



DIGITAL
CITIES
SURVEY

**Center for Digital Government's Report from the
2007 Digital Cities Survey**

The most technology-advanced cities in America have been named by the Center for Digital Government based on its 2007 Digital Cities Survey. The annual study, underwritten by Hyland Software, developers of OnBase, Fujitsu and GTSI, proud partners of state and local governments across America, examines how city governments are utilizing digital technologies to better serve their citizens and streamline operations.

"This year's winners have really raised the bar for cities," said Cathilea Robinett, executive director for the Center for Digital Government. "Digital technology connects citizens with their government on a level never before achieved."

In the major metro category Aurora, Colo., received the No. 1 spot after consistently placing in the top five the past three years. Lincoln, Neb., is first in the 125-249,999 division and has graced the top ten six out of seven years. Out of the mid-level cities – population 75,000 to 124,999 – Santa Monica, Calif., placed first with Roanoke, Va., (top ten every year) and Orem, Utah, also in the top three. In the smallest city category, 30,000 to 74,999, there was a tie for first between Jupiter, Fla., and Lynchburg, Va., both returning from last year's top 10.

Top 10 Digital Cities

► 250,000 or more population category:

- 1st City of Aurora, Colorado
- 2nd City of Virginia Beach, Virginia
- 3rd City of Tampa, Florida (tie)
- 3rd City of Tucson, Arizona (tie)
- 4th Metropolitan Gov't of Nashville & Davidson Co., Tennessee (tie)
- 4th City of Riverside, California (tie)
- 5th City of Kansas City, Missouri (tie)
- 5th City of San Diego, California (tie)
- 6th City of Miami, Florida (tie)
- 6th City of Phoenix, Arizona (tie)
- 7th City of Colorado Springs, Colorado
- 8th City of Honolulu, Hawaii
- 9th Washington, District of Columbia
- 10th City of Mesa, Arizona

► 125,000-249,999 population category:

- 1st City of Lincoln, Nebraska
- 2nd City of Richmond, Virginia
- 3rd City of Alexandria, Virginia (tie)
- 3rd City of Madison, Wisconsin (tie)
- 3rd Salt Lake City, Utah (tie)
- 4th City of Hampton, Virginia (tie)
- 4th City of Irving, Texas (tie)
- 5th City of Winston-Salem, North Carolina (tie)
- 5th City of St. Petersburg, Florida (tie)
- 6th City of Hollywood, Florida
- 7th City of Norfolk, Virginia
- 8th City of Lakewood, Colorado
- 9th City of Ontario, California
- 10th City of Chesapeake, Virginia (tie)
- 10th City of Fort Collins, Colorado (tie)

▶ **75,000 – 124,999 population category:**

- 1st City of Santa Monica, California
- 2nd City of Roanoke, Virginia
- 3rd City of Orem, Utah (tie)
- 3rd City of Independence, Missouri (tie)
- 4th City of Arvada, Colorado (tie)
- 4th City of Westminster, Colorado (tie)
- 5th City of Olathe, Kansas
- 6th City of Pueblo, Colorado
- 7th City of West Palm Beach, Florida
- 8th Village of Schaumburg, Illinois (tie)
- 8th City of Lawrence, Kansas (tie)
- 9th City of Carlsbad, California
- 10th City of Boulder, Colorado

▶ **30,000 – 74,999 population category:**

- 1st Town of Jupiter, Florida (tie)
- 1st City of Lynchburg, Virginia (tie)
- 2nd City of Medford, Oregon
- 3rd City of Delray Beach, Florida
- 4th Town of Enfield, Connecticut
- 5th City of Boynton Beach, Florida
- 6th City of Charlottesville, Virginia
- 7th Town of Blacksburg, Virginia
- 8th Town of Manchester, Connecticut
- 9th Town of Flower Mound, Texas
- 10th City of Titusville, Florida

Report of Major Findings from the 2007 Digital Cities Survey

The Center for Digital Government (Center) and the National League of Cities (NLC) are pleased to present the following report on major findings from the 2007 Digital Cities Survey that documents recent trends and the progress made to date in the transition to digital government.

The Center and NLC invited city mayors, managers and chief information officers from more than 600 cities to participate. The survey, underwritten by Hyland Software, developers of OnBase, Fujitsu and GTSI, grouped cities into four population categories: 250,000 or more; 125,000-249,999; 75,000-124,999; and 30,000-74,999. Officials responded to a set of 26 questions. Survey questions focused on implementation and adoption of online service delivery; planning and governance; citizen engagement in digital governance; and the infrastructure and architecture that make the transformation to digital government possible.

RESULTS AND TREND ANALYSIS

In 2007, cities reported an increased capacity for information technology services and underlying infrastructure in order to better serve citizens and provide economic improvements for cities, towns and their collaborating partners, according to the results and success stories of survey respondents.

"The results of the annual Digital Cities Survey confirms what we are hearing from our member cities," said Donald J. Borut, executive director of the National League of Cities (NLC). "More and more cities and towns are increasingly utilizing technology and Web-based resources to provide both direct services and greater interaction between local government and the citizens and businesses in the community."

To meet the demands of citizens and businesses for the fruits of the technological revolution, United States cities, towns and consolidated city-counties are increasing their online services and looking for ways to provide these fruits for all. The majority of services are delivered online by more than half the responding cities; three-quarters of respondents also use IVR systems, kiosks and call centers.

For more than half of responding cities (52 percent), increasing Internet access is an issue under consideration, and for 21 percent it is a top priority for the city.

CITIZEN ENGAGEMENT

For those governments with both organization and citizens' needs in mind, garnering what those needs are through interactive processes is an important step in the provision of services that meet those needs.

