consider open source ERP solutions, which are starting to catch on in the manufacturing sector.

"For states and the largest counties and cities, the mission criticality of their ERP makes open source less attractive to them," Sood added, "but there is always interest in open source, especially at smaller levels of government."

Tracking IT Services in Alaska

When Dubey became Alaska's ETS director almost three years ago, he wanted to know how much money his agency was spending on each of the services it provides. He was upset that it took the finance staff a week to get back to him with data from the old mainframe ERP system — and even then he still had difficulty discerning how his personnel spent their time.

Dubey set out to create a catalog of services and assets his agency provides. He then

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asked employees to dump their traditional time sheets and track all their work hours to specific service requests.

"For instance, Alaska owns a microwave telecommunications system," he explained. "We get service requests to do things such as fix a tower. Now when employees track their time, they tie it to the service request and the asset, and using the Virtual Manager, I can see how much each is costing me."

Business intelligence (BI) is another pet peeve. "People like to talk about the BI reports they get from traditional ERP systems," Dubey said. "But when I ask them

Dubey asks people to show him things they can do with a multimillion-dollar ERP program that he can't do with his five-screen Virtual Manager. "If someone tells me something I can't do, I think the program is agile enough that we could change it to be able to do it," he said.

Dubey's first goal was to gain acceptance of the tool within the ETS and then to proselytize other state agencies and CIOs around the country. But he admits that changing people's minds about ERP is difficult. Perhaps ironically, his state currently is considering the procurement of a massive ERP system.

“There are directors of finance and bureaucrats who have been in state government for 25 years, and they just don’t believe you can do for \$100,000 what other states are paying \$200 million for.”

—Anand Dubey, director, Alaska Enterprise Technology Services

what they actually do with their favorite five reports, they don't say much. They don't know what they are going to do with them."

With the Virtual Manager, Dubey produces simple pie charts that break down services by day, month, year and how much the agency is spending on each service.

"You can drill down in those right to the invoice and timecard level," he said. "So I know what I am spending on telecom infrastructure. This system has become my eyes and ears."

"I do have some input there," he said, "and I wish the world were that simple that I could direct it. But there are directors of finance and bureaucrats who have been in state government for 25 years, and they just don't believe you can do for \$100,000 what other states are paying \$200 million for. I tell them, 'God didn't create those systems; people did.' And sometimes it takes someone new to come along and change the paradigm. I am that mad man on the mountain."



The University of Akron and Lorain County Community College have a shared ERP system that saves them 5-10 percent off their IT budgets. The partnership has been successful partially because the ERP project is managed by a third-party organization.



Shared Services in Ohio

Another unconventional approach is sharing ERP services between two public-sector organizations. Such an experiment is under way in Ohio's higher-education field between the University of Akron (UA) and Lorain County Community College (LCCC).

"We are trying to prove the viability of creating a shared administrative services center so each university and college doesn't have to have its own," explained Jim Sage, the UA's CIO. "One of the keys to that is a shared ERP system. We believe we can eliminate a lot of duplication on the administrative side."

By sharing technology, the schools can shave 5 to 10 percent off their IT budgets, Sage said. "But studies suggest that through sharing administrative operations, we might save 30 to 40 percent."

The organizations completed the project's first phase by installing a common Oracle PeopleSoft application for both schools. PeopleSoft was already in use at the UA, and Sage said it had the best architecture to handle multiple legal entities.

"Other ERP systems weren't designed to support multiple legal entities in terms of software licensing," he added. The LCCC had been using Jenzabar software and was in the process of looking at other ERP systems when the shared services deal was struck.

The next step will combine select business functions at the UA and LCCC to prove that combined administrative units can adequately serve multiple institutions. The ultimate goal is to create a stand-alone nonprofit organization and move the management of administrative functions to it.

Earlier attempts to develop shared services failed due to a lack of trust between schools, Sage admitted. "Once one school tried to control the project, others would disengage. I convinced our president it could not be controlled by one school but had to be managed by an outside organization."

Smaller Municipalities Get Savvy

City and county government officials are becoming savvier about what goes into a successful ERP implementation, said Adam Rujan, a partner with Plante and Moran, a Southfield, Mich.-based certified public accounting and business advisory firm.

"They are becoming better consumers of ERP," he said. "They are recognizing they may not need the larger Tier 1 ERP system

and are devolving to smaller Tier 2 systems, which have lower maintenance costs."

Cities and counties also are developing more robust IT governance models, which often are in reaction to an ERP implementation, Rujan added. "These systems are pervasive, and they realize that operating on a common system requires the organization to get more involved in IT decision-making."

After looking for ERP options that were less expensive and time-consuming, Roger Rick, IT manager for the Redevelopment Authority of the City of Milwaukee, switched to a software-as-a-service version of 4gov from the agency's ERP software vendor the Customer-Driven Co. (CDC) Software. The authority now pays a fixed monthly subscription fee that includes system maintenance, backups, security upgrades and disaster recovery.

Milwaukee has a software-as-a-service ERP solution that requires vendor support, but so far has been successful.

WIKIPEDIA/TOWPILOT



"It does offer savings in the sense that there is no software to maintain, no servers, storage or backup," Rick said. "We can have one less IT support person on staff."

Another benefit, he said, is that the implementation of upgrades is almost immediate. "They can work on changes and tweak them until they are satisfied and then turn them on overnight without disrupting us," he noted. "The challenge is that the vendor has to be responsive to your needs, because you don't have your hands on anything. You could really be left hanging if they don't meet your needs. My experience with [CDC] is that they are responsive and knowledgeable."

As cities look to upgrade from outdated systems, they also look for systems that require less IT support and allow users flexibility in creating their own reports. The budget-crunch in Nevada cities such as Sparks (population 88,602) meant more full-featured ERP solutions from Oracle or SAP would be too expensive to support. City employees looked at several offerings

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Top 10 Traits of Successful ERP Initiatives

Many organizations with failed ERP systems attribute their problems to the software being used. But according to Panorama's 2010 ERP Report, an ERP project's success hinges largely on the project team implementing the software. The report found 10 critical factors to having a best-in-class ERP system.

- 1** Focus on business processes and requirements first. Don't get tied up in the technical capabilities or platforms that a particular software system can support. Identify key business requirements and the proper alignment of software with business operations.
- 2** Don't rush the ERP evaluation process. Take time to clearly define specific business requirements, thoroughly evaluate the various vendors and plan for a successful project. Spend at least three to four months on the selection and planning process.
- 3** Focus on achieving a healthy ERP return on investment, including post-implementation performance measurement. This requires developing a high-level business case to solicit approval from upper management and establishing key performance measures, setting baselines and targets for those measures and tracking performance after the go-live.
- 4** Gain commitment from executives. Any ERP project without support from its top management will fail. Support from a CIO or IT director alone is not enough.
- 5** Develop a realistic project plan and implementation timeframe. Develop an implementation plan, so you can identify cost and time overruns.
- 6** Commit strong project management and resources to the project. Ensure that your ERP implementation includes a strong project manager and other "A-players" from several departments.
- 7** Ensure adequate organizational change management and training. A focus on training, organizational change management, job design and other employee support measures is crucial to any ERP project.
- 8** Limit software customization. Changes to software source code add to implementation cost, duration and risk.
- 9** Understand the advantages and disadvantages of multiple software delivery options. All ERP solutions have strengths, weaknesses and tradeoffs. Get an independent, objective perspective on options before making a final decision.
- 10** Use independent ERP expertise. To reduce future costs, utilize third-party expertise to help your team select the right software, implement effectively and manage organizational change.

Delivering Anywhere

California to deploy a mass alert system for wireless devices that could someday become part of a national network.

California is implementing a statewide mass mobile alert system that will send notifications to people's cell phones based on their location, putting emergency information at citizens' fingertips.

The California Emergency Management Agency (Cal EMA) and Sprint announced in August plans to deploy a Commercial Mobile Alert System (CMAS), a public safety tool that uses technology to deliver

SYNOPSIS
California and Sprint are teaming to develop and roll out a mass alert system that will notify mobile devices based on their location.

AGENCIES
California Emergency Management Agency and the San Diego County Office of Emergency Services.

TECHNOLOGY
Commercial Mobile Alert System.

warnings and safety information via text alerts to wireless phones in specified areas without requiring individuals to subscribe to the service. The state's CMAS pilot program will begin in San Diego County this fall, in partnership with the county's Office of Emergency Services (OES).

The CMAS technology works much like the emergency alerts broadcast on television or through land line phones. But the main difference is that emergency text messages will be sent to all mobile phones in a defined geographic area, which could be as large as a county or city or as small as a few blocks.

For example, the emergency text alerts would come in handy for residents impacted by a mudslide or flood; students and faculty locked down on a campus due to a threat; mall shoppers or airport travelers in the vicinity of a suspicious package; or even sports fans leaving a stadium who need to know where to go if there's a nearby highway accident or chemical spill. Focusing on targeted areas should help emergency management officials reach the right people in precise locations, which stakeholders say could save lives and protect property on a local, state or national scale.

"California is proud to lead the country in having the ability to instantly alert residents via their mobile phones to an emergency or



ILLUSTRATION BY TOM McKEITH

disaster specific to their current location," said Cal EMA Secretary Matthew Bettenhausen in a release. "This technology, along with Sprint's seasoned record of providing reliable wireless and network support during the state's wildfires, floods and earthquakes, will prove a tremendous resource to the country's public safety and emergency management community."

The announcement represents a big step for CMAS, a national program the FCC established in response to the 2006 Warning, Alert and Response Network Act to provide residents and visitors with emergency information from federal, state and local officials about natural disasters, terrorist threats and other potential dangers. With the CMAS network, the Federal Emergency Management Agency will be able to accept and aggregate alerts from the president, the National Weather Service, and state and local emergency operations centers.

But before the system can launch nationwide, the technology must be tested. Starting this fall, the San Diego County OES will assess the public safety tool across urban, suburban and rural areas with 100 phones distributed to law enforcement agencies, fire

agencies and other partners. The technology may be available for public use in about a year, according to the OES.

During the 2007 wildfires, the county's OES evacuated about 515,000 residents, but this new technology will expand its reach to contact everyone in an impacted area, including tourists and visitors, according to Leslie Luke, group program manager at the OES.

"In San Diego, a number of people come to visit us and go to the beach or come from out of state," Luke said. "If they don't have a hard line phone, we cannot reach them through normal channels and they may not have registered their cell phones. With this new system, we'll be able to geo-code a particular area and reach people based on cell towers, including tourists who may be here for business or pleasure."

In the pilot, the alerts will be sent to the Sprint network over a secure interface, enabled by Alcatel-Lucent's Broadcast Message Center, and then delivered to cell phones using the CMAS technology. Text-based CMAS alerts will also reach hearing- or vision-impaired wireless customers through vibrations and audio signals. 

special report

BY ANDY OPSAHL FEATURES EDITOR

Web Masters

California, Boston and Chesterfield County, Va., take top honors in 2010 Best of the Web program.

California, Boston and Chesterfield County, Va., run the nation's best government websites, according to the Center for Digital Government's Best of the Web awards.

The annual survey picks the top 10 state, county and city portals in the country, based on innovation, functionality and efficiency. The Center for Digital Government is the research arm of e.Republic Inc., which publishes *Government Technology* magazine.

California Innovation

The top state honor for 2010 went to California's government portal, CA.gov. Among the site's numerous new features was mobile.ca.gov, a version of the site specifically designed for mobile devices.

"You can go on and just look at the applications that have a mobile configuration," said California CIO Teri Takai. "We believe that access to the Internet through mobile devices is going to be one of the fastest growing ways that people are going to access information, and we want to be ready for that."

Takai credited the site's win to the employees who redesigned it. "We just turned everybody loose and provided the tools for them to be successful," she said.

Websites were judged by a panel of former Best of the Web winners and senior analysts. And one member of the judging panel agreed with Takai's assessment. "It turns California's biggest challenge [extreme decentralization] into an asset," the judge wrote.

CA.gov features many new applications, including one that pairs citizens seeking volunteer opportunities with the appropriate organization. Another application directs military veterans returning to civilian life toward potential job opportunities. The California CIO's office put together much of the technology used for the various applications and taught individual agencies how to make their own applications with it.

"Very innovative and excellent use of Web 2.0 technologies," another judge wrote. "Content is very well organized, resulting in a great user experience. The Smart Search allows you to enter a California ZIP code and find localized service and information."

"I've never seen a Best of the Web entry — or anyone, for that matter — make a better case that e-government is good for the environment," a judge said, referencing CA.gov's explanation of the millions of pounds of paper saved by e-government in California.

Mobility Matters

Boston, the top winner in the city category, also made Web accessibility on mobile devices a priority in 2010.

One of Boston's new mobile applications alerts citizens when their cars have been towed, and instructs citizens how and where to retrieve them. The notification also explains the reason the vehicle was towed. "This [app] really changed the way people deal with being towed," said Bill Oates, Boston's CIO.

In the past, according to Boston Department of Innovation and Technology spokeswoman Sara Walsh, citizens sometimes made a dozen phone calls to determine if their vehicle had been stolen or towed, and which agency had jurisdiction over it.

Immediately alerting owners when their vehicle is towed also saves them money, since towing lots charge for each 24-hour period a car is impounded. "If you were at work and you got towed, you may not notice it until you get home after business hours," Walsh said. "That's already a 24-hour fee. You may not get it until the next day."

In addition, Boston's website, cityofboston.gov, offers a mobile app to alert citizens before street cleanings occur so they can move their cars to avoid getting them towed. Another mobile application enables resi-

STATE PORTALS:

1. California
2. Arkansas
3. Alabama
4. Maine
5. Kentucky



CITY PORTALS:

1. Boston
2. Louisville Metro Government, Ky.
3. Fort Collins, Colo.
4. Castle Rock, Colo.
5. Coralville, Iowa

COUNTY PORTALS:

1. Chesterfield County, Va.
2. Pinellas County, Fla.
3. Oakland County, Mich.
4. Maui County, Hawaii
5. Park County, Colo.

