

Is Your Local Government Plugged In? Highlights of the 2000 Electronic Government Survey

Prepared for ICMA and PTI

by

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Introduction

Just a few short years ago, local governments across the United States considered themselves at the cutting edge of technology if they provided public access terminals in libraries and mall kiosks to share information with citizens.

Today, however, thanks to the proliferation of Internet-based retailers, more and more citizens have come to expect an increasingly higher level of convenience and services from their local governments, including electronic payment of taxes, tickets and fines; online registrations; and access to a range of local government documents and records. What are communities doing to address these new demands for electronic services?

In the fall of 2000, the International City/County Management Association (ICMA) and Public Technology, Inc. (PTI) conducted a survey of city and county governments concerning the use of electronic government. The survey was mailed to 3,749 local governments in the United States (see the survey response table on page 2).¹ More than half of the local governments responded, including 50.7% of municipalities and 48.2% of counties. Their responses tell us a great deal about the electronic delivery of community services, the digital divide, and e-procurement. A summary of their responses follows.

¹ This includes 2,899 municipalities above 10,000 in population and 850 counties with either the council-administrator (manager) or council-elected executive form of government.

E-Gov Survey Response Rate and Geographic Distribution

Categories	Number of municipalities and counties surveyed	Responses	
		Number	Percent
Total	3,749	1,881	50.2
Population group			
Over 1,000,000	31	15	48.4
500,000-1,000,000	56	20	35.7
250,000-499,999	105	50	47.6
100,000-249,999	283	180	63.6
50,000-99,999	509	268	52.7
25,000-49,999	853	445	52.2
10,000-24,999	1,837	865	47.1
5,000-9,999	55	27	49.1
2,500-4,999	9	6	66.7
Under 2,500	11	5	45.5
Geographic region			
Northeast	880	306	34.8
North-Central	1,000	518	51.8
South	1,180	618	52.4
West	689	439	63.7
Geographic division*			
New England	338	126	37.3
Mid-Atlantic	542	180	33.2
East North-Central	703	335	47.7
West North-Central	297	183	61.6
South Atlantic	664	384	57.8
East South-Central	188	73	38.8
West South-Central	328	161	49.1
Mountain	202	125	61.9
Pacific Coast	487	314	64.5
Metro status			
Central	696	366	52.6
Suburban	1,955	1,013	51.8
Independent	1,098	502	45.7

* Geographic divisions: *New England*: the states of Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; *Mid-Atlantic*: the states of New Jersey, New York, and Pennsylvania; *East North-Central*: the states of Illinois, Indiana, Michigan, Ohio, and Wisconsin; *West North-Central*: the states of Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota; *South Atlantic*: the states of Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, and the District of Columbia; *East South-Central*: the states of Alabama, Kentucky, Mississippi, and Tennessee; *West South-Central*: the states of Arkansas, Louisiana, Oklahoma, and Texas; *Mountain*: the states of Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; *Pacific Coast*: the states of Alaska, California, Hawaii, Oregon, and Washington.

How Has E-Government Changed Local Government?

Although typically e-government involves use of the Internet and Web-based technology, this survey defined e-government as “the delivery of services and information, electronically, to businesses and residents, 24 hours a day, seven days a week.” Consequently, e-government is not limited to Web-based services.

Slightly over 40% of the survey respondents provided information about the changes they have experienced as a result of e-government. Forty-four percent of these indicated that provision of e-government services has increased demands on local government employees. Because significant e-government resources are devoted to Web-based initiatives and most local government Web sites are relatively new, it is reasonable that an initial increased demand would be placed on staff. At the same time, however, one-third (36.2%) responded that business processes were being re-engineered, and one-quarter (27.4%) said that business processes were more efficient. Finally, more than 4 in 10 respondents indicated that e-government has changed the role of local government staff.