According to "Engage: Creating e-Government that Supports Commerce, Collaboration, Community and Commonwealth," a strategy paper from the Center, "As electronic government initiatives and the organizations using them to deliver services mature, expectations and perspectives shift from a focus on simple information dissemination to one of active participation in the government process..."

CITIZEN ENGAGEMENT	
Citizen engagement/participation methods:	Percentage of respondents providing:
Meetings of the city governing body are:	
Telecast (including civic cable channel)	80%
Web cast (streamed live and archived)	66%
Podcast	14%
Online polls or surveys are conducted:	
During meetings of city governing body	6%
Between meetings to gauge community perception on matters of public concern	21%
Annually to measure citizen satisfaction with city services	47%
The results of the above online polls or surveys are posted for public comment with search, sort & graphing	17%
The city hosts online forums on matters of public concern through:	
Discussion boards (moderated)	11%
Discussion boards (un-moderated)	2%
Chat rooms/sessions in or during which city staff regularly respond to citizen questions	2%
Web logs (blogs) that allow comments or responses to entries by mayor or other city officials	10%
The city or its library has created online repositories of subject matter expertise through:	
Listserve and their archives	28%
Wikis (Wiki: a collaborative Web site composed of the perpetual collective work of many authors)	11%
The city supports community-based media through the provision of public access opportunities for:	
Community cable channel shows	67%
Community podcasts	10%
Other	15%
Average all online services above	25%

There is a renewed interest in civic participation; a more engaged citizenry expects greater government transparency. The information capacity available on the Internet allows citizens to become more knowledgeable about government and political issues, and the interactivity of the medium allows for new forms of communication with elected officials. The posting of contact information, legislation, agendas and policies make government more transparent, potentially enabling more informed participation both online and offline."

NLC and the Center took a first look at the emerging interactivity of municipal government and its efforts to improve government responsiveness and accountability last year. Currently, 80 percent of responding cities telecast their governing body meetings, 66 percent webcast or stream live — a 14 percent increase over last year — and 14 percent podcast, which is a 10 percent increase in 2007).

Many cities reported they are still very much in the piloting and experimentation phase with newer technologies used for citizen participation; discussion board hosting (11 percent host moderated and two percent host un-moderated discussion boards), chat rooms/sessions in or during which city staff regularly respond to citizen questions (2 percent) and Web logs (blogs) that allow comments or responses to entries by the mayor or other city officials (10 percent).

FEATURED CITIES:

In Tucson, Ariz., the development and implementation of a centralized citizen response system was a key public service initiative over the last few years. Phone and Web queries for most departments are now centrally received, catalogued, managed and tracked. The contact information is disseminated via the Web, and also via a wide variety of cooperating local agencies and public service offices. Two separate weekly reports go to all departments and the mayor and council.

Salt Lake City, Utah, completed an effort to assist community councils and other special interest groups to better communicate their message through their Web hosting service. The city hosts eight community council Web sites, including list servers, blogs and forums, and four special interest groups. This has enabled more communication from these groups to the citizens of their communities and the city at large. Previously, many community council members were unable to have a Web site due to costs and concerns over maintaining the site.

PORTALS AND ONLINE SERVICES

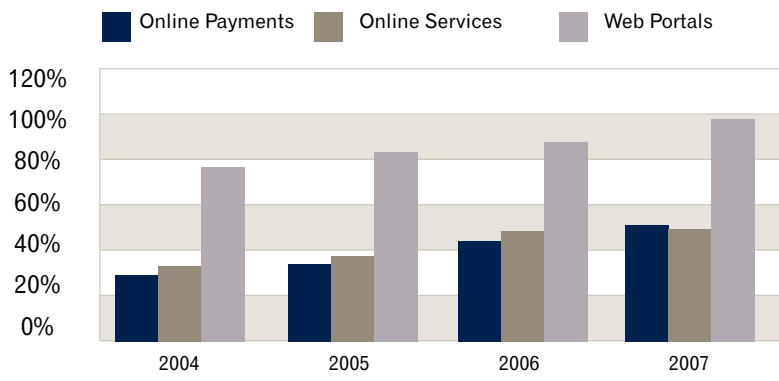
Nearly 100 percent of all surveyed cities report having a Web portal or online "front door" to city services. Web portals link all agencies and departments and allow the public to conduct online services and transactions. The percentage of cities reporting they have a Web portal was 57 percent in 2003 — and in just five years has grown to 98 percent.

Online city service transmissions have increased 21 percent during those same years; from 27 percent in 2003 to 48 percent in 2007. Frequently used forms are offered online by a much larger percentage (71 percent) of reporting cities (see survey questions 4 through 7 and 22 below for the full list of forms and transmissions surveyed). Online payments for services surveyed increased 16 percent — from 34 percent to 50 percent in 2007.

The following chart shows the increase in surveyed cities for both online payments and online services in relation to the percentage of cities having a Web portal. Again this year there is much room for growth in end-to-end services and payments online.

City Web sites are characterized by excellent online services which are aligned to their constituency and organization.

CITY ONLINE PAYMENTS, ONLINE SERVICES AND WEB PORTALS



FEATURED CITIES:

With over 75 percent of the information used throughout Roanoke, Va.'s organization, GIS technology has been embraced as a powerful transforming technology; building applications to search, identify, analyze, and visually present a vast library of information stored across a wide variety of systems and platforms. Today there are over 330 GIS data layers stored in the city's enterprise GIS facility providing information relating to tax parcels, addresses, zoning, streets, permits, E911, storm water, and much more.

In Independence, Mo., online and self-service business/occupational licensing systems were developed and implemented to provide the approximately 8,000 local businesses and their employees with the opportunity to conduct business with the city in a more convenient and efficient manner. To apply, renew, and maintain their licenses and permits online, the entire process is streamlined online and can be completed in just a few short minutes.