TO SEE A COMPLETE LIST OF WINNERS, GO TO WWW.CENTERDIGITALGOV.COM.

dents to submit service requests, like pothole repairs, and notifies them when requests are done. And the site's new Citizens Connect feature aggregates more than 300 citizen transactions in a central spot and labels those services with clear descriptions, rather than government jargon.

"Good use of Web 2.0 tools," a judge wrote about Boston. "The site offers the ability for users to translate the site in multiple languages and back to English if necessary."

Chesterfield County, Va., won the top county spot. County staff believes chesterfield.gov's primary improvement is its clean new layout, said Robert Freeland, manager of digital government for the county. The previous website design was "sort of like the old tacky lights tour," he said.

"The unique presentation layer offers an intuitive user interface," wrote a judge about Chesterfield County. "Good use of graphics, easy consistent navigation." GT

Boston Mobile

A mobile version of city website lets citizens use a variety of platforms to access Web services.

Consider briefly the number of devices that can access the Web — cell phones, smartphones, computers, laptops, tablets, game consoles. Now imagine trying to build a website that functions well across all these platforms. The city of Boston did in recently launching a mobile version of cityofboston.gov to try to bridge the digital device divide.

As mobile devices evolve, some might wonder whether building a mobile version of a website still makes sense. Boston CIO Bill Oates and Raj Pareek, the city's manager of e-government initiatives, believe it does. They built an inexpensive mobile site they believe will put the city in a better position to communicate with citizens now and in the future.

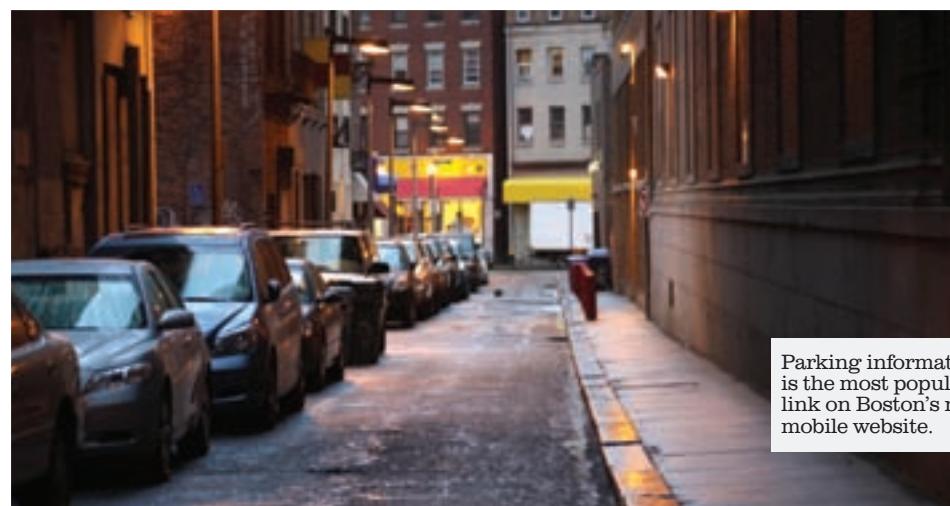
Flood of Interest

Last summer, Boston launched its first iPhone application called Citizens Connect. The app was another avenue in a growing line of online municipal 311 services. Users who spot potholes, graffiti or any other nuisance can snap a picture and use Citizens Connect to immediately upload the photo to City Hall.

That deployment's success led Oates to ponder whether Boston and its residents and visitors would benefit from a mobile version of the city's official website. He asked Pareek to explore the feasibility.

"I talked to a lot of vendors, and some people were quoting a lot of money, like \$100,000. We weren't sure that kind of investment was wise," Pareek said. Turned off by the expense, Pareek said he spoke with some private-sector associates who'd been working with Vancouver, British Columbia-based Mobify, a company that specializes in creating mobile versions of traditional websites.

"I was amazed how fast they were able to prototype for us and they helped us very,



Parking information is the most popular link on Boston's new mobile website.

very fast in terms of turnaround," Pareek said. "We were shocked at the success, the low cost and the implementation." The cost, he said, came to \$1,200 per year — a pittance compared to the quotes he'd received earlier.

In late February, Pareek and his staff began work on development. The app was ready for launch just two months later, timing that ended up fortuitous. On May 1, the city of Weston, a Boston suburb, suffered from a massive water main break. Approximately 64 million gallons of water flooded from a 10-foot diameter pipe that delivers water to Boston residents. The break affected 2 million customers and forced Massachusetts Gov. Deval Patrick to declare a state of emergency and even issue a "boil water" order for Boston and surrounding communities. The event was the mobile website's first test.

"For a couple of days we had to let people know that they had to boil their water, and that was for 2 million customers across eastern Massachusetts," Oates said. "Being able to present that information through their mobile device when they came into our mobile site was a huge improvement in our ability to communicate to constituents."

Different Demographic

After the flood, business in Boston went back to normal. However, the mobile version of the city's website had proven itself valuable and numbers indicated the city was reaching residents who didn't normally make many connections to city government. "We were reaching a whole different constituency that had not traditionally come into City Hall or called the mayor's hotline — or had even come on to do a Web service request," Oates said. "That was interesting to us because it was connecting the city to a whole different demographic."

The mobile site loads automatically when it detects a user is accessing the city's portal via a mobile phone. When the page loads, the user sees a pared-down version of the city's normal home page. Along the top of the page are three buttons: home, contact and payments. The payments button lists the city's available online transaction services.

In the body are links clearly designed with visitors and residents on-the-go in mind. The most accessed link on the page is information on parking in the city. When clicked, users can find information on street

Insight = Efficiency

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Joe's town is a safe, secure and prosperous place to raise a family. The fire and police departments are exceptional. The area attracts new businesses, contributing to the community's economy. Important information is distributed efficiently. How? Pitney Bowes Business Insight. Their solutions, software and services help the public sector to discover the insights that uncover the opportunities. Opportunities to increase responsiveness. To better serve and communicate with the public. And, ultimately, to create a better community for citizens like Joe.

Solutions for Customer Intelligence, Communications and Care.

Info on the Go

Virginia Web widgets bring government information to users — on the website of their choice.

SYNOPSIS

One Virginia project makes accessing government information a matter of convenience.

AGENCY

Virginia Information Technologies Agency.

CONTACT

Emily Seibert, public relations and marketing specialist, Virginia Information Technologies Agency, 804/416-6084, Emily.Seibert@vita.virginia.gov.

Ask people what they think of their state's official website and chances are, most won't have much to say — government sites just aren't that popular. According to data from Alexa, a company that tracks Internet traffic, not one of the top 100 most visited sites in the United States was a state or local government portal as of July.

This could mean that many citizens are missing out on important information their state and local leaders want them to see online — information that could impact their lives and relationship with the government.

Because people aren't spending enough time on state portals, Virginia officials are creating mini-applications, called widgets, that visitors can take from Virginia's official portal and embed on their personal

websites, blogs, social networking pages or other private pieces of Web real estate. These widgets contain state-specific data — election news, lottery numbers or hotel information, for example — that automatically update with new information.

"The most important consideration that we had was the user, and it was important to us to allow users to control content that they were interested in, as opposed to us trying to control the process of feeding it to them on a static website," said Emily Seibert, public relations and marketing specialist for the Virginia Information Technologies Agency (VITA).

This movable functionality makes things more convenient for people, in her opinion. "We didn't want them to be controlled by a state



URL, and so the widget technology allowed us to provide portable and very dynamic content," Seibert said. "It's the kind of thing that changes frequently, like events at wineries, lottery numbers or inauguration events."

The widget technology came about as part of the state's portal redesign project that VITA began in 2008. The agency partnered with Virginia Interactive (VI), a subsidiary of NIC, a company specializing in e-government services. That year, the two groups planned to make Virginia.gov more attractive to the public. Objectives included providing easy-to-use tools, disseminating information in or close to real time, finding a way to engage younger citizens and making information portable. The widgets, which went live in June 2008, were one way to move toward these goals.

"We were looking at what was going on in the Web world, and how other websites were attracting visitors to their websites and delivering information more quickly," said Deanna Boehm, VI's marketing director.



Blogs

GOVERNMENT TECHNOLOGY®

Who's Talking?

Calling all readers to join the discussion as experts dispatch witty observations and tackle the tough issues. Converse with like-minded views, or agree to disagree. We look forward to the debate!



→ Lohrman on Infrastructure:

Dan Lohrmann
Chief Technology Officer
Michigan

blogs on the virtual tsunami of IT challenges and options government faces today.



→ Notes from a City CIO:

Bill Schrier
Chief Technology Officer
City of Seattle

blogs on making technology work for city government.



→ Disaster Zone:

Eric Holdeman
Fmr. Director
Office of Emergency Management
King County, Washington

on the ongoing palette of new laws, plans, procedures and all aspects of emergency management and homeland security.

The screenshot shows the Government Technology website interface. At the top, there's a navigation bar with links for Home, News Topics, Blogs, Digital Communities, Video, Events, Webinars, Magazines, Advertising, and My GT. Below the navigation is a search bar and a login link. The main content area features three blog posts in a "Just In" section:

- Time to Disconnect IT Email and Vacation** by Dan Lohrmann: Discusses the struggle with balancing work and family time, mentioning the difficulty of turning off a BlackBerry even on vacation.
- Is China losing grip on information censorship?** by Dan Lohrmann: Discusses the Chinese government's control over information and its potential relaxation.
- Islandia's Credential: A Manufactured Controversy** by Dan Lohrmann: Discusses a controversial issue in Islandia, New York.

Below this is a section titled "GovTech Blogs" featuring a post by Dan Lohrmann: "Discussions on the virtual tsunami of technology challenges and options government faces today, from hot stimulus projects to cloud computing."

On the right side of the page, there are sidebar sections for "Video" (with a thumbnail for "County Oakdale 1800.00 supports the age..."), "How Do Apps for Government Work? Into \$2, out how way D C technolo...", "County Louisville video is swaying... More Video >", and "digital communities" (with a thumbnail for "Local IT W... Download FREE Reports! How a spen...").

Join the discussion at govtech.com/blogs

"[We] explored a couple of ideas for personalization and felt that the widgets would be the approach to deliver government information in a format that can be pollinated and shared through social networks, websites and e-mail."

Sharing the Knowledge

According to Travis Sarkees, a senior project manager at VI, 14 widgets have been available on the site since its inception. Some, like the elections widget, come and go based on relevance or season. Six were available as of July: hotel booking, local winery listings, lottery results, news feeds, fun facts and links to state parks. VITA and the VI worked with Clearspring, a third-party company, to develop the technology and deploy widgets on its AddThis platform.

"I would say the biggest challenge for us was more in creating the good ideas," said Mark Elmendorf, a VI Web applications developer. "What would make a usable widget? What would our citizens really enjoy? What would they keep coming back to?"

All the widgets work similarly as far as portability and functionality.

The Virginia Fun Facts and Virginia Wineries widgets, for example, are two mini-apps with the same modes of delivery. The Fun Facts widget lists a random piece of data about the state for any user interested in expanding his or her knowledge of Virginia. There's nothing to click or download, just interesting pieces of brain food for curious readers. The Fun Facts widget will likely display different text with every page visit or refresh. The Wineries widget, on the other hand, has a scroll bar that lists state wineries. When the user clicks a listing, a new page opens with the winery's location, description, admission fees and contact.

Though the two widgets have different features, they're identical in how they're accessed or moved around, just like the other widgets.

To add a widget, a Web user picks one from Virginia.gov and clicks the "Share" button, and a directory of websites appears. The user then selects from roughly 100 sites to embed the widget into. There are well-known sites like AIM Share, iGoogle, Facebook, Digg, Fark, Twitter and LinkedIn, as well as lesser known ones like Link Ninja, LinkaGoGo, Farkinda, CiteULike, Aero, ZooLoo or Virb. Users select one widget and follow on-screen

2,399,420

The number of views Virginia's widgets received in 2009.

instructions to place it on a site they want, or bypass the Web page embedding option and e-mail the widget to whomever they choose.

Sarkee thinks the widgets might be more credible if they're seen on a friend's page. "It comes as an endorsement by their friend rather than an endorsement by state government," he said. "That's big with social media."

Data in Demand

The widgets' dynamic content has been viewed more than 3 million times from more than 3,500 placements, according to VI, which tracks the widgets' use. The majority of these views and placements occurred recently — 2009 saw 2.4 million views and 2,303 placements for all widgets that year, as opposed to 763,432 views and 1,219 placements in 2008. But not all widgets were available in both years: The elections widget was only up in 2008 and one for hotel reservations debuted in 2009.

The most popular widget in 2008 was elections — it had 686,850 views and 480 placements. Boehm said the media even contacted the government to ask if the widget could be placed on news sites. The state portal suffered during election season because so many page views impacted bandwidth, but the widgets displayed information without delay because they were hosted on remote sites.

"The state website was down for a while because of the heavy traffic load, but the widget was still up and running," Boehm said, "so it was still displaying real-time results to citizens."

VITA staff members were so pleased with the widgets that they submitted the project to the National Association of State Chief Information Officers for consideration for an outstanding IT achievement award. That was a wise decision: Virginia won the 2009 recognition award for achievement in government-to-citizen interaction.

"This was truly an initiative that looked at the user, how they consumed information and how they might like to consume information — how they're doing it in their normal everyday lives," Seibert said.

The widgets are doing well enough for now, but there could be room for growth and experimentation. According to Boehm, VITA and VI are still determining the full range of sites that widgets can work with. They've also contacted other state agencies to encourage them to create agency-specific widgets to widen the selection.

