



DIGITAL CITIES SURVEY

EXECUTIVE SUMMARY

Center for Digital Government's Report from the
2008 Digital Cities Survey

Underwritten by:



Alcatel-Lucent



OnBase
a Hyland Software solution

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DIGITAL
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www.centerdigitalgov.com

E.Republic's Center for Digital Government and the *Digital Communities* program released results of the eighth annual Digital Cities Survey, which examines how cities use technology to create a seamless environment between local government and constituents. The 2008 survey was underwritten by Alcatel-Lucent, AT&T, Blackberry and Hyland Software, developers of OnBase. All companies are proud partners of city governments across America.

"This year's winners reflect that even with budgetary challenges, cities are placing a high value on citizen engagement and improved services," said Cathilea Robinett, executive director for the Center for Digital Government. "Cities are incorporating newer technologies such as webcasting, podcasts and blogs while continuing to use information technology to enhance delivery options for citizens and businesses."

The survey is open to all U.S. cities with a population of 30,000 or more. Respondent cities are classified into four size-based categories.

THE FIRST-PLACE WINNERS IN EACH OF THE FOUR POPULATION CATEGORIES ARE:

- ▶ **Aurora, Colo.** (250,000 or more population)
- ▶ **Lincoln, Neb.** (125,000–249,999 population)
- ▶ **Roanoke, Va.** (75,000–124,999 population)
- ▶ **Lynchburg, Va.** (30,000–74,999 population)

In recognition of their hard work and innovation, the survey's top digital cities were honored at an awards ceremony at the National League of Cities' conference in Orlando, Fla., in November 2008.

2008 WINNERS

In each of the population categories, the top 10 cities are adjudicated based on how comprehensive and innovative their IT programs are in support of government operations and in serving citizens and businesses.

TOP 10 DIGITAL CITIES BY POPULATION

► 250,000 or more population category:

- 1st City of Aurora, Colo.
- 2nd City of Virginia Beach, Va.
- 3rd City of Miami, Fla.
- 4th City of Tucson, Ariz.
- 5th City of Tampa, Fla.
- 6th City of Riverside, Calif.
- 7th City of Mesa, Ariz.
- 8th City of Corpus Christi, Texas
- 9th Metropolitan Government of Nashville & Davidson County, Tenn.
- 10th City of Honolulu, Hawaii (tie)
- 10th City of Houston, Texas (tie)

► 125,000-249,999 population category:

- 1st City of Lincoln, Neb.
- 2nd City of Winston-Salem, N.C. (tie)
- 2nd Salt Lake City, Utah (tie)
- 3rd City of Madison, Wisc.
- 4th City of Alexandria, Va.
- 5th City of Norfolk, Va.
- 6th City of Irving, Texas
- 7th City of Hampton, Va. (tie)
- 7th City of Hollywood, Fla. (tie)
- 8th City of Cape Coral, Fla. (tie)
- 8th City of Richmond, Va. (tie)
- 9th City of Chesapeake, Va. (tie)
- 9th City of Lakewood, Colo. (tie)
- 10th City of Durham, N.C.

► 75,000–124,999 population category:

- 1st City of Roanoke, Va.
- 2nd City of Independence, Mo. (tie)
- 2nd City of West Palm Beach, Fla. (tie)
- 3rd City of Richardson, Texas (tie)
- 3rd City of Santa Monica, Calif. (tie)
- 4th City of Arvada, Colo.
- 5th City of Orem, Utah
- 6th City of Lawrence, Kan.
- 7th City of Ann Arbor, Mich. (tie)
- 7th City of Westminster, Colo. (tie)
- 8th City of Boulder, Colo.
- 9th City of Lee's Summit, Mo.
- 10th City of Pueblo, Colo.

► 30,000 – 74,999 population category:

- 1st City of Lynchburg, Va.
- 2nd Town of Flower Mound, Texas
- 3rd Town of Jupiter, Fla.
- 4th Town of Blacksburg, Va.
- 5th City of Charlottesville, Va.
- 6th City of Annapolis, Md.
- 7th City of Medford, Ore.
- 8th City of Delray Beach, Fla.
- 9th Town of Manchester, Conn.
- 10th City of Boynton Beach, Fla.