The Richmond, Va., Police Department's Law Enforcement Analytics dashboard offers crime stat trends and comparisons, details mapped by city sector and customizable alerts. The dashboard is deployed in a way that blends reporting, alerts, predictive analytics, and geographic mapping to help the Richmond Police Department get ahead of crime. The capabilities of the Law Enforcement Analytics application have been leveraged to dramatically reduce major crime in Richmond, down 40 percent from 2005. The city has also witnessed a 49 percent reduction in random gunfire incidents, a 246 percent increase in weapons seized, and a \$15,000 reduction in overtime costs.

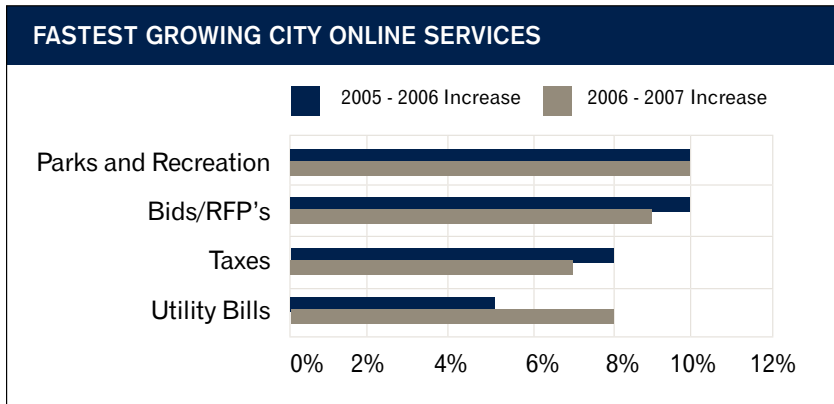
FASTEST GROWING SERVICES

The fastest growing online services reported from 2005-2007 were parks and recreation services, and Bids and request for proposals (RFP's) — a 20 percent and 19 percent increase respectively. Parks and recreation services grew from 43 percent to 63 percent, while Bids and RFP's grew from 35 percent to 54 percent.

Taxes and utility bills, the second fastest growing online services, had an increase of 15 percent and 13 percent respectively. Taxes started at 27 percent and grew to 42 percent, a 7 and 8 percent increase year over year, whereas utility bills growth has slowed from 8 percent in 2005-2006 to 5 percent in 2006-2007.

Parking tickets/traffic citations and utility bills were the fastest growing payments, increasing by 17 percent and 16 percent respectively from 2005 to 2007.

Parks and recreation services and taxes also continue to be fast growing payments since 2005; both at 12 percent growth.



FEATURED CITIES:

Lincoln, Neb., added many online services including water bill payments that are coupled with an e-billing option for paperless bills, a service request system with online monitoring of the progress of the request, 100 percent online job applications, 24 online traffic cams, seven RSS feeds, a second live and on-demand video channel, a new online survey system and new keyword engine.

Orem, Utah, has over 60 innovative applications — some of the largest include utility billing, accounting, payroll and purchasing applications — developed in-house by a team of five programmers. These have all been updated over the last several years to take advantage of the latest technologies, such as wireless, and work together to eliminate redundant data entry and provide real-time information.

Tampa, Fla., converted payment services and constructed repositories in a new development environment to collect revenue online, resulting in a new supported hardware and software environment with uniformly designed interfaces and better performing application services. Administration supported the effort by eliminating convenience fees. Business growth was substantial; TampaGov payments increased dramatically from 4,381 payments totaling \$325,013 in February 2005 — the last month fees were applied — to 12,154 payments totaling \$1,061,842 eighteen months later.

Virginia Beach, Va., implemented a robust Automatic Call Distribution (ACD) system linking 911 and 311 into the same phone operating environment, plus providing 311 operators with radio capabilities allowing them to also service after-hours, non-public safety agency incidents (Public Works, Public Utilities, etc.). This freed up valuable time for the 911 operators to respond to emergency citizen calls. As a result of the technology enhancements, average 911 call answering time was reduced from over 11 seconds to under five seconds. An emergency alerting system, called VAlert is now operating within the 311 service delivery area (examples of alerts include rabies, infectious disease, hostage events, and large fires), further alleviating congestion in the 911 system.

MUNICIPAL BROADBAND APPROACHES

In their efforts to increase access and online services, cities, towns, and municipalities have a firm foothold in the civic broadband technology arena. Nearly 40 percent of surveyed cities are working with private providers to build out wireless broadband in business districts and residential areas as well as in public facilities.

Whether broadband technology can actually be leveraged to achieve a myriad of goals — such as reducing the digital divide, providing economic relief for municipalities or improving labor force participation, or even improving the health and independent living of the elderly or disabled — its deployment is certainly underway and growing.

Broadband development strategies are varied. In “Un-tethered Nation”, a series of strategic planning guides from the Center, three choices for governments/municipalities for getting wireless services and the underlying infrastructure were identified. Governments can:

Build – the government owns and builds the infrastructure, and delivers wireless services across the network,