"Any state entity is welcomed and encouraged to join, and it is a very robust community," Seibert said. "Virginia Interactive has presented several different times about the wrapper technology, shown people how they work, encouraged them to participate and about how they might use the widget with their particular content." GT

Widget Metrics

The metrics for widgets on Virginia.gov are dramatically different from 2008 to 2009, as shown below.

WIDGET NAME	Year 1 July 08-December 08		Year 2 January 09-December 09	
	VIEWES	PLACEMENTS	VIEWES	PLACEMENTS
Wineries	5,846	242	2,270,750	1,481
Election	686,850	480	—	—
Lottery	17,568	82	60,077	305
Online Services	12,152	81	19,356	69
Emergency Services	6,509	57	13,163	28
Fun Facts	5,528	32	8,102	20
YouTube	6,108	12	5,643	16
State Parks	6,255	72	5,257	189
Traffic	3,622	52	3,848	52
Online Reservations	—	—	230	34
Podcasts	5,918	67	5,918	67
News Feeds	7,076	42	7,076	42
Total	763,432	1,219	2,399,420	2,303



A STRATEGY PAPER FROM

CENTER FOR
DIGITAL
GOVERNMENT

MANAGING GOVERNMENT COMMUNICATIONS

IN THE AGE OF OPEN GOVERNMENT



THE NEED FOR MANAGED COMMUNICATIONS

Picture yourself as the newly appointed commissioner of the recently consolidated public works agency for a large municipality. Your agency was formed as part of a cost-cutting plan aimed at helping reduce the government's budget shortfalls. You are responsible for a wide range of services, including water and sewage, sanitation, transportation conditions and public housing. You are expected to not only reduce the costs of operations, but also to improve the overall customer satisfaction ratings for the agency. You are also required to make the results of your operations more transparent, and to fulfill the requirements of the newly passed open government legislation.

In examining your challenge, you are impressed with the significant improvements that were made in communicating with your constituents, mainly through the 311 service center that you are now responsible to run. However, you have found a number of serious issues:

- Separate legacy systems for different functions result in duplicative business functions and redundant technical support.
- Constituents are no longer satisfied with calling into 311 to report problems and check on the status of their requests and now desire communication through multiple communication vehicles including e-mail, text messaging, social networking websites and mobile apps.
- Messages sent out are not always consistent. For example, informational e-mail messages differ from data that is communicated via the phone regarding complex services such as hazardous waste disposal, status of pothole

MANY AGENCIES ARE SUCCESSFULLY TAKING THE FIRST STEPS TO IMPLEMENTING CUSTOMER COMMUNICATION MANAGEMENT APPROACHES TO IMPROVE SERVICE, SUPPORT OPEN GOVERNMENT INITIATIVES, AND REDUCE COSTS — ALL AT THE SAME TIME.

repairs, or what to do if the heater does not work during the winter. The expansion of communication vehicles — and the separate conventional siloed approach to providing the services — has resulted in communication overload and errors.

Is this a hypothetical challenge or the reality agencies currently face during a budgetary conundrum? This paper will show that many agencies are facing these challenges across the country and are successfully taking the first steps to implementing customer communication management approaches to improve service, support open government initiatives and reduce costs — all at the same time.

DEALING WITH THE REALITY

The above scenario, while hypothetical, resembles the reality faced by most government executives across the country. The desire for transparent operations has captured the public's attention as government's role in the life of communities and the country has expanded coincident with massive investments of taxpayer funds in helping to stabilize economic conditions. Constituents are continually demanding more from their governments, and taxpayers want to know more about how their money is being spent. At the same time, government unfortunately not only has less revenue to fund the investments in technology that would help solve these problems, it is often operating with a reduced workforce.

Multi-million dollar modernization initiatives are not an option; if government leaders are to improve services under current fiscal conditions, they must begin to leverage previous investments in technology. However, the problems presented above are not just technical issues; there are organizational considerations as well. In order to success-



fully fulfill the needs and expectations of an ultra-connected public, government leaders need to:

- manage communications in a consistent manner, using the communications vehicle that the constituent prefers;
- present government to constituents as a single entity — masking organizational distinctions;
- enhance constituent self service; and
- build upon and connect the legacy investments in technology.

MANAGING COMMUNICATIONS IN THE WAY THE CONSTITUENT PREFERENCES

Today's open government initiatives require a much more precise tracking and reporting of actions than was the norm even a few short years ago. Laws have been passed in most jurisdictions that require full disclosure of all governmental activities. Public websites abound with information — graphical in many cases — showing open work orders, average wait times, and all other forms of information that provide real-time performance monitoring.

In addition, individuals now demand real-time feedback on their service requests, wanting to know precisely when someone will show up to fix their problem. They also demand information detailing easier ways of processing transactions such as license renewals. The days when the public will stand in line for hours waiting to be called for a license exam are numbered. Innovative DMVs are already deploying technology that allows customers to input their mobile phone number and be notified about wait times and even hold their place in line.

It is critical to get the right message, to the right person, at the right time, in the way they want to receive it. This requires a comprehensive methodology to manage communications across the enterprise and necessitates expansion beyond the traditional constituent relationship management (CRM) approach used today in most sophisticated 311 operations. To put it simply, governments must integrate presentation and constituent response across all channels: paper, Web, e-mail, instant messaging, social networks and data feeds to the full range of end user devices: phone, PC, laptop, mobile.

The Arkansas Recovery Portal combines the need for greater transparency with efficient government-to-citizen communication. The portal — along with mobile applications

— provides citizens with updates on how federal stimulus money is spent and how state and local governments are managing stimulus funds. The portal is updated as new funds are allocated. Citizens can find contact information and view dynamic graphs and maps, and track online requests. Thousands of citizens have received notifications by e-mail and the phone application has been downloaded several thousand times around the world.



Miami-Dade County, Fla., is working to perfect two-way communication with its residents. The county's "Service-Direct" capability allows residents to enter requests such as pothole repairs and notify officials of issues such as impaired street signs, among others. ServiceDirect shows real-time status of the user's requests and expands upon 311 by allowing call centers to send customized e-mails to the constituent. With the implementation of ServiceDirect, the county has seen cost savings through the elimination of 15 in-person service centers.

PRESENTING GOVERNMENT AS A SINGLE ENTITY

Governments, by necessity, provide many different types of services across many different functional areas: health and human services, public safety, education, licensing, motor vehicles and other regulatory oversight, permits and various other forms of licensing, taxation and revenue collection, etc. These services are traditionally provided by separate agencies as the nature of the service is often quite different. For instance, the functions of a law enforcement department

are distinctly different from those of a health and human services agency. Yet, even these functions need coordination, as in the case of probation for child offenders and the child support or other health and human services that may already be offered at the released prisoner's new domicile.

AN AGENCY'S ABILITY TO COMMUNICATE IN AN INTEGRATED MANNER WITH ITS SISTER AGENCIES CAN ACTUALLY PROVIDE A NEW SOURCE OF REVENUE AS WELL AS IMPROVE CONSTITUENT SERVICE.

An agency's ability to communicate in an integrated manner with its sister agencies can actually provide a new source of revenue as well as improve constituent service. The city of Dallas has found that by coordinating its monthly water bill statements with fines imposed by other city agencies it can substantially improve its revenue collections across all agencies.

To the south, Harris County, Texas, has consolidated more than five central databases to form a consolidated criminal history. The search application pulls information from numerous sources to provide data on one consolidated screen, saving prosecutors, staff and citizens countless hours of work — a defendant's transgressions can be pulled up in less than 10 seconds, a process which formerly took more than an hour.

Other examples of integrated solutions exist in complex inspection services, routine maintenance services, and other everyday government functions. Whether it's eliminating the redundancy associated with multiple field visits, or improving the revenue collection process, communicating with constituents in a common, integrated manner is providing serious benefits across the board.

ENHANCING CONSTITUENT SELF SERVICE

Improving constituent service does not come without a cost. Nor does the reporting, oversight and transaction tracking required to provide greater transparency come for free. One

way to pay for those improved functions is to enable substantially more constituent self service. Spurred by the Internet, there are a number of illustrious examples where enhancements in self service have resulted in substantial improvements in overall service, as well as significant reductions in transaction processing costs.



In 1998 the Internal Revenue Service was put under strict Congressional direction to improve its constituent services while at the same time taking significant budget cuts. One area of service improvement was electronic filing, with a mandate to achieve 70 percent electronic filing by 2007. At the time of the mandate, electronic filings were less than 20 percent of the total filings, as the tax preparers were charging additional fees for electronic filing, thus discouraging its uptake. By encouraging the tax preparers to increase the number of electronic filings, the IRS not only improved its constituent service (faster refunds, less paperwork), but also substantially reduced its own workload and reduced errors associated with entering tax return data from paper documents into its own computers. This enabled the IRS to allow many of its people to do less tedious jobs, and to do a better job of advising the tax-paying public, as well as improving its overall collections.

Along those same lines, the New York State Department of Taxation and Finance has taken self service a few steps further by modernizing their core systems using a service-oriented architecture (see sidebar "A Different Kind of Tax Collection").

All documents that the department receives from taxpayers or sends to taxpayers are now maintained in an XML form-overlay structure that makes them look a lot more like paper. As a result, when taxpayers check for their documents on the Web, or call center operators view documents while they are speaking to taxpayers, everyone is looking at exactly the same document.

The process of issuing driver licenses and motor vehicle registrations has also been made better by applying new technology. Most states provide simplified online processes over the Internet for individuals and businesses to renew their driver licenses, motor vehicle registrations and many other forms of permits and professional licenses. Not only does this save the constituent time, as they no longer have to visit the governmental entity, stand in line, take time off from their job, and

become frustrated; but it streamlines the entire process, again reducing the amount of transaction processing that must be performed by governmental clerical operators. This allows the governmental entity to really focus on improving its internal processes within and across agency lines in order to drive costs out of doing the work of government.

States, cities and even counties across the United States are realizing the value of providing robust online self-service options for constituents. The cost savings coupled with the resulting increase in citizen satisfaction changes the relationship between residents and their government while vastly improving the underlying cost structure. Fairfax County, Va., has conducted 600,000 payment transactions online, generating over \$123 million in online revenue in 2008.

A DIFFERENT KIND OF TAX COLLECTION

The New York State Department of Taxation and Finance launched a modernization program four years ago aimed at replacing its core legacy systems that were 30 years old and built upon a proprietary database management system. Deciding that they needed to facilitate self service if they were to reign in their costs, and also deciding that they needed to drastically reduce their printing and mailing costs, they architected the new systems following a service-oriented architecture approach that enabled them to manage all their paper electronically in XML formats. By integrating their print, Web and IVR services into a single XML structure they have dramatically improved customer service while at the same time reducing printing and mailing costs significantly.

Coupling Web-based services with growth in electronic filing has also had great benefits. The growth of e-filing has allowed the agency to absorb some of the budget cuts that have been necessary due to the fiscal environment. Refunds have been expedited in the personal income tax program and associated reductions in mailing, printing, paper processing and bank costs have made up for some of the spending the agency has had to cut.

The agency isn't stopping there. Having realized the benefits of managing taxpayer and tax preparer communications in a more electronic enterprise-wide manner, the next steps are

using e-commerce techniques as well as e-mail to better facilitate communications. The agency is now working electronically with thousands of tax preparers by creating a single state-wide sign-on process that allows them to be properly identified and thus have access to the taxpayer records for which they are entitled to view. This is a major improvement in privacy policy, as the agency needs to assure with certainty the protection of taxpayer records. In addition, the agency is able to better service the tax preparers through e-commerce by pointing them to hundreds of different service offerings, such as programs designed to better track stock and bond transactions. The agency has clearly demonstrated that you can improve service and reduce cost at the same time.



BUILD UPON AND CONNECT LEGACY INVESTMENTS IN TECHNOLOGY

Most governmental managers will recognize the challenges discussed here, and will have their own examples of how smart investments can both improve constituent services, while at the same time reducing their transaction processing costs. However, the reality of drastic reductions in technology budgets make it virtually impossible to buy an entire brand-new enterprise integrated system and simply replace legacy processes. Even if public agencies could afford such a wholesale change, few are willing or able to take on the risk of a major technology project.

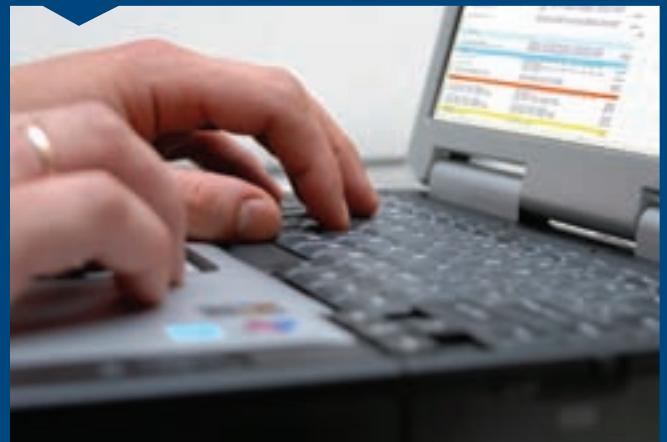
TAKING “DOING MORE WITH LESS” TO NEW LEVELS

The California Employment Development Department (EDD), responsible for ensuring citizens receive unemployment benefits, faced a 400 percent expansion in customer interactions due to a doubling in the unemployment rate and an unprecedented spike in long-term unemployment, to which the federal government has responded by extending the unemployment period four times for a total eligibility period of 96 weeks. The agency primarily used telephone interactions to communicate with clients and employees would enter customers' data into a 20-year old system. However, due to the enormous volume increase the phone lines soon became overloaded, leaving the agency with a communications challenge.

Pam Harris, the agency's chief deputy director says, "the only workable strategy was to immediately give customers new ways to file with the agency by making our website more customer-centric." Harris didn't stop there; she also launched a number of major public relations activities to get customers interested in using the Web to communicate with the agency. One of the most innovative techniques the agency employed was to utilize YouTube to educate customers on how to file a claim, as well as contacting potential customers via employment-oriented websites. They also established a Twitter account and used it to communicate new information on a regular basis. The EDD is proud to claim that its number of followers on Twitter is greater than the state's main Twitter account.