More Than 80% of Local Governments Currently Have a Web Site

Eighty-three percent of responding cities and counties have an Internet Web site and 10% plan to create one within the next 12 months. Among cities with populations of 10,000 and over, 85.8% have Web sites. Not surprisingly, population influences a local government’s Web presence: for example, all of the jurisdictions with a population of 500,000 and above have Web sites. More than two-thirds of local government Web sites are less than three years old. All jurisdictions under 10,000 in population have had their Web sites for two years or less. Of the local governments without Web sites, 207 (70%) indicate that they plan to create one within the next year.

A Slight Majority Have a Web Administrator

Slightly more than half of local governments report having a Web manager/administrator position. Again population size influences the response, with the percentage of local governments that report having a Web manager increasing as population size increases. The majority of local governments integrate these responsibilities into other local government positions, and several jurisdictions report using volunteers or interns to handle these responsibilities.

Fewer Than 20% of Local Governments Provide Internet Access to All Employees

In a slight majority of local governments (52.9%), Internet access is provided to all departments but not to all employees. Slightly more than one-fourth of local governments give access to some, but not all, departments. Limited employee access to the Internet is determined by policy for slightly more than half (54.3%), and 45.7% identified insufficient resources as the reason for limited access.

Only a Few Local Government Web Sites Allow Paid Advertising

Only 20 of the responding local governments allow paid advertising on their Web sites, and only 145 have a formal policy regarding paid advertisements. Although the survey did not ask why paid advertising is prohibited, one reasonable assumption might be that local government officials and citizens view their Web sites as public resources and feel that allowing advertising on them would violate the purpose of the site.

Local Governments Use Several Tools to Market Web Sites

Local governments are able to promote their Web sites to residents and businesses by placing ads or information in local government publications (61.6%), placing inserts in utility bills and other bills (34.1%), and using flyers (23.2%) and television (25.1%) and newspaper (21.1%) ads. Most responding local governments indicate that citizen response to their Web sites meets their expectations (65.2%), and nearly equal numbers report that citizen response either exceeds (16.8%) or is below expectations (17.9%).

E-Government Master Plans Are on the Horizon

Although relatively few local governments (153) report currently having an e-government strategy or master plan, well over half of those that do not are considering developing one within the next year.

Lack of Technical Staff Is a Major Barrier to E-Government

For local governments that engage in e-government and those that plan to, the biggest obstacles are lack of information technology or Web staff (66.6%) and lack of financial resources (54.3%), followed by lack of technology and Web expertise (46.7%). Other barriers include security issues (42.1%), the need to upgrade current technology (33.9%), privacy issues (27.7%), and issues relating to convenience fees for online transactions (26.4%).

E-Government Vendors Have Made Few Inroads

The vast majority of local governments do not contract for services with e-government vendors. Of the 242 jurisdictions that do, 213 reported on their level of satisfaction with vendor services. Almost 85% of them rated their satisfaction level from 3 to 5 on a five-point scale, with 5 being very satisfied and 1 being very unsatisfied.

Outsourcing Is High for Other Web Administration Functions

Although a substantial majority of local governments do not contract for services with an e-government vendor, many respondents indicate that they currently outsource or plan to outsource certain Web-related functions. Specifically, 773 outsource or plan to outsource Web site hosting, 652 outsource or plan to outsource Web site design, 401 outsource or plan to outsource Web site operations and management, and 425 outsource or plan to outsource integration of their Web site with local government databases. When the number of local governments currently outsourcing each of these functions is divided by the number of local governments reporting that they have a Web site (1,566), we find that nearly 4 in 10 (39.7%) outsource the Web hosting function, one quarter (26.6%) outsource Web design, 16.4% outsource Web operations, and 7.5% outsource data integration. Likewise, dividing the number of local governments planning to outsource by the number that have a Web site or plan to have a Web site in the next year (1,773), we find that 8.5% plan to outsource Web hosting, 13.3% plan to outsource Web design, 8.1% plan to outsource Web site operations, and 17.4% plan to outsource data integration, perhaps the most challenging aspect of providing information online.