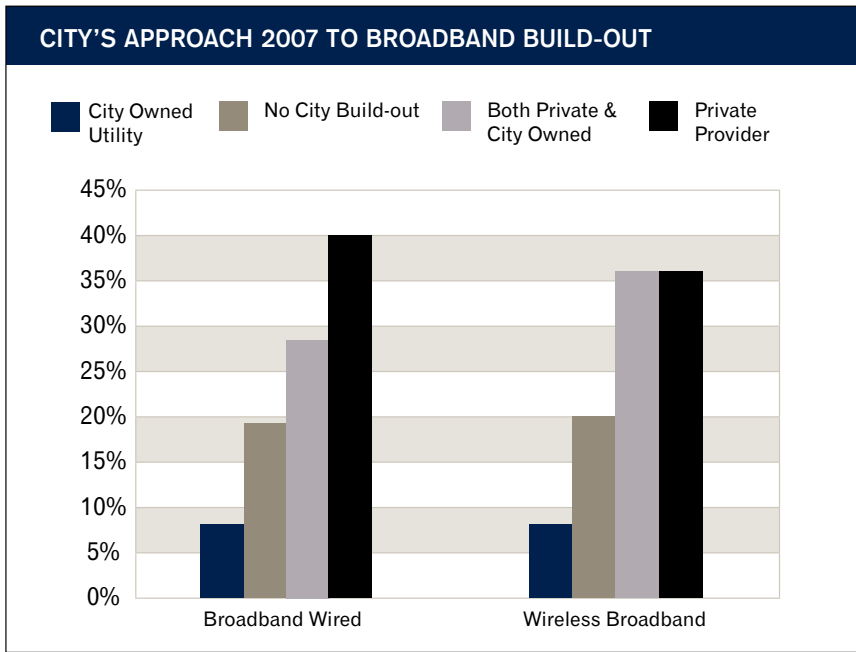
Buy – the government buys services from third parties for internal operations but leaves citizen provisions of wireless broadband to private sector providers, or

Broker - the government assumes the role of broker, entering into agreements or contracts with one or more wireless service providers for service provisions within the jurisdiction; public-private partnerships.

Survey results showed that an average 33 percent of cities are currently working with private providers. Eight percent of surveyed cities are building out their own wired and wireless broadband infrastructures.

Before beginning broadband infrastructure development, more than 50 percent of surveyed cities assessed and mapped private and city-owned telecommunications infrastructure and benchmarked other cities' actions in broadband.

City objectives for their broadband communitywide networks were the following in priority order: economic development, providing access to underserved area(s), increasing Internet access and municipal livability or quality of life and greater access to e-government services.



Survey results show that several types of wireless infrastructure are being pursued: Public Safety 700/ 800 Mhz Radio (78 percent), WiFi (77 percent), broadband cellular (63 percent), mesh (54 percent) and WiMAX/WiWAN (42 percent).

FEATURED CITIES:

The Corpus Christi, Texas, citywide Wi-Fi Project is operated by the Corpus Christi Digital Community Development Corporation; a non profit, under the direction of the City of Corpus Christi, the owner of the system. The system has been developed as a public/private initiative serving the needs of government, the general public and local economic development. Government pays for their use of the system on a co-op basis. Approximately 40 percent of the available bandwidth is reserved for government use. The remainder of the bandwidth is available to existing Internet service providers on a wholesale basis for distribution to the general public as a retail service. The city maintains control of the “free” captive portal for access to all city-operated sites and linked services. The system is made available to other government initiatives and usage.

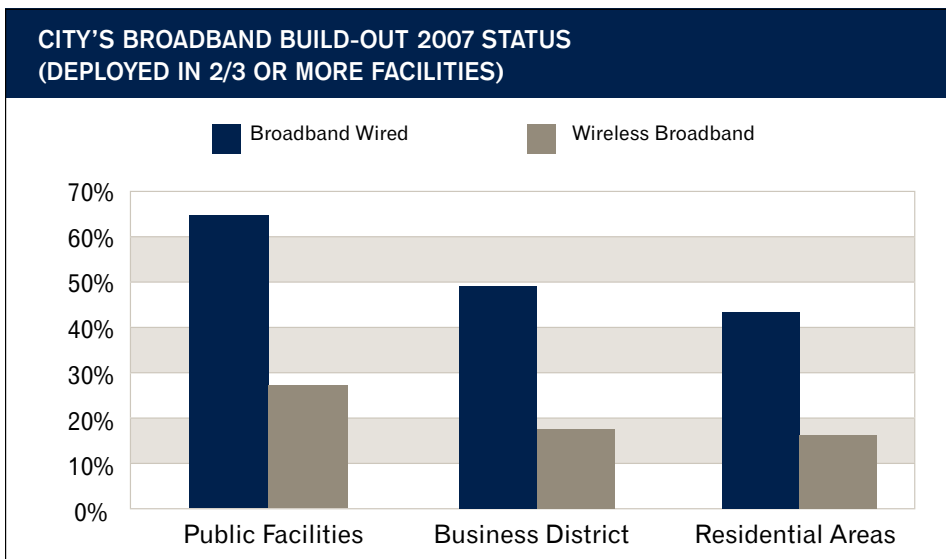
In Richardson, Texas, the wired broadband infrastructure was funded and built by a variety of private Internet service providers (ISPs). Wired broadband is available to residents and businesses anywhere in the city. However, to provide free wireless Internet access to the public, the city built on an earlier project which converted the city’s WAN to a fiber-optic backbone, using hotspots at city facilities, including the library and recreation centers, senior centers and the civic center.

San Diego, Calif., directly provides wireless and wireline infrastructure (including the public access component) at city facilities. Services throughout the city are provided through private entities or non-exclusive public/private partnerships.

MUNICIPAL BROADBAND BUILD-OUT

Broadband wired is making great strides with 65 percent of public facilities and an average 46 percent of business and residential areas’ deployment in more than two-thirds of facilities.

However broadband wireless is far from saturated — having less than one-third deployment of broadband wireless in business districts (36 percent) and residential areas (33 percent). How far surveyed cities have progressed in their broadband build-out — wired vs. wireless — is reflected in the chart below.



FEATURED CITIES:

In Alexandria, Va., the city's Institutional Network (I-Net) is a citywide fiber optic backbone that provides a variety of data, voice, and video communications capabilities to city government facilities, libraries, and public schools. The I-Net, which was the first network of its kind in Virginia, now connects more than 95 municipal and school facilities. The I-Net also provides for dial-up or VPN remote access by city employees and contractors. In conjunction with the provider, Alexandria has interconnected the I-Net with neighboring Arlington County to provide alternate communication paths in the event of an emergency or disaster and lower on-going costs of inter-jurisdictional communications.