That said, doing nothing isn't an option either. Without addressing the issue of a citizen communication strategy on an enterprise level, attempts to address the challenges discussed above are often met with less than optimal success. Leveraging prior investments, thus improving the return on investment on customer communication management solutions, is clearly the key to success. It will extend the value of existing investments in mission-critical improvements to legacy systems across platforms at incremental cost without the need for wholesale system replacements. Organizations that have taken this approach to customer communication management have found success on many levels.

While this had a significant impact on increasing the percentage of self-service digital transactions from less than 50 percent to now more than 80 percent, it also had a number of other strong benefits for the agency. According to Harris, "by expanding the number of channels that we used to communicate with our customers, we now had to address the issue of 'How do we keep all those messages consistent?'" In order to accomplish that goal, they established a new unit within the Public Affairs organization that was jointly staffed between employees from both the Public Affairs and Information Technology organizations. This created a much better working relationship between these two organizations, and helped the agency better manage communications.



The California Employment Development Department (see sidebar “Taking ‘Doing More With Less’ To New Levels”) has found that the use of a customer communication management approach to managing unemployment communications is best handled on an integrated enterprise basis. The agency has significantly improved its communications and services to its constituents at a time of great need and reduced budgets, by managing communications from a central platform.

Finally, integrating business intelligence capabilities and providing an integrated platform for developing and managing multiple applications in an age when open government increasingly means data mash-ups and mosaic views of formerly discrete information are a must. Governments can no longer afford to handle every constituent inquiry as a one-off. Providing data in a manner where the constituents themselves can mine and create their own information is becoming a requirement of a more open government. Led by efforts in Washington, D.C., and the federal government, states and municipalities across the nation are finding that the easiest way to meet open government demands is to simply make the raw data available in an integrated fashion.



CONCLUSION

Effective communication and interaction between government and its constituents requires more than a website and a call center. Governments must reach out to citizens through the channels they prefer, be it e-mail, text message, social networking website updates or a more traditional phone call. Information must be integrated and consistent — it is no longer acceptable for individuals to receive differing data depending on what medium they choose to access information.

At the same time, financially struggling government agencies must begin to realize the efficiencies and cost reductions that robust citizen self-service options can provide. They must limit duplicative services and processes and save themselves — and the public — much time and frustration by working together to present government as more of a single entity. Informational siloes created by departmental distinctions and organizational boundaries create lags in the public’s ability to receive information and conduct its government business, while in turn costing government money that it does not have to waste.

Finally, at a time when multi-million dollar modernizations are not an option, governments must build upon legacy investments in technology, leveraging previous investments to improve their return on investment of customer communication management solutions.

More efficiently and effectively managing communications with constituents better serves everyone involved. Public agencies are able to reduce costs by eliminating redundancies and providing more self-service options. Increased access to information provides citizens with a more open and transparent government and helps them to be more confident that their tax dollars are put to good use. This combination of organized and simplified two-way communication is a platform that can benefit government and the citizens it serves for years to come.



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For more information about HP Exstream customer communication management solution, please contact Hewlett-Packard at (866)318-5925 or exstream.info@hp.com, or visit www.hp.com/go/realtime_publicservice.



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ACKNOWLEDGEMENTS:



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The image shows a screenshot of the GovTech Today website. At the top, there's a banner with the text "GOVTECH TODAY" and "DAILY STATE AND LOCAL IT NEWS". Below the banner, there are several news items listed under categories like "News and Features", "Video", "Latest Blog Post", and "Most Popular". Each news item includes a thumbnail image, the title, a brief description, and a date.

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- Jan 11, 2010
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 - San Jose, Calif., Upgrades 911 Call Center Technology**
- Jan 11, 2010
Call center improves redundancy and simplifies retrieval of recordings.
 - Michigan Releases Shared Data Center RFI**
- Jan 11, 2010
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 - Is the Federal Government's Defined Speed for Broadband Too Slow?**
- Jan 9, 2010
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Innovation on the Verge

As technology continues to change the world, inquiring minds share opinions on where it's leading the country.

Mobility and the technology that enables it is helping shape what the future work force will look like. Far from the spacefaring Everyman envisioned by science fiction writers, the employee of the future will be firmly rooted not in outer space but in cyber-space.

Riding the subway or traveling by plane offers proof enough that people are tethered to their mobile devices. David Morton, director of mobile strategies at the University of Washington, studies the mobile device phenomenon. Morton monitors mobile device use on the campus network and posts findings on the Freshly Mobile website. The gadgets people love are growing ever more essential.

In fall 2007, only 393 iPod Touches and 1,033 iPhones were recorded on the university's network, but by winter 2008, these numbers grew to 3,426 iPod Touches and 4,546 iPhones. In spring 2010, 7,843 iPod Touches and 9,160 iPhones were recorded, and 57 percent of Wi-Fi users were students. "As we move to more proliferation of the handheld devices and the connectivity that often comes with those, that access is much more prevalent and immediate," Morton said. "And I really think we're just at the start of that."

But many might wonder just what exactly that's the start of. As the current generation of students becomes the next generation of employers and employees, they'll inevitably move their relationship with technology from the campus to the office. "I know people who have infants. Some of these kids aren't even 1 year old and they are already being taught how to scroll on an iPhone," said Lynn Bertsch, director of employer engagement at the University of Kentucky's Institute for Workplace Innovation.

And there won't be any turning back. "It's very likely that the students and workers of the future will have even better and

more immediate access to information and resources than they already have today," Morton said. "We're starting to see some of that today with the proliferation of smartphones and now with things like the iPad. And soon there will be other tablets and other types of devices that serve that need."

But the devices can be a distraction, according to Carlos Jensen, assistant professor of electrical engineering and computer science at Oregon State University. "It's really difficult to get [students] off these devices even if you wanted to, but for us, that's not really the point because we're trying to teach them not just to live with these tools but to use them as productively as possible," he said.

Jensen admitted that it's not just the coeds who use mobile devices. "You can go to any meeting — faculty meeting, university meeting, whatever — and you'll see about 20 [or] 25 percent of people sitting there with laptops."

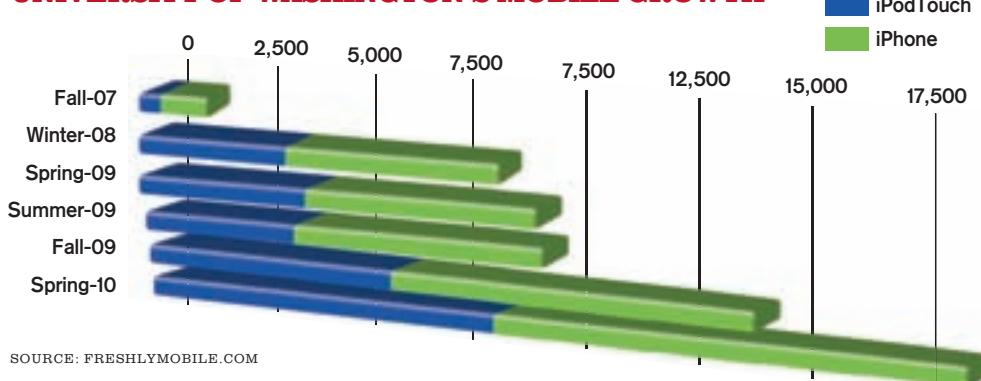
Jensen foresees a growing struggle to find the balance between employing technology as a tool and as a distraction. But technology is poised to change things in other ways, too. *Newsweek* reported in June 2010 that one in five American employees works nonstandard hours versus the regular nine-to-five. Bertsch thinks that mobile technology will only increase this trend, as computing devices evolve to accommodate mobile workers.

"Probably all of them will just naturally be equipped with video conferencing, and that will be just a normal thing," she said. "I think more and more the traditional eight-hour workday is going to go away if people can do their jobs with mobile technology from their homes, cars or wherever."

Bertsch admits, however, that flexible work schedules and taking work home, so to speak, could create discipline problems for some people where none would exist otherwise. But disciplined or not, being "always on" is likely here to stay. "We're finding that we're never off work anymore. But there's an expectation among students, among people I'm working with that because they're always on, that the actual workplace is a little more relaxed, a little less formal, a little less regimented as far as number of hours worked," said John Greydanus, media services and outreach director at Oregon State University.

Jon Dorbolo, associate director of Oregon State's Technology Across the Curriculum program, said students don't just want instant access — they need it. "The student of the future is right now, and it's only going to increase what we're seeing," he said. "They want immediate access to information. Not having the information available is incomprehensible to them." GT

UNIVERSITY OF WASHINGTON'S MOBILE GROWTH



Mending the Divide

Stimulus funding fuels innovative digital divide initiative in Washington, D.C.

Broadband adoption in Washington, D.C., toes the line — not party lines, but rather the lines of the district's eight wards. In well-to-do neighborhoods located in the northwest, more than 90 percent of residents are connected to high-speed Internet access, according to a 2009 study by the district's technology office. But to the southeast, in poorer communities, only 36 to 40 percent of people can access broadband.

There's literally a digital divide that splits Washington, D.C.'s geography.

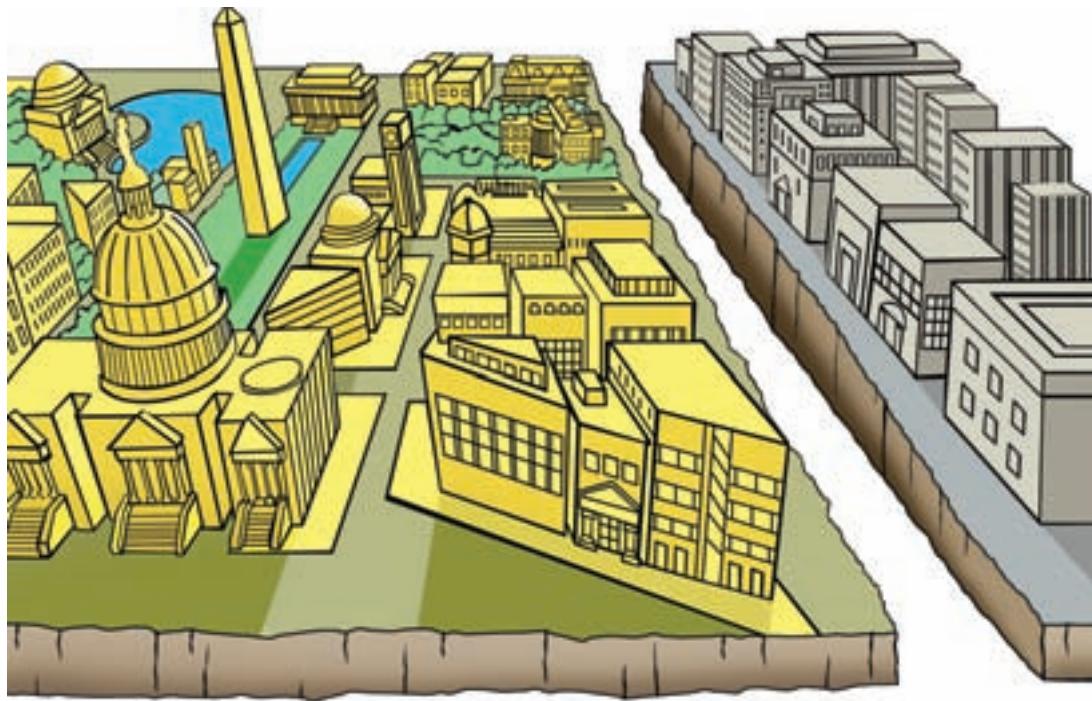
Bryan Sivak, who has been the district's CTO for the past year, is leading a coordinated effort to close that stark disparity — an effort that will be one of his office's main missions, he said. "Some might say I'm evangelical about addressing the digital divide," he added.

In a program Sivak believes is unique in scope, the district has assembled a three-pronged strat-

egy that addresses the major challenges of providing and sustaining universal broadband to citizens: cost, public education and access to technology. All three obstacles are being addressed with separate stimulus grants awarded by the federal government.

"I think we may be the only institution [in the U.S.] to get three grants from the National Telecommunications and Information Administration," Sivak said. In fact, he said, the city couldn't undertake such a holistic approach without stimulus money.

In August, Sivak and Mayor Adrian Fenty announced the district's newest award. A \$4.2 million grant from the National Tele-



communications and Information Administration (NTIA), coupled with \$1.5 million in matching funds, will be put toward an Internet and computer skills education program offered at Washington, D.C.'s public libraries and community college campuses. The program will target underserved individuals, including low-income residents, seniors and residents who speak English as a second language. The six-month classes — called DC Broadband Education, Training and Adoption — may start as soon as October, and will continue for two years. Washington, D.C., hopes to train 3,400 residents, Sivak said. After graduating, participants will receive a free computer, tech support and six months of free Internet access.

The district will then measure the number of residents who continue to subscribe to and use broadband beyond the six-month free-access period. Sivak believes this survey will provide an accurate tally of the project's effectiveness in boosting broadband adoption. The hope is the class-goers will learn that using broadband is essential to their economic future.

Beyond this education component, two other grants awarded earlier by the NTIA address the cost and public availability of broadband. A \$17.4 million grant will extend the district's high-speed fiber-optic network, called DC-Net, which is currently available to

schools, libraries, public housing and other institutions. The money will grow the 330-mile fiber-optic network by 50 percent, Sivak said, connecting the network to 220 additional anchor institutions. Officials hope that Internet service providers will connect to Washington, D.C.'s lower-cost backhaul and in turn offer consumers cheaper broadband than what's currently available.

With the availability of new money, Sivak said he's had friendlier discussions recently with carriers about building out the necessary last-mile infrastructure.