Major Findings

The Center for Digital Government and the National League of Cities (NLC) in association with *Government Technology* magazine and the *Digital Communities* program recently completed the eighth annual Digital Cities Survey. This survey forms a vital component of the longest running suite of national surveys of government information technology (IT) initiatives, conducted each year to benchmark excellence and innovation in the public sector's use of information technology.

Increasingly, survey results are used in strategic planning by a growing number of jurisdictions as well as for research by public policy think tanks. They also frequently receive editorial coverage from major media outlets, including *The Wall Street Journal*, *USA Today* and *The New York Times*.

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In the 2008 survey, 21 questions and more than 100 data points probed the extent of:

- 1) implementation and adoption of online service delivery;
- 2) planning and governance that makes the transformation to digital government possible; and
- 3) infrastructure and architecture that also makes the transformation possible.

An open-ended section allowed cities to discuss their initiatives — such as community broadband, organization and structure data and citizen engagement — in their own words.

The 2008 survey was open to all U.S. cities with a population of 30,000 or more. Respondent cities are classified into four size-based categories as follows:

- ▶ 30,000-74,999 – 16 percent;
- ▶ 75,000-124,000 – 28 percent;
- ▶ 125,000-249,000 – 34 percent; and
- ▶ 250,000 or more – 22 percent.

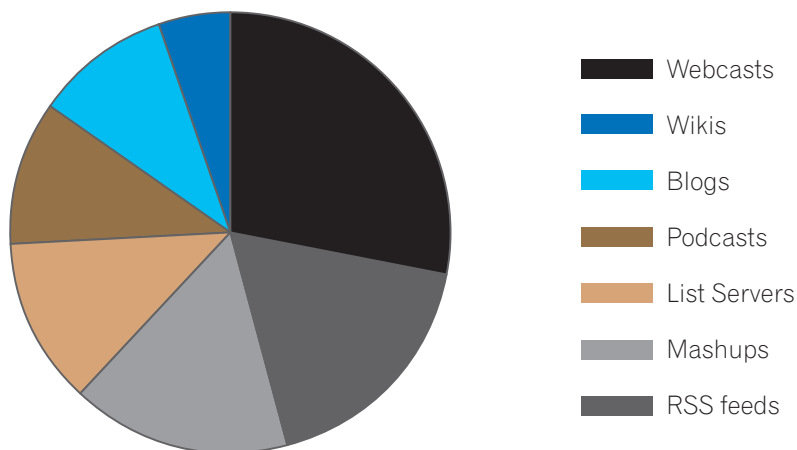
In looking at the combined survey results from different population categories, the survey documented a continuing trend of increased online transactions, citizen participation opportunities, transparency and an expanding use of webcasts and blogs on city Web sites.

ONLINE SELF SERVICE

- ▶ 100 percent of respondents have Web sites and 94 percent have portals with transactions
- ▶ 82 percent have webcasts that feature streamed audio and video — live and archived — including Civic cable channel
- ▶ 54 percent have all-hazard alerts
- ▶ 52 percent have RSS feeds
- ▶ 47 percent have mashups in which government-held data, such as school performance, crime statistics and home sales are automatically plotted on an online mapping utility
- ▶ 36 percent have list serves and their archives
- ▶ 31 percent have podcasts
- ▶ 29 percent have blogs
- ▶ 15 percent have wikis

Utility bills and payment is the service most implemented at 63 percent, followed closely by parking tickets or traffic citations at 62 percent, and parks and recreation services at 54 percent.

A breakdown of the range of online services utilizing newer information technologies can be seen in the following graph:



Of course, not all interaction with citizens is or can be conducted online. The use of Web services by constituents is underscored by what we describe as the current delivery channel mix. In other words, how are citizens and government employees accessing the city's IT services?