Ogden City, Utah, has recently announced and deployed a public-private partnership which provides wireless broadband access to its businesses, residents, and visitors. The partnership provides for a municipal freenet which provides free limited broadband services and is supported by a subscription-based network. The initial deployment covers the major business corridor as well as a large area of low-income residential.

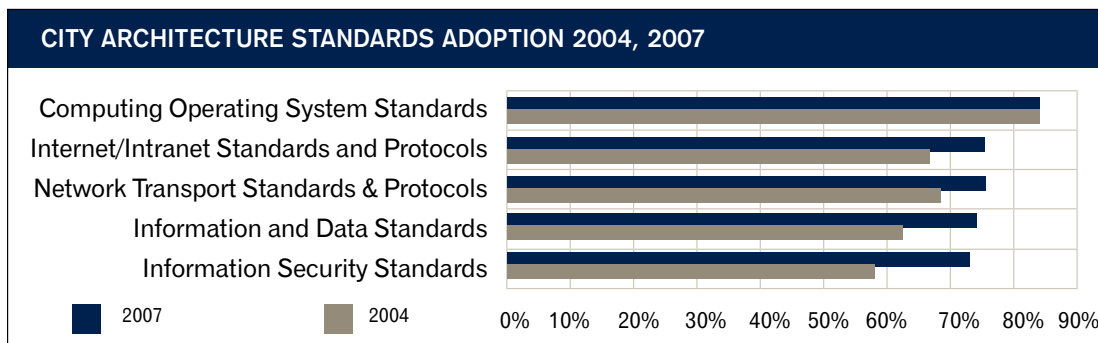
Aurora, Colo., led, implemented, and hosted the interoperability of public safety radio across five cities in the Denver metro area (Aurora, Denver, Arvada, Westminster, and Lakewood). From that core implementation services were extended to include access to city and state agencies in Colorado.

Over two years ago, Washington, D. C. launched the Wireless Accelerated Responder Network (WARN); the first city-wide, wide-area broadband network for public safety. The system operates in the public safety 700 MHz band and provides citywide coverage using only 12 transmission sites. Using this network, the District has educated Congress, the Federal Communications Commission, the Federal Government and public safety decision makers on its benefits and feasibility. More than 200 users from nearly 20 agencies have been provided WARN access devices.

CITY ARCHITECTURE

The glue that holds the front and back ends of government together — the city's technological and data architectures — has shown excellent progress over the years. In three years, cities have increasingly adopted architecture standards by an average of 8 percent, for a current adoption rate of 76 percent for all standards surveyed.

In addition, 57 percent of responding cities require these standards to be adopted for funding of programs and projects, compared with 44 percent in 2005.



FEATURED CITIES:

One of the most beneficial technology advances Lynchburg, Va., implemented was the City's enterprise-wide document management system platform. This system provides the capability to manage the location, work flow and life span of documents and is expected to pay huge dividends including customer service, version control and standardization. Although the initial scope is limited to internal operations, it is expected that certain documents from this system will be made available to citizens via the Web.

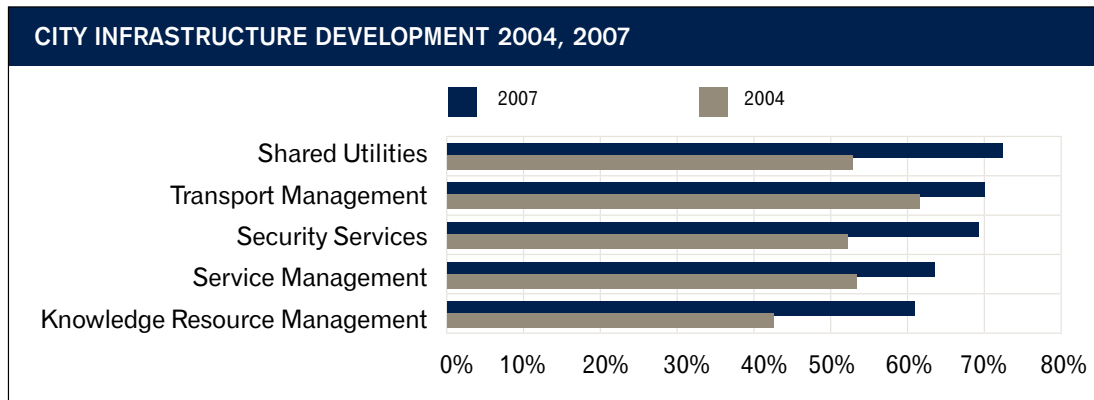
Jupiter, Fla., implemented an Incident Management System which is completely Web-based and acts as a virtual emergency operations center. The town now has the ability in the case of a category five hurricane where all network connectivity, power etc. is lost, to deploy a stand-alone satellite unit that will allow emergency Internet connectivity. This system employs state-of-the-art GPS as well as automatic tracking and alignment of the dish to the satellite. In addition, they can move the current Web site to an external host that is located in the Midwest.

Charlottesville, Va., implemented an integrated systems solution that supports the flow of work across city operations, resulting in the city's data residing in one central secure database. Much of the city's data was formerly spread across many computer systems. All redundancies in terms of work activities across departments, duplicate computer applications, and re-keying of common data have been greatly reduced. Additionally, many manual activities were automated, resulting in a reduction in overall effort. Data is captured only once, at the earliest point in time, and at the source.

For Metro Nashville and Davidson County, Tenn., the Land Information System represents the broadest and most challenging applications implementation and achievement. The mainframe computer was decommissioned, as the new system is server-based, providing many productive and cost-savings benefits to Metro.