The third grant, \$1.5 million to Washington D.C.'s public libraries, will fund expanded computer learning centers and training. One-gigabit connections will be installed in all library branches, Sivak said, including 10-gigabit bandwidth at the main library.

Washington, D.C.'s digital divide strategy was to be fleshed out in more detail in a three-year planning document that was due in September, Sivak said. As of press time, there were still decisions to be made: Some issues were small, like deciding what brand or brands of computer the class participants will be given. Others were bigger, such as how the augmented city-owned fiber-optic network will be sustained in the future — possibilities include government financing, a public-private partner or a carrier-owned option. **GT**

SYNOPSIS

Washington, D.C., broadband initiative addresses cost, public education and access to technology.

AGENCIES

National Telecommunications and Information Administration; Washington, D.C., Office of the Chief Technology Officer.

CONTACT

Office of the chief technology officer, octo@dc.gov, 202/727-2277.

Incident Immersion

The Los Angeles Police Department opens sophisticated training suite to help command-level officers by simulating critical incidents.

Bringing a training system that's named after a seven-headed beast from Greek lore to America from the UK is an unusual way to procure software — but that's exactly what happened. A few years ago, former Los Angeles Police Department (LAPD) Chief Bill Bratton participated in a Hydra exercise in London's New Scotland Yard, and he returned stateside enamored with the system.

The immersive simulation training suite uses video and audio feeds to monitor real-time decision-making during critical incident drills, and also can be utilized for operational and investigative training. The exercises are designed to simulate the range of responses that might be required of a law enforcement officer during natural disasters, counterterrorism operations and large-scale investigations. After three and a half years of training and development, the LAPD's Hydra system went live in March with a simulated bomb threat from a terrorist unit. The LAPD also is using the system to continue training for high-level officers.

"It fills a training gap for our command-level officers," said Sgt. Timothy Kalkus, the LAPD's officer in charge of Hydra operations, "because what we have found not only in Great Britain but also in the United States is that training for police officers, sergeants and lieutenants is quite robust — we send them to training updates and so forth — but then when you make captain, essentially your training is curtailed quite a bit because your duties and responsibilities increase."

Hydra's methodology mixes technology and interaction among decision-makers, according to Jonathan Crego, the system's designer and the director of Hydra operations for London's Metropolitan Police Service. He

SYNOPSIS

New training system mixes technology with interaction among decision-makers to improve response to critical incidents.

AGENCY

Los Angeles Police Department.

TECHNOLOGY

Hydra simulation system.

CONTACT

Jonathan Crego,
developer, Hydra
simulation system,
jcrego@10kv.com.



PHOTOS COURTESY OF THE LOS ANGELES POLICE DEPARTMENT

designed the system in response to England's 1985 Bradford City Fire Disaster, where a flash fire that broke out during a soccer match killed 56 people and injured 265 others. "A public inquiry looked at the way we train strategic police decision-making," Crego said. "And that was the basis in which I designed the whole concept."

Incident Simulation

During Hydra simulations, trainees are divided into Incident Management Teams that are housed in different breakout rooms. The teams are monitored via closed-circuit television and boundary microphones. By recording everything that occurs, it allows observers to participate in and learn from the training, and precisely documents the teams' actions.

60

The number of Hydra centers worldwide.

The LAPD's setup for the system consists of six rooms: a control room that runs the events and houses the stations of communications and subject-matter experts; a plenary room that acts as the debriefing center; three

syndicate rooms that are the breakout centers for the Incident Management Teams and contain a Hydra computer, conference table and whiteboards; and a role-playing room.

Law enforcement leaders control the exercise and feed trainees a stream of information, which can consist of newscasts, intelligence briefings, and police and fire radio traffic. "It's all very immersive," Kalkus said. "They get all this intelligence thrown at them, and then we will send them a task to work on."

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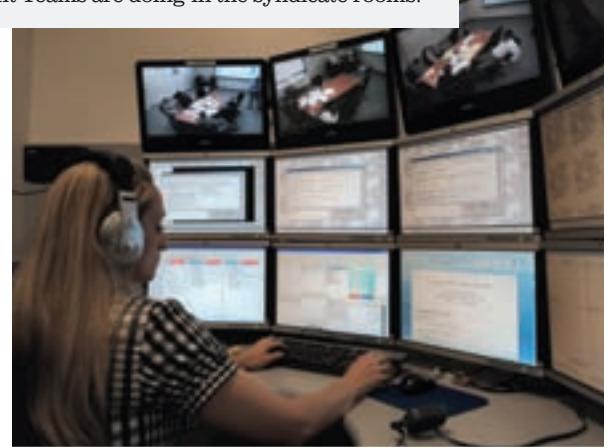
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For example, he said, the law enforcement leaders could tell trainees to conduct a risk analysis of five events that will occur in the city over the next week and determine where the city should put resources. Or the talk could be something more sophisticated, Kalkus said. "Like, 'This is an unfolding event right now. We want you to write an operational order that covers all the planning aspects, from intelligence and logistics to resources and funding.'"

Participants enter their decisions and rationale into the system, where they are saved and used during debriefings in the plenary room. The subject-matter experts monitor the live action in each room via the audio and video feeds.

Once everyone is brought into the plenary room for debriefing, the Incident Management Teams' decisions are discussed,

Officer Erin Gabaldon operates the communicator station during a Hydra simulation; she can see and hear everything the Incident Management Teams are doing in the syndicate rooms.



which allows participants to learn about the decision-making process and each team's response to the same situation.

The role-playing room can be used in a variety of ways to make the exercise feel closer to real life. Role-plays can include press briefings, and meetings with victims' families, community forums. An exercise earlier this year tasked participants with notifying the department's chief of staff on operation plans. "The briefing was captured on live video and fed into the plenary room for the other delegates to observe," Kalkus said. "The learning is thereby extended to all participating members in real time."

An important objective of the simulations is collaborating with other agencies and partners. During the LAPD's first



The plenary room acts as the debriefing center during Hydra simulations, and brings the trainee teams together to discuss their decisions and the rationale behind them.

Hydra exercise, the FBI and members of the Police Commission, a civilian organization that functions as the department's board of directors, were included in the event. And during a counterterrorism exercise in June, a Muslim and a Jewish community leader participated in the training.

"The technology allows us to immerse the teams into the scenario and provides them with the stress that they would feel in the field," Kalkus said, "but it's the way that we break that training down throughout the day and have them talk in an open and frank environment about our deficiencies, as well as strengths that really leads the training."

Each exercise is unique because the participants are different, which allows the department to test policies, procedures, tactics and strategies. He said it stirs up "water-cooler conversations" that let the department's officers and officials identify and discuss best practices.

Worldwide Training

Although Los Angeles is the first U.S. city to operate a Hydra system, 60 centers operate in Europe and Canada. Australia and Ireland each have one, according to Crego, who said he thinks it's been slow to spread to the U.S. because it's difficult to describe and takes time, space and training.

The first Hydra system, built for the Metropolitan Police Service in London, went live in 1993, Crego said, and has since evolved from using computer-controlled tape decks to real-time video monitoring. "In the early

days, just getting video on computers was full of wonder," he said. "And then we recognized that putting together a multiroom computer simulation was the real difference between Hydra and computer gaming."

He said the 1983 movie *WarGames* — in which a mischievous boy hacked into a government computer and accidentally engaged with live agencies in a nuclear weapons control system — is a closer approximation of what Hydra is than traditional computer gaming, which uses set algorithms and solutions.

The LAPD's setup cost about \$500,000, which included the hardware, infrastructure improvements to the existing facility and a \$1 licensing fee for the Hydra software. According to the LAPD, funding for the project was arranged by the Los Angeles Police Foundation with major contributions from Target Corp. and the Annenberg Foundation. Kalkus said the system doesn't require specialized hardware — the software is what makes it unique. Off-the-shelf PCs, projectors and video equipment are used, which makes it easy to customize a Hydra environment.

Crego said he sold the LAPD the licensing fee for \$1 because of the current credit crunch and to force the department into a research collaboration with all the other Hydra centers. The LAPD's Hydra center links to the others, which makes multicenter exercises possible.

"I truly believe it's going to be a sea change for command staff training in the U.S. law enforcement community," Kalkus said, "and you'll see it develop over the next five to 10 years, where the LAPD, [New York Police Department] and Chicago PD — all the major police departments — are going to have Hydra suites that can connect together and run a national exercise." 



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Brand Aid

Agencies look to contract with private sponsors to fund state and local properties, but at what cost?

Take a trip to the San Francisco Zoo and you'll see something you may have never seen before: a 14-passenger, solar-electric shuttle with beady orange owl eyes staring at you.

These eyes gawk from a banner displayed across the side and above the front window of the transporter. "Get Closer at Natgeowild.com," reads the text, promoting the *National Geographic* website. Such an advertisement might not be the strangest sight at the zoo, but it could be one of the rarest, because public spaces traditionally have been forbidden territory for corporate sponsors.

But not anymore.

In the face of endangered funds, the idea to put ads in zoos, parks and gardens has spread nationwide. The notion is dividing government agencies that are desperate for revenue to save public spaces and environmental groups that want to protect natural areas from a brand-name invasion.

"I think it's a very slippery slope," said Bill Wade, a former superintendent of Shenandoah

National Park, Va., and now a leader of the Coalition of National Park Service Retirees. "I don't want to think about the potential outcome years from now of what these places are going to look like."

For critics, the quandary raises weighty questions: Do governments have any business selling ad space to generate revenue? Will the practice look like an endorsement of a product or service?

And in the case of the San Francisco Zoo, which is operated by the city and the San Francisco Zoological Society, the plot thickens because the NASCAR-style ads help support green technology. After securing the National Geographic Society as a corporate sponsor, the zoo became the first

SYNOPSIS

As the economy cripples budgets for state and local parks and other public spaces, state and local governments consider selling ad space.

AGENCIES: San Francisco Zoo; Shenandoah National Park, Va.; Georgia Department of Natural Resources; Lake County Forest Preserve, Ill.

CONTACT Bill Eichengreen, vice president, Solar Electric Vehicle Co., 847/656-8100, bill@solarevco.com.



PHOTOS COURTESY OF THE SOLAR ELECTRIC VEHICLE CO.

in the country to deploy two free electric vehicles as part of a pilot program by the Solar Electric Vehicle Co. (SEVC).

"It just seemed to be natural fit," said Bob Jenkins, the zoo's vice president for institutional advancement and the project lead. "Since they came free of charge pending the agreement, and we had the right to say 'yay' or 'nay' with regard to the sponsors, we saw this as a win-win."

Ad Space Available

Considering the country's economic climate, SEVC, based in Northbrook, Ill., launched the pilot as a way to deliver energy-efficient vehicles at no cost to operators of public spaces.

"The fact is you can't get advertising or promotion inside of a zoo, garden or park.

\$40,000

The total amount the Preservation Foundation of the Lake County Forest Preserves in Illinois seeks from sponsors to acquire a solar trolley and solar police vehicle.

"They don't sell it," said SEVC Vice President Bill Eichengreen. "This is a unique business model that we thought would accelerate getting solar-electric vehicles out there in front of the public. When they see the vehicle, they want to ride on it. When they see that a sponsor made it possible, it does great goodwill."

In this model, as seen with the San Francisco Zoo, every party involved reaps rewards, Eichengreen said. The sponsor pays for the vehicle and gets eco-friendly recognition for providing green technology; the zoo, in turn, gets a free electric vehicle to use; and SEVC collects monthly payments from the corporate sponsor.

But with corporate sponsorships, will these vehicles ultimately look like NASCAR racecars roaming the parks? Not according

to Eichengreen, who said the ads are “very tastefully done.” In addition, organizations have the right to refuse any sponsor and certain companies will be prohibited automatically.

“I don’t think a beer company is appropriate for a zoo, which has kids and families,” he said.

In addition to the multipassenger shuttle, the company also has a four-passenger, street-legal electric security vehicle with lights and sirens. Eichengreen added that the company’s manufacturing partner, Sarasota, Fla.’s Cruise Car Inc., is an approved General Services Administration license holder.

Though the SEVC pilot started in San Francisco, the program has been gaining traction at a critical time — cash-strapped states are devising alternatives, such as raising park fees or closing parks, to weather

our visitors will be comfortable with small signs recognizing those partners.”

In Washington state, the use of corporate sponsorships by government entities must have a public purpose, according to the Municipal Research and Services Center. In most cases, it would be a public-private partnership in which the jurisdiction receives funding, goods or services from a private entity in return for naming rights or advertising.

But with the trend of corporate sponsorships, especially on the national level, Wade sees signs of trouble ahead — a potential risk of whittling away the basic concept of parks until they become mundane commercial zones.

“This is a **unique business model** that we thought would accelerate getting solar-electric vehicles out there in front of the public.”

—Bill Eichengreen, vice president, Solar Electric Vehicle Co.

the economic storm. From California to Georgia to New York, various states in recent months grappled with the delicate question of whether corporate sponsors could and should save parks.

To boost revenue and plug budget gaps in Georgia, the state’s Department of Natural Resources recently hired a marketing firm to help identify sponsors for events and infrastructure within state-owned parks.

“It’s important for us to maintain high-quality facilities to ensure a positive experience for our visitors, while keeping rates reasonable so that they can remain accessible to Georgians,” said Georgia Natural Resources Commissioner Chris Clark. “If engaging corporate partners helps us keep our facilities open and maintained, I think

“I think people go to parks to get away from the things they see in everyday working life,” he said. “The whole idea is that they would be special, not like other places. The more they move toward commercialism, the more they lose that specialness.”



20

The number of zoos nationwide working to secure corporate sponsorship for solar-electric vehicles in the pilot program with the Solar Electric Vehicle Co.

Sponsors Wanted

Moving beyond plaques honoring donors and trails sponsored by companies, the mobile billboard approach adds a new twist to the corporate sponsorship concept.

In SEVC’s program, the ads appear only on the vehicles, possibly signifying a trend, given California’s similar idea to use pop-up ads on citizens’ digital license plates to pay bills.