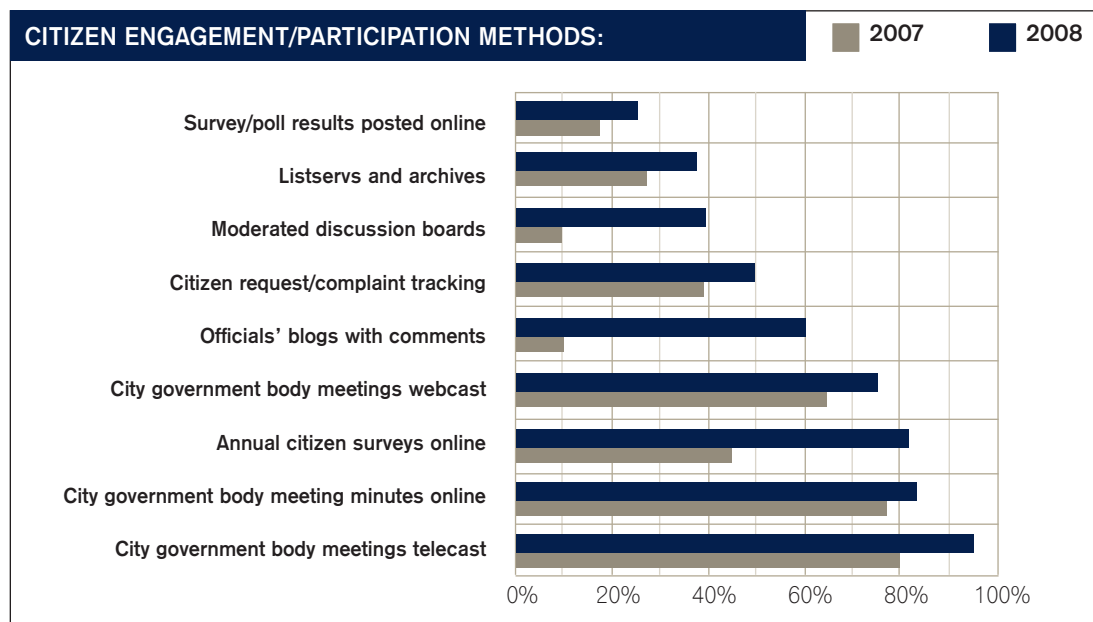
The majority of services are delivered online by more than one-third of the responding cities (36 percent). In addition, 40 percent are using call centers for the majority of their services. IVR systems, kiosks and after-business-hours offices are also providing services (in the range of 25 percent or less of all services delivered).

CITIZEN PARTICIPATION AND GOVERNMENT TRANSPARENCY ONLINE

As noted by Marilyn Gittell, professor of political science at the Graduate School and University Center of the City University of New York, “The experience of self-government in the U.S. is centered in two institutions: local government and civil society. The strong tradition of local government is directly related to the fear of a potentially tyrannical central state. Jefferson idealized the access to local government and the participation of the educated citizen in it as intrinsic to democracy. Participation in elections in a larger representative political system, the Republic, was only one aspect of citizenship. Local governments were the source of community identification, and more responsive to felt public needs — and therefore a more direct vehicle for citizen engagement.”¹

The continuing growth of citizen participation opportunities and transparency through the Web is a significant trend, one that is vital for the health of our democratic institutions. Some incredible rates of increase are occurring. Of particular note:

- ▶ 94 percent of responding cities (up from 80 percent last year) telecast their city governing body meetings, including Civic cable channel
- ▶ 85 percent (up from 76 percent last year and 71 percent in 2006) have city governing body meeting minutes available online, archived and searchable
- ▶ 74 percent webcast (streamed lived and archived) their city governing body meetings (up from 66 percent last year)
- ▶ 23 percent podcast their city governing body meetings (up from 14 percent last year)
- ▶ 83 percent conduct online annual surveys of citizen satisfaction with city services (up from 47 percent last year), and 43 percent conduct online polls between meetings to gauge community perception on matters of public concern (up from 21 percent last year)
- ▶ 28 percent (up from 17 percent last year) are now posting the results of the above polls or surveys for public comment online
- ▶ 50 percent provide citizen request and complaint tracking (up from 37 percent last year)
- ▶ 36 percent of responding cities have created listservs and their archives (up from 28 percent last year)
- ▶ 39 percent have moderated discussion boards (up from 11 percent last year)
- ▶ 61 percent (up from 10 percent last year!) have blogs that allow comments to entries by the mayor or other city officials



IMPLEMENTATION OF WEB TOOLS AND APPLICATIONS

Interrelating the types of services available online with the extent of interactive transactions possible presents a very complete overview of how far the Web interface with citizens has evolved. Examined based on specific services to citizens, we see in the sample of services in the chart below that there are wide differences in both online availability and the nature of possible transactions offered.