CITY INFRASTRUCTURE

Major strides have been made in all types of city infrastructure consolidation. The largest increase since 2004 is 19 percent for shared utilities — including portals, e-mail services, payment services and help desks — now at 72 percent partial or full consolidation across the enterprise.



Capacities and types of infrastructure are being developed for a myriad of purposes, including hard dollar and soft dollar cost savings.

Featured cities:

Santa Monica, Calif., used fiber optics, wireless, SAN, video compression, GIS and Web-based technologies to provide several successful improved mobility projects. Parking availability for all parking structures and beach lots is pushed out to the Web and updated in five-second intervals. Parking availability signs were installed in the front of each parking structure, showing the number of available spaces, and parking information is available on the AM parking radio station that is also connected to the fiber optic network for management and information updates.

In Delray Beach, Fla., the IT Division and city attorney's office negotiated a cable franchise and I-Net agreement that allowed the city to connect 12 remote city facility sites with fiber optic lines, saving more than \$7,000 in per-site cost and \$2,000-4,000 in monthly costs. The daily backup of remote servers is now done through fiber optic lines.

In the past few years, the City of Madison, Wis.'s enterprise VoIP telephone system has allowed the city to leverage its investment in its network infrastructure to provide a powerful, flexible, and consistent telephone system to all city agencies. Taxpayers expect to see a savings of over \$200,000/year in the city operating budget.

In Medford, Ore., technological accomplishments included several initiatives, such as establishing the infrastructure necessary to support an enterprise geographical information system (GIS), the creation of a land information system (LIS) available to all departments citywide, and the enhancement of public safety communications infrastructure by installing digitally capable radio communication voter sites with fiber transport of radio over Internet protocol (IP).

QUESTIONS, CRITERIA AND AGGREGATED RESPONSES

1. Are the meetings of the city council available electronically to the public?

Criteria:	2006	2007
a. No, not at this time.	1%	2%
b. Meetings of the city governing body are televised.	7%	11%
c. City governing body meeting agenda or minutes are available online.	21%	12%
d. Meetings of the city governing body are available online, archived and searchable.	71%	76%

2. Does the city have a Web site?

Criteria:	2006	2007
a. The city does not have a Web site.	0%	0%
b. The city is developing a Web site.	0%	0%
c. The city has a Web site that links to all agencies and departments.	13%	2%
d. The city has a Web site/Web portal that links to all agencies and departments and through which the public conduct online services and transactions.	87%	98%

3. Does the city have privacy notices on its Web site?

Criteria:	2006	2007
a. The city does not have a privacy statement posted on its Web site at this time.	9%	9%
b. Posting of privacy statement is scheduled by December 31, 2006/7.	8%	4%
c. No privacy statement (or direct link to it) is posted on our Web site home page; however, privacy statements are located online.	4%	2%
d. Our privacy statement (or direct link to it) is posted on our Web site home page (the privacy statement should also address the security measures taken to safeguard personally identifiable information collected or displayed online).	79%	85%

4. Does the city provide its frequently-used forms online?

Online forms	2006	2007
Animal Services (pet licenses/adoption, wild/sick animal)	50%	46%
Bids or RFP's	82%	88%
Building Permits	86%	93%
Occupational license renewal	61%	64%
Parks and recreation services	80%	84%
Taxes	55%	51%
Utility bills	68%	68%
Other	78%	73%
Average all online services above	71%	71%

5. Does the city provide online submissions for its services?

From the following list, please check all that apply for forms that can be filled out and submitted online. (PDF or other print and fill files that can be filled out online, saved and attached as an e-mail do not qualify as submissions).

Online services:	2006	2007
Animal services (pet licenses/adoption, wild/sick animal)	26%	38%
Bids or RFP's	44%	54%
Building permits	51%	62%
Occupational license renewal	24%	28%
Parks and recreation services	53%	63%
Taxes	34%	42%
Utility bills	58%	63%
Other	68%	70%
Average all online services above	45%	48%

6. Please check the status of the following online applications:

Online applications:	None	Implementation planned by December 31, 2007	Partially integrated with back-office systems	Fully integrated with appropriate back-office systems
Bids or RFPs	27%	6%	32%	23%
Building permits	20%	8%	15%	45%
Parks and recreation services	21%	45	13%	48%
Utility bills	18%	2%	7%	60%
Other	14%	2%	10%	46%

7. Can online payments be submitted along with completed forms for the following services?

Online payments:	2006	2007
Building permits	29%	36%
Parks and recreation services	43%	57%
Parking tickets or traffic citations	47%	60%
Taxes	35%	39%
Utility bills	60%	68%
Other	40%	40%
Average all online pay above	42%	50%

8. Does the city have a direct link to citizen emergency preparedness information on its Web site?

Criteria:	2006	2007
a. City does not have emergency preparedness information on the city Web site.	11%	6%
b. Citizen emergency preparedness information will be on the city Web site by Dec. 31, 2006/7.	4%	2%
c. Citizen emergency preparedness information ("how to" information, preparedness guides and resources) is on the city Web site.	15%	15%
d. Citizen emergency preparedness information ("how to" information, preparedness guides and resources) is a direct link from the city Web site home page, within a few clicks.	68%	76%

9. Does the city provide a single online citizen service area where constituents can request services, report problems or complaints about services and complete citizen satisfaction surveys about the city services?