There’s also the fact that the shuttles and police vehicles can cut fuel and maintenance costs because they’re solar powered. With the acquisition of the vehicles at the San Francisco Zoo, for example, administrators took four of their six golf carts offline, saving money that would have gone to repairs. And solar panels can extend battery life by one-third, Eichengreen said, adding that the vehicles can go up to 25 mph.

It was a deal that made too much sense for Barb Vicory not to pursue. As executive director of the Preservation Foundation of the Lake County Forest Preserves in Illinois, she had been looking for a new police vehicle and a trolley for tours that could better navigate the trail system at the Independence Grove Forest Preserve.

At the moment, the preserve has standard police vehicles that barely fit on the paths. Slightly larger than golf carts, the new electric vehicles would be more maneuverable and quieter with zero emissions.

“It meets our desire to have an open and approachable vehicle,” Vicory said. “It’s much more customer-service oriented than a squad car.”

The solar trolley, she added, would be accessible to people with disabilities, helping provide transportation to senior programs and events and for “people who don’t have a way of enjoying the finest preserve trails.”

The foundation is actively seeking partners for the project and sponsors to provide \$20,000 per vehicle. It’s first-come, first-serve, Vicory said, and there has been some interest, but so far no takers.

“We’re closing in on the end of the summer,” she said, “but we’ll certainly keep feelers out for next year. This is a pilot project, and if we see that it really is a good benefit, it would be happily extended.” **GT**

Free Solar EVs

The San Francisco Zoo’s 14-passenger, solar-electric shuttle is free to the zoo because it displays a *National Geographic* banner promoting Natgeowild.com. Thanks to the zoo’s acquisition of vehicles like these, administrators took four of their six golf carts offline, saving money that would have gone toward repairs.



SYNOPSIS

State and local jurisdictions begin to find uses for iPads.

JURISDICTIONS

Utah and Clarksville, Tenn.

TECHNOLOGY

Apple iPad.

CONTACT

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Beyond the Hype

Utah IT official gives Apple's iPad high marks for functionality, and localities consider adoption for city council meetings.

When Apple's "magical" tablet computer debuted earlier this year, it was touted as a multifunctional device designed for the tech-savvy and tech-illiterate — one that would "revolutionize" media consumption.

The sleek, lightweight iPad has a roughly 8-by-10-inch multitouch display, and as with any Apple product, a cultlike subculture following (and an opposing subculture

disdain). Apple claims it sold more than 3 million iPads since its April U.S. market entrance, and the reviews generally have been positive regarding its usefulness. With a \$499 starting price and weighing in at 1.5 pounds, the supergadget combines Web browsing, e-mail, video gaming, movie and video viewing, and music listening capabilities, among others.

"[The] iPad is our most advanced technology in a magical and revolutionary device at an unbelievable price," said Apple CEO Steve Jobs in a statement earlier this year. "[It] creates and defines an entirely new category of devices that will connect users with their apps and content in a much more intimate, intuitive and fun way than ever before."

The trendy, dainty and easy-to-hold tablet computer is also breaking ground in the public sector: IT professionals and other officials are adopting, or considering adopting, Apple's new gadget with hopes of going paperless and mobile — and saving money.

New York City Mayor Michael Bloomberg was one of the first notable politicians to embrace the technology, and Hawaii Rep. Charles Djou became the first member

“It’s a great Internet [and] mail device. I use it extensively for note taking — it’s been absolutely invaluable for that purpose.”

— Bob Woolley, chief technologist and strategic planner, Utah Department of Technology Services

of Congress to use an iPad during a floor speech, CNN reported in late June.

The hype is tangible and the ads pervasive, but how does the iPad compare to other small devices, like netbooks and the Amazon Kindle, which have lower price tags? How will officials justify the costs to use the tablet computers to increase government effectiveness and efficiency?

Several state and city officials offered insight into these issues and were overall supportive of the iPad. But Apple's baby isn't infallible and likely won't replace traditional laptops and PCs — though officials say it has many features that meet public-sector needs.

Passing the Test

"It's a multifunction device, whereas the Kindle is a single-function device," said Utah Chief Technologist and Strategic Planner Bob Woolley, who tested the iPad extensively prior to the state purchasing several for its governor, CIO, water quality inspec-

tors and social workers. He wrote a report detailing 20 government use-case scenarios and co-wrote another report with Utah IT colleagues describing software and accessory recommendations for doing government work on the iPad.

"I wasn't expecting it to work out as well as it did," Woolley said. "It's been very effective and surprisingly so."

Woolley's use-case scenarios covered note taking, battery life, printability, document syncing and access to state networks, to name a few. He found that the device performed well.

"It's not useful to get something shiny and pretty, and then make an assessment if this has a business value," he said. "As we look at use cases, we're looking at workflows common in government that in some form need to be met."

Cities Examine Potential

Along with Utah, several Virginia cities, Tennessee, and even Chicago's public school system examined the iPad's potential.

For Bill Summers, a city councilman in Clarksville, Tenn., the iPad represents tremendous cost savings, as the city prints countless City Council agendas, attachments and supporting documents. Summers approached the council with the idea of purchasing iPads for its 12 council members in June, and so far, the momentum has been positive.

"I'm looking at the savings long term, that was my primary goal," said Summers, who hopes the devices will pay for themselves after 18 months. "We know what we're looking to use them for, and so we want to make sure ... that the steps won't be so complicated for the nontech-savvy — we don't want to create a nightmare for them."

With some slightly older Clarksville City Council members, Summers wanted a device that would be easy to use, reliable and portable. And as with any tech investment, Summers wants to get the most out of them as possible — he hopes for four to five years of life expectancy for the council's iPads.

And government-specific iPad apps are already available, as e-government firm NIC revealed five driver's license practice test apps (for Kentucky, Nebraska, Tennessee, Utah and West Virginia) — the day the iPad was released.

"As soon as the iPad was unveiled, NIC started building these apps because we

A for IPad?

Bob Woolley, Utah's chief technologist, tested the iPad extensively before procuring several for the state. He developed 20 scenarios for potential government use and ranked the iPad's functionality on a scale of one to five. The iPad earned an average score of four. "Overall satisfaction with the device and its usability remains high, and the overall user experience is very good if not compelling," he wrote. "As the device and [operating system] mature, this will be a very capable product and will likely score higher."

Here's a sample of the scenarios and their functionality rankings:

SCENARIO: Usability, accessibility and rendering for frequently used websites and browsers

FUNCTIONALITY: ★★★★

After visiting about 100 frequently accessed IT research and awareness websites, no major issues were found and no special app solutions were required.

SCENARIO: Safari mobile browser effectiveness with frequently used sites

FUNCTIONALITY: ★★★

While the browser generally worked well, there were issues with the lack of content-editable capabilities and Safari's impact on sites like Google Docs. Because mobile Safari isn't natively video graphics array-enabled, browser alternatives to get around the issue exist.

SCENARIO: Ability to print documents and images

FUNCTIONALITY: ★★★★

There are many printing solutions for the iPad, but the best tested solution was PrintCentral when it was required.

SCENARIO: Battery life

FUNCTIONALITY: ★★★★★

The iPad's 10- to 11-hour battery life is consistent and "superb," Woolley noted, after conducting a 12-week battery test. It's very easy to take to an all-day meeting and not have to think about power, unlike laptops, he said.

SCENARIO: Setup and access to multiple e-mail and instant messaging accounts, calendar and scheduling

FUNCTIONALITY: ★★★★

There were no major issues, other than limitations with specific services when accounts were set up using AOL, Gmail and GroupWise; accounts set up using Google Talk and AIM had no issues.

READ WOOLLEY'S ENTIRE REPORT:
[HTTP://TINYURL.COM/WOOLLEYREPORT](http://tinyurl.com/woolleyreport).

"I wasn't expecting it to work out as well as it did. It's been very effective, and surprisingly so."

— **Bob Woolley**, chief technologist and strategic planner, Utah Department of Technology Services

recognized how popular this device was going to be," said NIC Chairman and CEO Harry Herington in a press release. "These are cool solutions for a very cool device. Tech-savvy teens and young adults are an important emerging market for e-government services."

Life Without Paper?

iPad glam aside, use by public officials could have some unforeseen consequences, according to Megan Rhyne, executive director of the Virginia Coalition for Open Government. In an early June blog post, Rhyne wrote that replacing paper with the iPad makes her a little nervous.

A self-described Apple geek, Rhyne took note of the Hampton, Va., City Council's plan to buy iPads and ditch paper.

"There's something about moving all meeting materials onto electronic devices," she wrote. "Maybe it's knowing that while looking at their iPad agendas, they could be using any number of apps that allow users to make — and share — annotations.

"They could be e-mailing, editing, exchanging documents all the while, out of the public's eye or knowledge," she continued. "Elected officials have been using computers at meetings for years now. This shouldn't be any different. Maybe I'm paranoid. I hope I'm paranoid."

When it comes to using iPads for government use, Woolley has simple advice: Test first and invest later. "Think about what those uses are and which ones matter," he said. "Don't get hung up on what I'll call 'technical geek criticism' or [one] thing or another that is missing, because it may not matter."

"It's a great Internet [and] mail device," he added, "I use it extensively for note taking — it's been absolutely invaluable for that purpose. The use cases and workflows that are common in government are the things that drive it, not the device." GT

Defining Moments

Security lapses prompt Nashville, Tenn., to strengthen policy and hire an IT security chief.

ILLUSTRATION BY TOM McKEITH



SYNOPSIS

The incorporated Metropolitan Government of Nashville and Davidson County in Tennessee seeks to hire a chief information security officer and drafts an enterprise-wide IT security policy after high-profile lapses.

JURISDICTION

Metropolitan Government of Nashville and Davidson County.

CONTACT

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When the personal information of more than 320,000 Nashville, Tenn., voters was breached in late 2007, it was a turning point that propelled the incorporated Metropolitan Government of Nashville and Davidson County to assess and define IT security policy, among other internal changes.

A laptop and other electronic equipment was stolen from the Davidson County Election Commission office after someone threw a brick through a window in December 2007, said Metro Technology Chief Keith Durbin. Although there was no evidence that voters' Social Security numbers or other personal information was accessed, the laptop wasn't encrypted, so the government had to assume the worst, he said.

"We got a lot of [media] attention, as you might imagine," said Durbin, noting that his own voter registration data was on the stolen

laptop, as well as that of the mayor and city council. "It truly was a defining moment."

That was nearly three years ago, and it was a wake-up call for the combined government, which has roughly 60 departments and agencies. Mayor Karl Dean, on the job just months before the security breach, set into motion a series of executive orders that established oversight boards and training programs, in hopes of preventing future security issues. A comprehensive security policy is set to go into effect this fall, and Durbin is hiring a chief information security officer to lead the effort. In the meantime, a few security faux pas have occurred, but officials said nothing close to the magnitude experienced in 2007.

Human Error and Outdated Policy

"There was a cavalcade of security issues ... that really set into motion a series of events that has culminated in us putting together

a comprehensive program," Durbin said. "What we've seen has been human error of some sort, or policies that haven't been adhered to."

An August article in *The Tennessean* highlighted these issues, including an incident in which three Nashville flood victims' banking information was posted online. The assessor's office, in allowing victims to apply online for property tax deferments, disabled the password requirement, which essentially allowed anyone visiting the website to view copies of the three individual's canceled checks, Durbin said.

"The human error was taking a secure system and doing the stupid thing of taking the password off," he said.

Another security incident occurred in April, when the county criminal clerk's office, responding to a public records request, inadvertently released the Social Security numbers of the clerk and two other employees. Citing human error — there was no IT factor — Durbin said it was strictly an oversight.

And in August 2009, the Nashville Career Advancement Center exposed 160 clients' Social Security numbers on its website. Using a Web application that was developed nearly 10 years prior, coupled with outdated security standards, Durbin described the breach as "a huge embarrassment for the organization."

That incident wasn't quite human error, however, as the information wasn't on the city-county network, but was hosted outside the metropolitan system, Durbin said. "And again, at the time, there were no comprehensive policies that said stuff needs to be secure, hosting needs to be secure, applications need to be secure, [and] it needs to meet these standards," he said.

Lastly, the names and banking records of about 500 juvenile offenders were potentially exposed in February 2009, when an auditor lost an unencrypted flash drive containing that information. The city-county

didn't have a flash drive security policy, Durbin said.

Moving Forward

Officials said Nashville is poised to implement a comprehensive security policy this fall and already has completed some groundwork to help smooth the transition.

Shortly after Dean took office as mayor, he hired Durbin and established an executive order that created external advisory boards — an Information Technology Advisory Board and an Information Security Advisory Board. The security board members are executive-level professionals from private industry, universities and state government. Durbin said they have been critical to the city-county's success.

Information security training programs also were mandated under an executive order, Durbin added, but that hasn't been uniformly implemented yet. And the capstone effort — a comprehensive security policy that provides all agencies with a minimum standard — is still a work in progress.

"We feel that coming back in with well defined, industry standard-based policies and practices that are comprehensively developed and rolled out will give us a much better leg to stand on than the situation where the IT department decrees, 'You should encrypt your data,' but there's no one to enforce that," he said.

And while the directive is coming from the mayor's office, having an enforcer is essential to departments' adherence. Durbin began to push for an IT security officer last fall, and was successful in making his case to the mayor and council, he said. That person will be charged with managing the implementation of the security policy, which has been problematic.

"We've not had anyone who could formally lead this effort in the way it needs to be led," said Durbin. "It's an indication of the commitment we have."

Lessons Learned

Keep it simple and straightforward. That's what this experience has taught

Durbin on how to write an information security policy, especially for a diverse agency such as his. "An IT person typically will be more verbose than they need to," he said. "So we worked hard to make sure they were as clean and understandable to the average user as possible. We're tailoring our policies to Nashville and to our government and our users."