Services	View and Download (Print & fill out)	Submit Online	Transact* Online	Transact* via IVR
Building permits	62%	24%	42%	24%
Public procurements — bids or RFPs	70%	20%	27%	1%
Parks and recreation services	45%	23%	54%	6%
Utility bills	19%	17%	63%	24%
Library card or materials renewal	15%	17%	50%	8%
Parking tickets or traffic citations	16%	16%	62%	12%
Tax filing and payment	51%	25%	17%	9%
City-owned property use tracking	28%	11%	15%	1%
Public facilities locator map	55%	12%	28%	1%
GIS maps on the Internet	44%	22%	42%	1%

*Transact means a secure end-to-end transaction that includes submission and payments as authorized.

THE ONE-STOP CITIZEN PORTAL

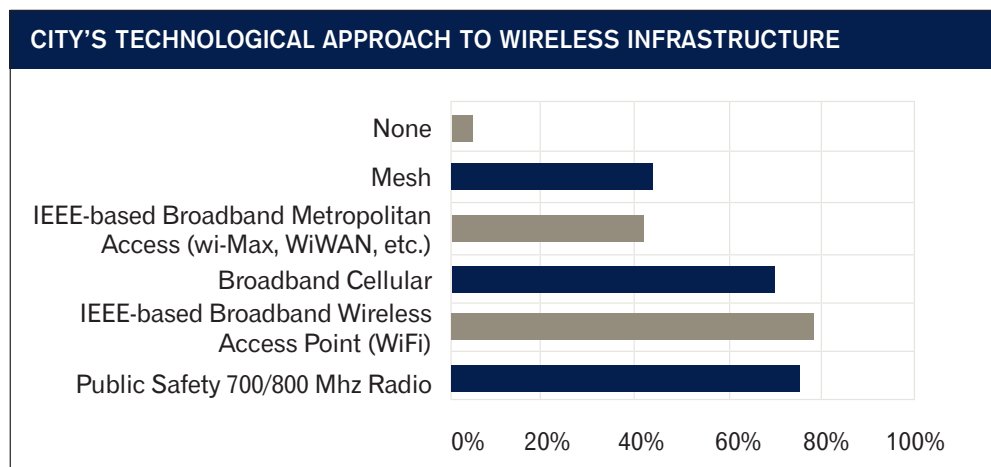
It has long been noted that citizens frequently do not know the organizational structure of their local government. When they wish to report a problem or request services, they do not always know where to go. The proven solution is for the city to provide a single citizen service area on its Web site where constituents can request services, report problems or complaints about services and complete citizen satisfaction surveys about city services. This type of offering to citizens increased 6 percent in the past year. Specifically, when asked if the city provides such a single service area, the answers broke down as follows:

Does the city provide a single citizen service area on its Web site?	Percent
a. No, not at this time.	15%
b. Implementation is scheduled by December 31, 2008, or the service center exists but is not yet accessible through one click from the Web site's home page.	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.	37%
d. The Web citizen service area has the attributes listed in "c" above, and utilizes the same database as the telephone call center.	37%
Total	100%

BROADBAND AND WIRELESS INFRASTRUCTURE

As information technologies continue to evolve and citizens become more familiar and comfortable with what has now been dubbed Web 2.0 technologies, issues of infrastructure — utilized and potentially available to the city — become increasingly relevant. Several questions in this year's survey intended to capture continuing broadband trends.

The survey sought to identify the underlying thinking about a city's technological approach to wireless. Respondents were asked to indicate their strategic directions regarding wireless (more than one could be selected).



Cities were also asked how broadband networking – both wireless and wire line broadband community-wide networks – were being built.

City's approach to broadband build-out:	None	City-owned Utility	Private Provider	Both
Wire line broadband:	19%	14%	50%	36%
Wireless broadband:	22%	15%	42%	41%

Along the same lines, the cities were asked to indicate how such network build-outs — both wireless and wired — were funded.