Criteria:	2006	2007
a. No, not at this time.	16%	20%
b. Implementation is scheduled by Dec. 31, 2006/7, or the service center exists but is not yet accessible through one click from the Web site's home page.	7%	10%
c. The online citizen service area (transmissions, not e-mail) on the city's Web site is accessible through one click from the Web site's home page.	31%	31%
d. The Web citizen service area has the attributes listed in "c" above, and utilizes the same database as the telephone call center.	37%	37%

10. How does your city law enforcement department use technology?

Criteria:	2006	2007
a. Police officers use traditional public safety communication technologies; two-way radio with some digital mobile technologies such as laptops, hand-held or voice-recognition devices.	7%	1%
b. Police department has capabilities in response (a), and is connected to a digital communication network to retrieve information on license plates, driver licenses, mug shots or criminal histories.	11%	11%
c. Police department has capabilities in response (b), and is fully integrated with federal and state criminal database systems, such as AFIS or NCIC, and others, and has some aspects integrated with the local courts or corrections systems.	12%	12%
d. Police department has capabilities in response (c); in addition information for the public is posted via the Web such as photos of most-wanted suspects, Megan's Law (convicted sex offender) information, neighborhood watch or other community policing program or training information.	70%	74%

11. Does the city have a strategic plan for deploying technology across city agencies and departments?

Criteria:	2006	2007
a. The city is or will be developing its IT strategic plan.	24%	18%
b. The city IT strategic plan will be completed by Dec. 31, 2006.	10%	5%
c. Yes, the city has an IT strategic plan.	20%	19%
d. Yes, the city has an IT strategic plan, and it has been updated since 2004/5.	47%	57%

12. How is the city managing Web content?

Criteria:	2006	2007
a. No content management software is in place at this time. Content is managed manually using Web-publishing software.	19%	7%
b. Content management is being pursued, and at least one pilot is under way.	7%	11%
c. Content management is in place for the city's major systems, although not yet on an enterprise basis.	18%	15%
d. Content management is being pursued on a city enterprise basis (for example, through shared hosting services or a master contract for agencies/departments to use).	55%	66%

13. Does the city have a project review mechanism in place for initiating and overseeing IT investments and does it use a formal project management process for executing IT projects?

Criteria:	2006	2007
a. The city uses neither at this time.	26%	19%
b. The city has a project review mechanism in place.	18%	15%
c. The city has a project management process in place.	6%	3%
d. The city has both a project review mechanism and a project management process in place.	50%	60%

14. What is the status of the city's architecture development?

Please indicate which response best represents the status of the following components of the city's technological and data architectures.

2007 response percentages in bold	None	A) Partial or under development	B) Full & adopted	C) Required	D) Reviewed & updated in last 18 months
2006 follows					
Architecture:					
Internet/Intranet Standards & Protocols	2%	16%	20%	15%	41%
Including portable data; portable logic; authentication; directory services; hypertext presentation; e-mail; and secure e-mail					39%
Network Transport Standards & Protocols	2%	17%	20%	15%	41%
Including internetworking standards; network transport infrastructure; wireless networking; video conferencing and circuit-switched infrastructure; and video distribution					34%
Computing Operating System Standards	1%	11%	22%	7%	54%
Including host-level computer; desktop; handheld; middleware; and client-server					52%
Information and Data Standards	3%	24%	19%	11%	42%
Including database systems; data architecture; digital records retention; geospatial datum; metadata; and data theme content standards					42%
Information Security Standards	1%	25%	24%	10%	40%
Including security policies, standards and guidelines; annual audit requirements; and disaster recovery (resiliency) plans					40%

15. What is the status of the city's infrastructure development?

Please indicate which response best represents the status of the following components of the city's approach to IT infrastructure.

For criteria D, "demand is fully aggregated" means that all operating departments/agencies use a commonly-provided networking computing infrastructure.

2007 response percentages in bold 2006 follows Architecture:	Not Available	A) Ad hoc/ agency-by-agency	B) Enterprise/federated approach specified in city strategic IT plan	C) Enterprise/fed. approach, plus demand is partially aggregated or consolidated	D) Enterprise/fed. approach, plus demand is fully aggregated or consolidated
Service Management Including provisioning and performance monitoring; maintaining quality of service, ensuring resiliency; data centers and server hosting environment (Web, file, print, e-mail)	2%	13%	15%	19%	46%
					50%
Knowledge Resource Management Including content management; business process automation; directory services, registries and repositories; and digital archive	7%	15%	12%	21%	40%
					35%
Transport Management Including local area network services in individual agencies; wide area network/citywide backbone service; and message queuing, filtering, metering, routing and monitoring	3%	10%	11%	11%	59%
					64%
Security Services Including identity management; encryption; access control, authentication and single sign-on; security infrastructure and defenses	5%	9%	12%	22%	46%
					44%
Shared Utilities Including portals; e-mail services; calendaring and scheduling; payment services (bill presentment, I-checks, credit cards, ACH); and help desks	4%	11%	8%	12%	60%
					57%

16. What is the status of the city's broadband infrastructure development?

16-1. Broadband Networking: For both wireless and wire line broadband community-wide networks, please indicate how these infrastructures are being built out

Criteria:	None	City Owned Utility	Private Utility	Both
Wire line Broadband: The city's approach is best described as:	19%	8%	40%	28%
Wireless Broadband: The city's approach is best described as:	20%	8%	29%	36%

16-1 A. What is being done to increase Internet access for the city's citizens and residents?