Durbin also recommends keeping departments involved instead of dictating directions and policy. "It's crucial in enforcement," he said. "If you have the buy-in from department heads, it makes it much easier to enforce."

For now, completing the overall policy is the next item to cross off the city-county's to-do list.

"We often tell people it would be great if we could just buy a set of policies off the shelf and slap it into place, but that would never work," said Durbin. 

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How Ya Gonna Call?

To save money, Corpus Christi, Texas, drastically cuts the number of cell phones it issues to employees — and not everyone is happy about it.

Should having a cell phone be considered an everyday personal expense of employment like buying work clothes and maintaining a reliable car? That's the question at hand in Corpus Christi, Texas, where a cost-reduction measure initiated by the City Council is poised to make that notion part of the government culture.

SYNOPSIS

Corpus Christi, Texas, saves money by cutting city-issued cell phones. Many employees now must use their personal phones at work.

AGENCY

Corpus Christi Municipal Information Systems.

CONTACT

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MichaelAr@cctexas.
com, 361/826-3740.

phones, the city paid approximately \$360,000 per year for the devices.

Under the new policy, the responsibility for tracking cell phone charges was withdrawn from Corpus Christi Municipal Information Systems (MIS), the city's IT department, and given to individual agencies, which were told to police their

Bertha Garcia's entire job was managing the city's cell phone bill, which stretched nearly 500 pages.

That bill often was riddled with erroneous charges made by the vendor, according to John Spiess, MIS operations manager. Garcia spent much of her time finding those errors and evaluating charges that were accumulated by employees. Another problem was that workers submitted bills in which personal calls were highlighted with explanations. Frequently calls not marked "personal" were made during nonwork hours. Garcia suspected that those calls — charged to the city — might be personal calls. However, following-up with the suspected abusers was the responsibility of the agencies that employed them. Garcia said the agencies often didn't bother investigating the charges. She and Spiess assumed the agencies didn't act because the charges were negligible compared to those agencies' overall budgets. Furthermore, Spiess said some employees openly flaunted that they didn't need personal cell phones or land lines if they had city-issued cell phones.

Indifference among the agencies finally could be changing, according to Garcia. "Now that they're actually getting a monthly bill and they see what the charges are for the usage and the breakdown, they're following the charges a lot more closely," she said.

Employees who want a reimbursement must now submit their personal phone bills, mark the work-related calls and then do a little math. "You go through your call detail that comes with your bill and indicate which of the calls were city-related calls and which were personal," Armstrong said. "Then you do the math to get the cost per minute for your plan, and you can request reimbursement for the city use for those particular calls."

This policy saves money in part because many employees don't bother requesting reimbursements, he said. "Either it's too much



In May, the municipality eliminated city-issued cell phones for many employees. The policy change slashed Corpus Christi's cell phone inventory by half, from 900 phones to about 450. Now only selected remote workers, like meter readers and roadwork foremen, carry city-issued cell phones, and those phones must be left at the office at the end of each workday. All other city workers were told to use their personal phones on the job and submit reimbursement requests for the work-related minutes they use. The new policy will save \$100,000 annually, according to Corpus Christi CIO Michael Armstrong. Before restricting government-issued cell

employees' phone minutes. Besides freeing up an MIS employee and saving money, the city's IT department anticipates the change will reduce personal calls unscrupulously charged to the city government.

The new rule generally is unpopular among employees, but officials are watching to see if employees will eventually accept it as a standard business practice.

Putting Abuse in Check

Corpus Christi's new cell phone compensation policy means more red tape for the individual agencies and less for the MIS. Before the change, MIS Functional Analyst

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of a pain or they simply want to keep their phones private," Armstrong said.

To get an accurate per-minute price quote, employees must submit their entire phone bill so the agency can verify the calculation. Consequently one might wonder if Corpus Christi opened itself to potential privacy lawsuits. Armstrong said officials discussed that concern, but weren't especially worried about it. Years ago, before city-owned cell phones were widely deployed, Speiss said workers submitted their phone bills. He contended that no privacy lawsuits resulted then. Employees today sign a waiver agreeing to reveal their personal phone bills to city staff in exchange for a reimbursement.

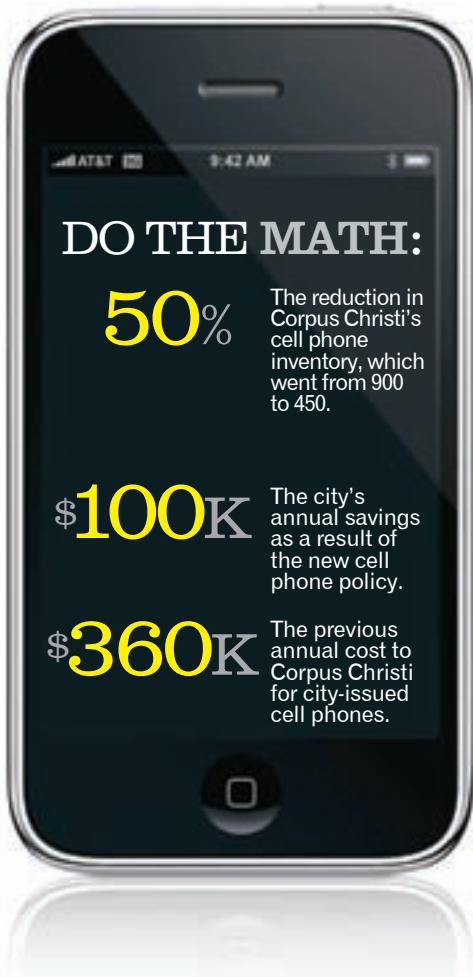
Cost of Collecting a Paycheck

Many Corpus Christi employees are wondering if having a cell phone is a requisite of having a job. After all, most employees provide their own means of transportation to and from the workplace and aren't reimbursed for work clothes.

Predictably not all Corpus Christi employees are buying into that idea, according to Lani Trotter, IT program coordinator of public safety for the MIS. Some workers Trotter collaborates with won't give her their personal phone numbers on the grounds that it's private information. She said disgruntled employees tell her to send communications to them through their supervisors, to whom they will give their personal numbers. Trotter considers it a "passive-aggressive" form of protest, adding the it causes delays and hurts productivity.

Trotter doubts these particular employees were concerned about the added costs to their phone bills. "I can't imagine the two or three phone calls a month we might exchange are going to impact their personal-usage plan or phone bill that much," Trotter said. "But I may be wrong."

Corpus Christi, Texas



Trotter has felt the new policy's effects firsthand. She said she was disappointed to lose her city-issued BlackBerry, because the device enabled her to do her job faster. However, Trotter enjoys carrying her own phone, and she hasn't seen an increase in her personal phone bill.

"You forget there was a time that you didn't have a cell phone," Trotter said. "When you take things away from government employees, you'd think you would have cut off their finger."

Trotter contended that complaints about the policy were subsiding. Meanwhile, Armstrong said some staff quickly warmed to the idea. "They've enjoyed having the freedom to choose the device they want to use," he said. "Frankly at this point, we don't hear much about it."

Time will tell whether the municipality's work force acclimates to the policy. Garcia said the city probably shouldn't be too concerned with the angriest employees: "I think those who were more upset were probably the ones who were abusing it." **GT**

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TWO CENTS: Our take on the latest technology

Hot Wheels

The wireless Motormouse successfully merges form and function.



The Motormouse has chrome alloy wheels with real rubber tires. The mouse also comes in pink, black and silver.

I'M NOT A GEAR HEAD, but when I saw the Motormouse it was love at first sight; I had to try it. When I received it, I was amazed by its size and presence. It immediately became a conversation piece — several of my colleagues inquired about my sweet new wheels. Installation was easy. Inserting two AAA batteries and the 19 mm receiver into the USB port makes the mouse ready for cruising.

Handling

The mouse worked well on my PC, but it wasn't smooth sailing. Although the manufacturer describes the mouse as ergonomic and ultracomfortable, it made my hand hurt during the first few days of usage. Prior to testing the Motormouse, I used a chunky trackball mouse that had surplus space for my hand to roam, so adjusting to a smaller mouse was difficult. After a week, however, my hand was fully attuned with the Motormouse, and I was navigating Web pages and documents with ease. The Motormouse and I were inseparable — until it was time to test it on a Mac. I don't have a Mac, so I relied on my colleagues in our design and video production departments.

Mac Testing

I reluctantly gave up the Motormouse, but 10 minutes later, it was surprisingly returned to me. "I liked the look and the cool factor," said Paul Williams, senior producer for Government Technology's GTtv video service. "I wanted to like it, but I missed the side buttons and the top tracking ball very quickly after I started using it. It got me all revved up, then it ran out of gas."

I was disappointed the Motormouse wasn't as well received as I had anticipated, and I began to suspect perhaps there was a Mac compatibility problem. So I asked Erin Pace, our marketing art director and another Mac user, to give the mouse a test drive.

A day later, Pace delivered her assessment. "From a design standpoint, it's a very novel product. With regard to functionality, the button seemed stiff and required more effort to engage. The scroll roller wasn't very smooth and was a bit oversized for my preference," she said. "Since I need a mouse that can handle all-day rapid movement and precision, I wouldn't buy this product."

The trunk holds two AAA batteries and the USB receiver.



The palm-sized mouse puts navigational power in your hand.



PHOTOS BY T.S. BROWN

Conclusion

I learned that while the mouse doesn't fulfill other testers' needs, it fulfilled mine. But I think with a couple design modifications, such as making it a tad bigger and giving the scroll wheel more functionality, the mouse would be even more appealing to Mac and PC users. Despite these nuances, however, the Motormouse gets my vote. So if you're looking to shift gears, consider taking the Motormouse for a spin — it's a satisfactory blend of form and function. **GT**

Specs

Junk in the Trunk: The trunk holds two AAA batteries that power the mouse and stores the 2.4 GHz USB receiver when not in use.

Spare Tire: Serves as the scroll wheel.

Hood: Left and right click by pressing each side of the hood respectively.

Rating



Price Starting at \$49.99

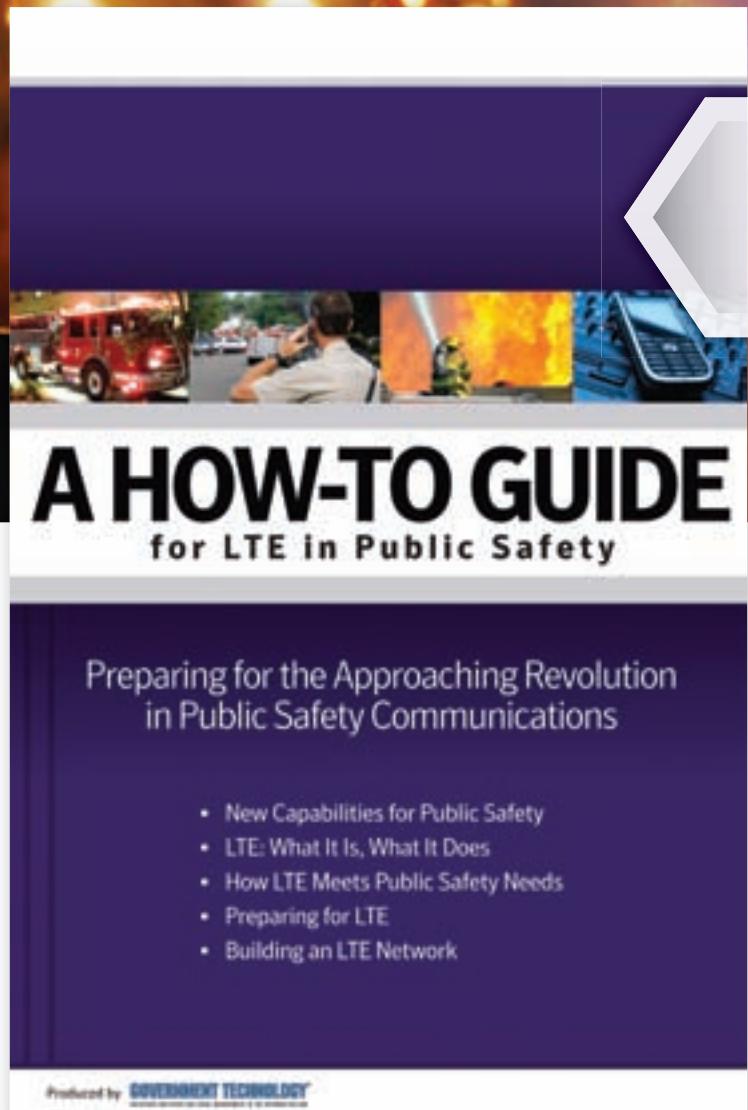


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at www.govtech.com/motormouse

Are You Prepared?

Your How-to Guide for LTE in Public Safety



The cover of the book features a collage of images related to public safety: a fire truck, a firefighter spraying water, a person on a phone, and a smartphone. The title 'A HOW-TO GUIDE' is prominently displayed in large, bold, black letters, with 'for LTE in Public Safety' in smaller text below it. A white arrow points from the right side of the book cover towards the 'Just Released!' section.

Produced by **GOVERNMENT TECHNOLOGY**



Just Released!

This insightful guidebook will help you plan the evolution of your public safety communications strategy.



Preparing for the Approaching Revolution in Public Safety Communications

- New Capabilities for Public Safety
- LTE: What It Is, What It Does
- How LTE Meets Public Safety Needs
- Preparing for LTE
- Building an LTE Network

The public safety landscape is in a rapid state of transition, and the potential of an infrastructure that supports bandwidth-intensive critical applications and greater interoperability is closer than ever.