City's approach to broadband funding:	None	Advertising (directly or through third party)	Public appropriation	Subscriber fees/charge backs	Combination
Wire line broadband:	55%	3%	22%	20%	20%
Wireless broadband:	50%	5%	22%	12%	31%

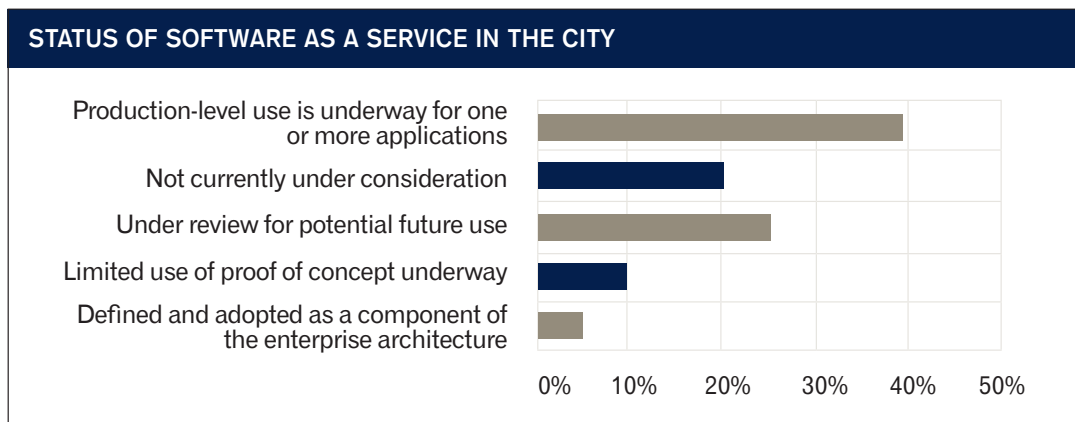
The survey queried what steps the cities had taken before beginning infrastructure development. Sixty-seven percent of responding cities had assessed and mapped private and city-owned telecommunications infrastructure, as well as benchmarked other cities' actions in broadband. Forty-five percent had convened local stakeholders (business, private telecommunications providers, schools and non-profits) to discuss community need. In addition, 40 percent hired an external consultant to facilitate the process, and 35 percent conducted at least one survey of community need.

The cities' number one objectives for their broadband community-wide networks were as follows:

Number one objective of the city's broadband community-wide network:	Percent
Economic development (attract business/jobs, high-tech business, etc.)	26%
Municipal livability or quality of life	19%
Serve special needs like schools, government or publicly-owned utilities	18%
Greater access to e-government services like on-line permitting	10%
City's future viability	10%
Increase Internet access	9%
Provide access to underserved area(s)	8%
Keeping up with other cities in the metropolitan area	1%

SOFTWARE AS A SERVICE

The notion of software as a service (SaaS) is promoted by some vendors as one direction the applications industry can evolve to provide increased benefits. The survey sought to identify how much traction this is gaining in small and large cities.



GREENING OF CITIES

As the National League of Cities (NLC) notes on its Web site, "Not long ago, being "green" might have been thought of as a peripheral, niche issue ... that's not the case anymore, and many cities are playing a leading role in fostering understanding that 'green' cities are strong cities. During tough economic times, and with a rapidly changing global economy, now is the time to make choices that lead to a sustainable future."

This year's survey sought to determine the degree that IT strategies and practices aligned with the city's overall sustainability program or climate action plan. Slightly more than one-quarter of respondents (27 percent) felt that their IT strategies were fully aligned to environmental plans or programs. One-third of respondents (32 percent) felt their IT strategies were somewhat aligned and just 3 percent felt they were not aligned.

Additionally, the survey asked what steps the city had taken through IT to ensure climate and environmental sustainability. The most significant actions to date have been data center and server virtualization and consolidation, e-waste recycling efforts and hardware refresh policies that reflect energy efficiency best practices.

Cities' green/sustainability efforts:	Percent
Established metrics and installed instruments to measure energy efficiencies	30%
Data center consolidation and virtualization	66%
Server consolidation and virtualization	86%
PC, laptop and server refresh policies reflect energy efficiency best practices	69%
E-waste recycling efforts and Earth-friendly disposal	77%
Transparency about the resulting carbon footprint using initiatives such as the Carbon Disclosure Project at www.cdproject.net	5%

CONCLUSION

Again this year, the Digital Cities Survey documented real and substantial technological progress and innovation by city governments of all sizes. This continued drive to harness new technologies to improve service to citizens and to ensure more efficient use of government resources is illustrated by the range of initiatives upon which cities have embarked, despite the budgetary challenges that seem to be an enduring reality of this decade.

¹*Democracy and Citizen Participation in the U.S.: The Role of Local Government*,
Marilyn Gittell, Department of Political Science, The Graduate Center — The City University of New York

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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