Criteria:	Percentage
Increasing Internet access is not an active issue.	14%
Increasing Internet access is an issue under consideration.	31%
Increasing Internet access is a top priority for the city.	21%
The city is increasing Internet access through a municipal-sponsored wireless network.	20%
The city is increasing Internet access through a partnership with a telecommunications provider to provide wireless network.	29%
The city is increasing Internet access through a municipal deployment of fiber optic cable-network for government and resident use.	12%
The city is increasing Internet access through a partnership with a telecommunications provider to provide fiber optic cable/network.	13%
The city is increasing Internet access through a municipal utility which directly or indirectly (leasing capacity to another provider) provides Internet access.	8%
Other	21%

16-2. Broadband Funding: For both wireless and wire line broadband community-wide networks, please indicate how these infrastructures are being funded:

Criteria:	None	Advertising - Directly or through a third party	Public Appropriation	Subscriber fees/charge backs	Hybrid
Wireline Broadband: The city's approach is best described as:	33%	0%	20%	18%	20%
Wireless Broadband: The city's approach is best described as:	31%	2%	17%	155	24%

16-3. Broadband Status: For both wireless and wire line broadband community-wide networks, please indicate how these infrastructures are being built out:

Criteria:	None	Deployed 1/3 or less of facilities	Deployed 1/3 - 2/3 of facilities	Deployed 2/3 or more of facilities
Wire line Broadband in public facilities (government offices, schools, airports, and libraries)	13%	7%	7%	65%
Wire line Broadband in business district, commercial areas and enterprise zones	29%	5%	7%	49%
Wire line Broadband in residential areas	34%	5%	7%	43%
Wireless Broadband in public facilities (government offices, schools, airports, and libraries)	11%	36%	20%	25%
Wireless Broadband in business district, commercial areas and enterprise zones	24%	33%	15%	17%
Wireless Broadband in residential areas	40%	26%	9%	15%

16-4. Wireless Infrastructure: Thinking about the city's technological approach to wireless, please indicate the strategic direction:

Criteria:	2006	2007
None	3%	65
Public Safety 700/800 Mhz Radio	81%	78%
Broadband Cellular	66%	63%
IEEE-Based Broadband Wireless Access Point (WiFi)	77%	77%
IEEE-Based Broadband Metropolitan Wireless Access Point (Wi-Max, Wi-WAN, etc.)	49%	42%
Mesh	59%	54%

16-5. Which city department is responsible for coordinating the broadband plan and build out?

Criteria:	Percentage
Information Technology	82%
Planning	10%
Economic Development	14%
Transportation	5%
Finance	7%
Other	20%

16-6 What steps did the city take before beginning broadband infrastructure development?

Criteria:	Percentage
Assessed and mapped private and city-owned telecommunications infrastructure.	57%
Convened local stakeholders (business, private telecommunications providers, schools, non-profits) to discuss community need.	41%
Benchmarked other cities' actions in broadband.	54%
Conducted survey(s) of community need.	27%
Hired an external consultant to facilitate the process.	39%
Other	23%

16-7 From the following please rank the objectives of the city's broadband community-wide networks (with number 1 being highest):

Criteria:	Average Rank (#1 highest)
Increase Internet access.	3.5
Economic development (attract business/jobs, high-tech business, etc.)	2.9
Municipal livability or quality of life.	3.5
City's future vitality.	3.7
Greater access to e-government services like on-line permitting.	3.5
Serve special needs like schools, government or publicly-owned utilities.	3.9
Provide access to underserved area(s).	3.4
Keeping up with other cities in the metropolitan area.	7.0

17. IT Centralization/Decentralization:

Please indicate the degree to which information technology development and operations are centralized within a single city entity or decentralized across departments.



Response percentages by population category:

Criteria:	2006	2007
1. Decentralized	1%	1%
2. Between decentralized and balanced	2%	1%
3. Balanced.	12%	13%
4. Between balanced and centralized	45%	43%

Criteria:	2006	2007
5. Centralized	41%	35%

20. With regard to the full range of direct service delivery options in your city, please indicate the current service delivery channel methods in the matrix below:

Systems	Less than 25%	25-49%	50-74%	75-100%
Online (Internet)	26%	14%	21%	30%
Internal systems that support civil servants at their desks	8%	9%	17%	57%
Call centers	31%	14%	14%	33%
Kiosks	70%	9%	5%	3%
IVR Systems	53%	18%	9%	7%
After business hours offices (e.g. city offices at the mall)	69%	6%	7%	4%
Other	12%	2%	2%	4%

21. Which emergency alerting methods does your jurisdiction currently have in place (Present) or will implement in the next 12-24 months (Planned):

Method:	Present	Planned
Broadcast-based (Radio/TV) Emergency Alert System (EAS)	80%	3%
Physical alerts (Alarms, sirens, signage)	63%	4%
Phone tree	61%	10%
Door-to-door (pamphlets, posters and runners)	49%	10%
Portal or Web site	82%	6%
Email, text messaging	58%	22%
All Hazards, All alerting methods above	39%	11%

22. Please check the status of the following online applications:

Online service:	None	Implementation Planned	Partially Integrated with back-office systems	Fully Integrated with back-office systems
Special event/use permits	24%	22%	27%	16%
Citizen request/complaint tracking	3%	16%	34%	37%
Code enforcement other than traffic citations	11%	17%	29%	34%
Employee benefits enrollment	14%	25%	23%	28%
Employee online training	15%	17%	34%	24%
Business continuity solutions	21%	24%	21%	17%
Animal services	35%	15%	20%	19%
Property use tracking	14%	13%	17%	41%
Public facilities locator map	11%	11%	17%	50%
Library card or materials renewal	31%	2%	7%	46%
Occupational license renewal	26%	23%	11%	27%
Emergency services alerts	6%	22%	26%	32%
Property assessment or tax information	32%	5%	9%	41%
Taxes	35%	7%	8%	34%
GIS maps on the Internet	2%	12%	13%	61%
GIS data sets request	15%	11%	20%	40%
GIS-based mash-ups (Web applications that combine data from more than one source into an integrated experience using GIS maps)	13%	18%	14%	40%
Parking tickets or traffic citations	7%	4%	1%	20%

The Digital Cities Survey reflects the common vision of the Center for Digital Government, a national research and advisory institute on information technology policies and best practices in state and local government, and the National League of Cities, the oldest and largest national organization representing municipal governments throughout the United States, the mission of which is to strengthen and promote cities as centers of opportunity, leadership and governance.



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