Written specifically for public safety and emergency response leaders, this must-read resource offers clear guidance and a detailed roadmap for a successful migration to Long Term Evolution (LTE) next-generation wireless technology. **It takes a deep dive into several areas including:**

- Specific ways LTE improves communications in emergencies and day-to-day operations
- Pivotal steps to help public safety agencies prepare to create LTE networks
- Helpful recommendations on how to successfully manage an LTE deployment

Produced by:

GOVERNMENT TECHNOLOGY
SOLUTIONS FOR STATE AND LOCAL GOVERNMENT IN THE INFORMATION AGE

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To receive your **FREE** copies, visit: www.govtech.com/LTE

1

FOREVER CONNECTED

The Samsung Eternity II features a 3-inch touch-screen plus 2.0-megapixel camera with 2x digital zoom and camcorder. The phone is capable of SMS, MMS, video messaging and instant messaging. It features a full HTML browser, mobile e-mail and MP3 player. The Eternity II has room for 2,000 phone book entries with expandable memory up to 32 GB. The smartphone offers up to five hours of talk time and 250 hours of standby time. AT&T features include Mobile TV, Social Net — which consolidates popular social networking sites — and Navigator.

www.samsung.com



2

MIGHTY NETBOOK

Gateway's LT32 netbook has an 11.6-inch HD LED-backlit display, an AMD Athlon II Neo K125 processor and 2 GB of DDR3 system memory. It measures less than an inch thick and weighs 2.76 pounds. The netbook offers a 250 GB hard disk drive and battery life of up to 5.5 hours. It has three USB 2.0 ports, as well as Gigabit Ethernet and VGA ports. Plus, it features a multi-in-one digital card reader.

www.gateway.com

3

TOUGH TABLET

GammaTech's RT10D touchscreen tablet includes an Intel Core Duo U2500 ULV 1.2 GHz dual-core processor and 2.5-inch SATA hard disk/solid-state drive. It weighs 5 pounds and has an attached stylus, two USB 2.0 ports, an Ethernet port, slots for regular and mini SD cards, and a docking station with four additional USB 2.0 ports. The RT10D features a 10.2-inch, 1024x600 WSVGA TFT LCD widescreen display. The tablet is designed to withstand spills, falls, shock and dust.

www.gammatechusa.com



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Reports from the IT horizon



Fill 'er Up

Alternative energy sources may be closer than we realize. Case in point: the Bio-Bug, a Volkswagen Beetle converted by British engineers to run on methane gas created from human waste. The biogas-powered vehicle has a top speed of 114 mph, according to its creators. The waste from about 70 homes in the United Kingdom is enough to power one vehicle for 10,000 miles — the average annual mileage for UK motorists.

SOURCES: GEEKY-GADGETS.COM AND TECH.BLORGE.COM



Wi-Fi On the Fly

If you're a mobile professional and frequent flyer who needs Internet access aboard an aircraft, options for connectivity are increasing. Many airlines have installed Wi-Fi equipment on their aircraft. Southwest Airlines recently joined the ranks of carriers offering onboard Wi-Fi and hopes to have its entire fleet equipped by early 2012. Southwest's price for Internet connectivity ranges from \$2 to \$12.

Internet Connect

184 MILLION adults are connected to the Internet, according to a 2009 Harris Interactive poll. The survey revealed that each user spends an average of 13 hours per week online. Other interesting findings include:

Where do you access the Internet?

- 76%** Home
- 40%** Work
- 32%** Other Location

Who spends the most time on the Internet?

AGE	WEEKLY HOURS
30-39	18
25-29	17
40-49	17

TAKE THIS JOB AND SHOVE IT ...

Although the national unemployment rate is 9.5 percent, a recent *Wall Street Journal* article found that the number of people quitting their job surpassed those being fired. In March, more than 1.87 million people willfully gave up their jobs, according to the U.S. Bureau of Labor Statistics. And the forecast looks grim. In a 2009 Right Management survey, 60 percent of employees said they intend to find other jobs once the market improves.

In a survey conducted by **Dice.com**, a job board for tech professionals, employees were asked what would persuade them to stay at their current job if another opportunity arose.

57%

Nothing could persuade me to stay at my job.

42%

A higher salary.

11%

I'll stay if I get a promotion.



Send **spectrum** ideas
to managing editor
Karen Stewartson
kstewartson@govtech.com

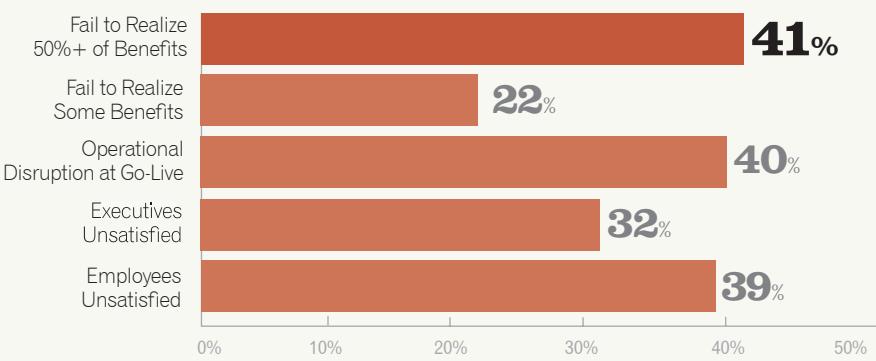
and chose Agresso Business World, a mid-market ERP solution from Unit4 Business Software, a European company whose U.S. subsidiary is based in Dallas.

The first motivation was that the city's previous software was 18 years old and both the software and hardware it was running on would no longer be supported, explained Sherri Flynn, Sparks' systems development administrator.

Recent work force cutbacks mean that she and a staff of just two other people have to support Agresso and 60 other city software applications. "Mainly we wanted our users to be able to create reports and work with it themselves without a systems administrator's help all the time," Flynn said.

With Agresso, users are becoming more self-sufficient because they can create their own inquiries and export results into Microsoft Excel files. "Some ERP implementations require the dedicated support of 10 people," she said. "The fact that we were downsizing makes Agresso a godsend."

ERP Results (%)



SOURCE: PANORAMA CONSULTING GROUP

Despite the trepidation about doing ERP implementations, Gartner's Sood stressed that there's still tremendous need in state and local government for the true functions of an ERP system. "Especially with the budgetary problems they are experiencing, there is a need to have deep insight into how revenue is being spent and the management of finances," he said.

And with federal stimulus funds, it's important to have good oversight of grants

management functionality that ERP systems can provide. "In contrast to other vertical markets, there is opportunity in the public sector for growth in ERP," Sood said, "and these new business models that are still emerging will become more prevalent." **GT**

DAVID RATHS, A WRITER BASED IN PHILADELPHIA, WRITES FREQUENTLY FOR GOVERNMENT TECHNOLOGY, PUBLIC CIO, GOVERNING AND EMERGENCY MANAGEMENT MAGAZINES.

www.govtech.com

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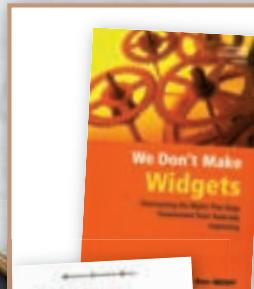
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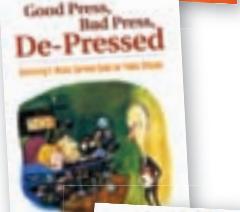


Discounts are available for bulk orders. For more information, or to reserve your copies, visit www.governing.com/books or contact Drian Perez at 888.932.5161 or dperez@erepublic.com.



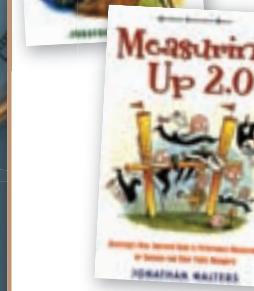
"We Don't Make Widgets has the potential to change how you lead your work team or organization and provides concrete steps for doing so."

Michael Lawson, Director, ICMA Center for Performance Measurement



"A fun read but, more importantly, a practical and pithy primer on the reality of media relations in the modern era."

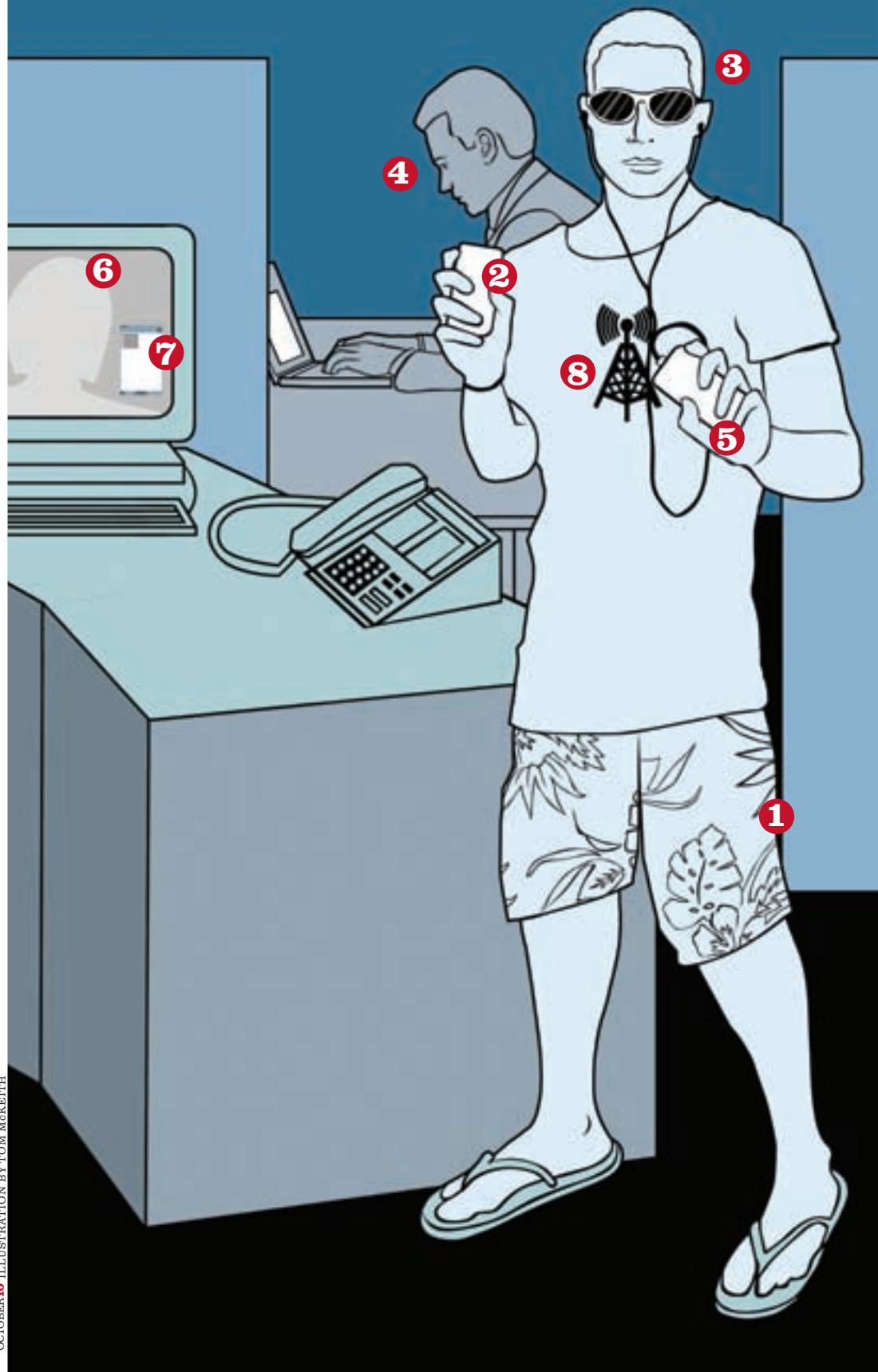
Martin O'Malley, Governor, State of Maryland



"Government can deliver results — and our performance measures help us prove that we're making a difference in people's lives. Measuring Up 2.0 presents a very readable account of how leaders can transform agencies to do just that."

Christine Gregoire, Governor, State of Washington

Meet Your New Employee



1 » Expects Freedom

The Net generation, more than any other generation, expects to set and abide by its own priorities. Net-generals place high priority on time with family and friends, so much so that they see their job fitting into their personal and social lives/lifestyles, instead of the opposite.

2 » Wants Customization

Living in a custom-created world is second nature to the Net generation. They choose how they get their information or entertainment, when they get it, and the color, configuration and applications on the delivery device. At work, they'll look for choices in job benefits and will want to customize the jobs they select.

3 » Will Choose Carefully

The Net generation is adept at online comparative analysis. Net-gen job hunters will carefully consider which occupations best fit their professional goals and work style preferences. They'll thoroughly research jobs available and the associated employers' culture, benefits and emphasis on career development.

4 » Demands Integrity

Net-generals will be keen to uncover the record and reputation of potential employers with respect to their commitment to integrity and ethical practices. They will not embrace an organization that has questionable ethics, nor will they follow questionable leadership.

5 » Mixes Work and Pleasure

Enjoying the job and workplace is important to Net-generals. They want to be a part of the action, and they expect to have fun while doing it. They also tend to work hard and then want to decompress. Blocking social networking sites and discouraging non-work Internet use prevents them from taking a break.

6 » Seeks Collaboration

The Net generation grew up in an interactive world. They use social networks to get information and feedback, and to work collaboratively on tasks. Additionally they want to provide their stamp on product and process development.

7 » Needs Speed

Net-generals demand speed of communication, so they tend not to use the telephone, e-mail and other traditional methods in their personal communications. They prefer instant messaging, and they'll look for ways to speed their productivity and response time wherever possible.

8 » Expects Innovation

Members of the Net generation are "digital natives." They grew up with technology in every aspect of their lives, and IT capabilities are often second nature to them.

SOURCE: NET GENERATION: PREPARING FOR CHANGE IN THE FEDERAL INFORMATION TECHNOLOGY WORKFORCE, FEDERAL CHIEF INFORMATION OFFICERS COUNCIL. READ THE FEDERAL CIO COUNCIL'S FULL NET GENERATION REPORT AT WWW.CIO.GOV.

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