Overcoming the Digital Divide

As more information and services are made available via Web-based technologies, the need for universal access grows more urgent. Not only is the cost of hardware prohibitive for some people, but the monthly fee for Internet access is too steep. A total of 1,638 local governments answered a question about strategies to narrow the gap between information “haves” and “have-nots.” Of these, more than

80% report public access terminals in city and county facilities. Nearly 45% work with local schools to provide computer access, and 22.6% provide technical support and/or information technology training for citizens.

Local Governments Plan to Offer Web-Based Financial Transactions

The survey defined interactive service delivery as “two-way communications in which a Web site visitor can submit information or payment, as well as receive information.”

Few local governments currently offer financial transactions through their Web sites. For example, of the 1,773 jurisdictions that have a Web site or plan to have a Web site in the next year, a quarter (446) indicate an interest in online payment of taxes ("currently offer" or "plan to offer"), but fewer than 1 in 10 of those interested currently offer this service (41). Even smaller numbers report offering other financial transactions: 35 of reporting local governments currently offer online payment of utility bills; 27 offer online payment of license and permit fees; and 26 offer online payment of tickets and fines. However, many local governments plan to offer the capability for online financial transactions: of those local governments that have or plan to have a Web site in the next year, 43.4% plan to offer license and permit fees payment; 32.7%, utility bill payment; 31.5%, ticket and fine payment; 22.8% tax payment; and 5.2% online payment for other services.

Nonfinancial Services Will Be Part of Web Sites

Fewer than 300 local governments report that they currently offer one of the nine nonfinancial services covered on the survey, but a high proportion plan to offer these services. Again, it is interesting to compare these numbers with the number of local governments that have or plan to have a Web site. Of the 1,566 local governments that have a Web site, 18.1% can take requests for service (such as pothole repair), 14.9% can take requests for government records, 11.2% offer interactive maps, and 7.5% offer program registration. Smaller percentages offer online property registration, business license applications, permit applications or renewals, and voter registration.

However, of the 1,773 local governments that either have or plan to have a Web site in the next year, 42% plan to offer permit application and renewal online, 35.7% plan to offer program registration, 34.6% plan to make business license applications available online, and 30.1% plan to enable online requests for services. Few local governments outsource or plan to outsource either financial or nonfinancial transactions.

Slightly More Than One-Half of Local Governments Use E-Procurement

Almost 53% of respondents make purchases online. In addition, although only one-third of reporting local governments post requests for bids or proposals (RFPs) on their Web sites, of those that do not, about 70% plan to do so.

Many respondents that reported on the impact of posting RFPs online indicate that the number of bids has not increased (60.7%); however, 39.1% report receiving more bids. It appears that e-procurement does not have a material effect on the quality or cost of the bids. Approximately 82% report the same quality of bids, and 16.6% report an increase in quality. Similarly, most (85.4%) report that the average cost of the service procured remained the same.

Next Steps

Local governments are adopting elements of e-government with enthusiasm. More than 8 in 10 have Web sites, and the majority of those without sites plan to establish them within the next year. In addition, most local governments feel that their citizens' responses to their Web sites have met or exceeded expectations. At this point in the development of e-government, however, few local governments are providing interactive services online. This is undoubtedly because e-government is relatively new, with about two-thirds of local governments having had Web sites for less than three years. It may also be because local governments report encountering barriers to e-government such as staffing, resources and technology expertise as well as concerns with privacy and security.

We expect that most of the trends observed in this survey will continue. More local governments will adopt e-government until nearly all of them have Web sites and offer a range of services online. We anticipate that as e-government applications become more extensive and sophisticated, local governments will experience (at least initially) increases in information technology expenditures and technical staffing requirements. On a more positive note, more extensive and sophisticated e-government also should promote greater efficiency, effectiveness, and responsiveness in mission-critical programs.

ELECTRONIC GOVERNMENT SURVEY 2000 AGGREGATE RESULTS

General Information

For the purposes of this survey, the local government Web site is the "official" Web site of the jurisdiction. This does not include Web sites produced by the Chamber of Commerce.

1. Does your local government have a Web site?

Yes: 83.3%

No: 16.7%

Total reporting: 1,879

1A. If no, do you plan to create a Web site in the next year?

Yes: 69.9%

No: 30.1%

Total reporting: 296

1B. If yes, how long have you had a Web site? (Check only one.)

Less than 1 year: 15%

1 to 2 years: 26.9%

2 to 3 years: 26.5%

3 to 4 years: 15.3%

4 to 5 years: 11.8%

More than 5 years: 4.4%

Total reporting: 1,173

2. Does your local government have an intranet?

Yes: 59.1%

No: 40.9%

Total reporting: 1,685

3. Do you have the position of Web manager or Web administrator in your local government?

Yes: 51.3%

No: 48.7%

Total reporting: 1,780

3A. If yes, is the position (Check only one.)

Full-time: 26.3%

Part of another position: 68.1%

Part-time: 3.7%

Volunteer: 0.8%

Other: 3.0%

Total reporting: 891

3B. If the position is a full-time position, please list the starting salary. (Annual starting salary.)

Population group	Mean
Over 1 million	\$54,900
500,000 to 1,000,000	\$51,773
250,000 to 499,999	\$49,462
100,000 to 249,999	\$41,814
50,000 to 99,999	\$41,019
25,000 to 49,999	\$37,921
10,000 to 24,999	\$39,278
Total reporting: 154	Mean: \$42,527

4. Which department has overall responsibility for the day-to-day management of your local government's Web site? (Check only one.)

City manager/CAO	23.4%	IT department	38.9%
Finance department	7.8%	PIO/Communications office	8.9%
Library	2.4%	Mayor's office	2.6%
Business development/	1.8%	Clerk's office	2.3%
Other	11.8%		
Total reporting:	1,492		

5. Extent of access to e-mail and to the Internet by local government employees.

5A. E-mail

No employees: 1.2%	Some departments: 21.6%
Every department: 48.2%	Every employee: 29.0%
Total reporting: 1,675	

5B. Internet

No employees: 0.7%	Some departments: 27.5%
Every department: 52.9%	Every employee: 19.0%
Total reporting: 1,661	

6. If access to the Internet is limited (not available to all employees), why is it limited? (Check only one.)

Insufficient resources: 45.7%	Local government policy: 54.3%
Total reporting: 1,219	

7. Do you have a written Internet use policy for employees that regulates their use of the Internet?

Yes: 59.2%	No: 40.8%	Total reporting: 1,726
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7A. If no, do you plan to create an Internet use policy in the next year?

Yes: 77.3%	No: 22.7%	Total reporting: 573
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8. Do you have a written e-mail use policy for employees that regulates their use of e-mail?

Yes: 56.6%	No: 43.4%	Total reporting: 1,695
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8A. If no, do you plan to create an e-mail use policy in the next year?

Yes: 74.2%	No: 25.8%	Total reporting: 578
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9. Have you developed a formal policy regarding paid advertisements on your Web site?

Yes: 9.5%	No: 90.5%	Total reporting: 1,525
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9A. Do you currently allow paid advertisements on your local government's Web site?

Yes: 2.1%

No: 97.9%

Total reporting: 942

10. How do you promote your Web site to residents and businesses? (Check all applicable.)

Inserts in utility and/or other bills	34.1%	Educational campaign in the school system	4.3%
Ads/info in local government pubs	61.6%	Flyers	23.2%
Television ads/promos	25.1%	Newspaper ads	21.1%
Press releases	1.5%	Letterhead	6.5%
Other	22.6%		
Total reporting: 1,293			

11. Please describe the citizen response to your local government's Web site. (Check only one.)

Meets our expectations: 65.2%

Below our expectations: 17.9%

Exceeds our expectations: 16.8%

Total reporting: 1,384

E-Government

E-government is the delivery of services and information, electronically, to businesses and residents, 24 hours a day, seven days a week.

12. Does your local government have an overall e-government strategy and/or master plan to guide its future e-government initiatives?

Yes: 8.8%

No: 91.2%

Total reporting: 1,743

12A. If yes, who has overall responsibility for implementing this strategy or plan? (Check only one.)

City manager/CAO office	24.1%	IT department	51.8%
Finance department	5.0%	PIO/Communications office	2.8%
Library	0.0%	Mayor's office	1.4%
Business development/affairs office	1.4%	No single office or department	5.0%
Other	8.5%	Total reporting:	141

12B. If no, are you considering developing a formal e-government strategy or plan within the next year?

Yes: 60%

No: 40%

Total reporting: 1,464

13. Which if any of the following barriers to e-government initiatives has your local government encountered? (Check all applicable.)

Lack of technology/Web staff	66.6%
Lack of technology/Web expertise	46.7%
Lack of information about e-gov applications	28.3%
Lack of support from elected officials	12.4%
Need to upgrade technology (PCs, networks, etc.)	33.9%
Issues regarding privacy	27.7%
Issues regarding security	42.1%
Lack of financial resources	54.3%
Issues relating to convenience fees for transactions	26.4%
Time constraints	1.3%
Other	7.4%
Total reporting:	1,547

14. How has e-government changed your local government? (Check all applicable.)

Has reduced the number of staff	1.4%
Has changed the role of staff	41.3%
Has reduced time demands on staff	17.3%
Has increased demands on staff	44.0%
Has increased non-tax-based revenues	1.3%
Business processes are being re-engineered	36.2%
Business processes are more efficient	27.4%
Has reduced administrative costs	10.1%
Too early to tell	2.8%
Other	14.5%
Total reporting:	782

15. Please indicate whether and how your local government broadcasts its council meetings over the Web:

Audio and/or video live: 4.2%	Audio and/or video, but it isn't live: 1.4%
We don't broadcast over the Internet: 94.4%	Total reporting: 1,487

16. What is the budgeted amount for e-government activities for the current fiscal year? Please include any hardware or software purchases and staff resources in this amount. (Check only one.)

0 to \$9,999	55.2%
\$10,000 to 24,999	12.7%
\$25,000 to 49,999	10.2%
\$50,000 to 99,999	10.6%
\$100,000 or more	11.3%
Total reporting:	1,483

17. Has your local government contracted for services with an e-government vendor?

Yes: 14.3%	No: 85.7%	Total reporting: 1,690
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17A. If yes, how satisfied are you with services provided by the e-government vendor? (Check only one, on a scale of 1 - very unsatisfied - to 5 - very satisfied.)

1 very unsatisfied	3.3%
2	12.2%
3	38.0%
4	35.2%
5 very satisfied	11.3%
Total reporting:	213

18. Please indicate whether your local government outsources or plans to outsource any of the following aspects of e-government.

	Currently outsource	Plans to outsource	Total reporting
Web site hosting	80.5% (622)	19.5% (151)	773
Web site design	64.0% (417)	36.0% (235)	652
Web site operations/mgmt	64.1% (257)	35.9% (144)	401
Integration of Web site with local government databases	27.5% (117)	72.5% (308)	425

Digital Divide

In this survey the digital divide is defined as the gap between those citizens who have access to Internet or technology services, tools, and resources, and those who do not.

19. What percent of households in your jurisdiction do you estimate to have personal computers?

None:	0.0%	1 to 20%:	7.9%
21 to 40%:	31.5%	41 to 60%:	35.2%
61 to 80%:	20.8%	More than 80%:	4.6%
Total reporting:	1,638		

20. Please indicate which of the following your government has implemented to address the digital divide. (Check all applicable.)

Public access terminals in city/county facilities:	82.8%	Working with local schools:	44.6%
Federal programs:	7.4%	Community technology centers:	12.9%
Programs or donations by private sector companies:	14.4%	Kiosks:	13.5%
Training/technical support for citizens:	22.6%	Other:	6.7%
Total reporting:	1,222		

Interactive Service Delivery

For the purposes of this survey, interactive service delivery is defined as two-way communications in which a Web site visitor can submit information or payment, as well as receive information.

21. Please indicate which of the following financial transactions your jurisdiction currently offers or plans to offer on its Web site, and which it currently outsources or plans to outsource. (Check all applicable.)

	Currently offers	Plans to offer	Total reporting
Online payment of tickets/fines	4.4%	95.6%	585
Online payment of taxes	9.2%	90.8%	446
Online payment of utility bills	5.7%	94.3%	615
Online payment of license/permit fees	3.4%	96.6%	797
Other	32.4%	67.6%	68
	Currently outsources	Plans to outsource	Total reporting
Online payment of tickets/fines	7.4%	92.6%	95
Online payment of taxes	25.6%	74.4%	90
Online payment of utility bills	13.2%	86.8%	91
Online payment of license/permit fees	4.7%	95.3%	106
Other	21.4%	78.6%	14

22. Please indicate which of the following transactions your jurisdiction currently offers or plans to offer on its Web site, and which it currently outsources or plans to outsource. (Check all applicable.)

	Currently offers	Plans to offer	Total reporting
Voter registration	13.8%	86.2%	225
Property registration (animal, bicycle, etc.)	4.3%	95.7%	347
Business license application or renewal	7.8%	92.2%	666
Permit application or renewal	9.3%	90.7%	824
Registration for programs/services (parks/rec, etc.)	15.7%	84.3%	752
Requests for service (streetlight repair, potholes, etc.)	34.7%	65.3%	819
Requests for local government records	32.2%	67.8%	727
Interactive maps	25.3%	74.7%	696
Employment applications	80.0%	20.0%	15
Other	57.7%	42.3%	52

	Currently outsources	Plans to outsource	Total reporting
Voter registration	59.3%	40.7%	27
Property registration (animal, bicycle, etc.)	27.8%	72.2%	18
Business license application or renewal	11.6%	88.4%	43
Permit application or renewal	12.1%	87.9%	58
Registration for programs/services (parks/rec, etc.)	4.0%	96.0%	50
Request for service (streetlight repair, potholes, etc.)	12.1%	87.9%	33
Requests for local government records	12.1%	87.9%	33
Interactive maps	23.7%	76.3%	38
Employment applications	0%	100%	1
Other	0%	100%	2

23. What is the average number of interactive transactions on your Web site per month?

Mean: 6,293

Total reporting: 516

24. Does your local government charge convenience fees for these Web transactions?

Yes: 4.9%

No: 95.1%

Total reporting: 960

E-Procurement

For the purposes of this survey, e-procurement is defined as buying or selling products over the Internet.

25. Does your local government currently purchase products over the Internet?

Yes: 52.7%

No: 47.3%

Total reporting: 1,734

25A. If no, does your local government plan to purchase goods and services over the Internet?

Yes: 51.4%

No: 48.6%

Total reporting: 494

26. Does your local government currently post requests for bids or requests for proposals (RFPs) on its Web site?

Yes: 31.1%

No: 68.9%

Total reporting: 1,532

26A. If yes, please indicate what if any difference posting requests for bids or RFPs on your Web site has made. (Check only one in each row.)

	Increased	Decreased	Remained the same	Total
Number of bids/proposals received has	39.1%	0.3%	60.7%	394
Quality of bids/proposals received has	16.6%	1.3%	82.1%	386
Average cost of services procured has	3.7%	10.9%	85.4%	377

26B. If no, are you planning to post requests for bids or RFPs on your local government Web site?

Yes: 70.5%

No: 29.5%

Total reporting: 928