### **UC Irvine**

### People, Organizations, and Information Technology

### **Title**

Information, The Internet, Elected Officials, and Local Government Decision Making

### **Permalink**

https://escholarship.org/uc/item/30w4m5nw

### **Authors**

Danziger, Jim N Dunkle, Debbie

### **Publication Date**

2008-10-01

# Information, The Internet, Elected Officials, and Local Government Decision Making

James N. Danziger Debora E. Dunkle

Center for Research on Information Technology and Organizations, School of Social Sciences University of California, Irvine CA 92697-4650

This research is part of the People, Organizations, and Information Technology project of the Center for Research on Information Technology and Organizations (CRITO) at the University of California, Irvine. This material is based upon work funded by the U.S. National Science foundation under Grant No. 0121232. Any opinions, findings and conclusions reflected in the material are those of the authors and do not necessarily reflect the views of the National Science Foundation.



# Information, The Internet, Elected Officials, and Local Government Decision Making

### **EXECUTIVE SUMMARY**

One objective of the current research on the POINT Project was to determine the extent of information and communication technology (ICT) use by local elected officials in the course of their duties. Nearly 300 council persons participated in the national survey and reported on their views of the role of the Internet and other information sources in their daily political activities. The analysis of the survey reveals that ICTs are used by a growing number of council members as a primary method of communication and as an important source of information.

About 95% of the local elected officials use a desktop computer, laptop computer, or both in their day-to-day governmental activities. And about one in four were also using a smart phone or handheld computer device by summer 2008. Internet use is very high among council members, particularly for obtaining general information, for specific council-related duties, and to communicate with citizens and other stakeholders. Email has now surpassed both one-on-one interactions and the telephone as the communication medium that local elected official use most frequently to communicate with citizens and other stakeholders on key policy issues. Half of the council members report that they rely heavily on email (daily or several times per week) and only 13% report that they are unlikely to use email at all during the policy process. More than 90% report that they (and/or their staff) can easily handle the volume of email they receive in their council work. A similar proportion finds that email is useful for understanding community opinion, and 4/5 of the council members believe email facilitates public discussion of complex issues. And almost 3/4 of the council members indicate that email opens communications channels between themselves and new groups who were not previously part of the dialogue of governance. As might be expected, the penetration of information and communications technologies (ICTs) into the work of local elected officials increases notably as the size of the city increases.

## Information, The Internet, Elected Officials, and Local Government Decision Making

### INTRODUCTION

The Internet has substantially increased the modes of communication, sources of information, and research capabilities of decision makers. The information world of public officials is one of the many contexts where the effects of the Internet have the potential to be significant, given the huge number of sources, ranging from online knowledge bases to email to blogs. First, from the perspective of democratic politics, the wide use of the Internet can enrich the communications to elected officials from citizens and groups, providing a more extensive range of views, both in terms of the numbers of those communicating and the diversity of their perspectives (Jensen et al., 2007; Chadwick, 2006, Bimber, 2003). It is possible that "e-democracy" also will be facilitated by the improved channels through which public officials can communicate with their constituents. Second, it is possible that public officials and their staffs will utilize the Internet as a source of rich information that can assist them in all stages of the policy process, from problem identification to data gathering to analysis to feedback and evaluation (Danziger 2009). Thus the Internet might serve "e-government" as it supports policy decision and action.

These potential effects of the Internet have raised important issues. To what extent has the Internet been incorporated into the elected official's activities in the performance of his/her duties? How is the Internet used? Does it make a difference? How does the Internet fit into the elected official's broader set of communication tools? To answer these questions, a national survey of local elected officials was conducted to focus on Internet use and impact. With the support of the National League of Cities, the 2007 study gathered data from a statistically drawn random sample of nearly 350 elected officials (council members, mayors) in more than 225 American cities. (See the Appendix for details on the methodology). This report provides a description of key results of the survey.

### **RESULTS**

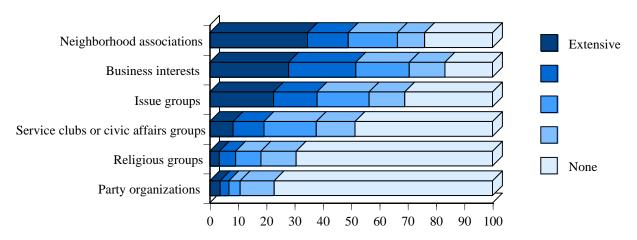
### Sources of information used by local public officials

To gain some awareness of the kinds of contacts, the modes of contact and the information sources used by council members in performing their responsibilities, they were asked to consider a recent decision (within the last 6 months) that was important enough to have generated input from the largest number of citizens, community groups and business interests. The council members used this decision as the basis for responding to questions regarding the groups involved, the information sources they used, and the kinds of contacts made as they formed their opinion and made their decision. (For some of the other sections in this report, data are from more general questions asked of the elected officials regarding their use of the Internet and other modes of communications and information as they engaged in governance).

Extent of contact with local groups on specific issues. Council members reported on the types of groups that they interacted with about the issue (See Figure 1). Contact could take a variety of forms, including face-to-face conversations, mail, telephone, email, fax messages or group meetings (See Figure 2).

- The "average" local elected official reports a significant level of contact with roughly 2-3 groups (the mean score is 2.58) on the recent policy issue which was considered.
- The groups with whom local elected officials report the most extensive contact are neighborhood associations and business interests. Nearly half of the elected officials (49%) reported at least somewhat extensive contact with neighborhood associations and this was the group with whom

- very extensive contact was highest. Slightly more than half (52%) report at least somewhat extensive contact with business interests, such as merchants' associations, manufacturers' groups, realtors or developers. About one-third of the officials have this level of contact with issue groups that is, groups that are organized to focus on a specific policy domain.
- In contrast, the large majority of local elected officials report no contact with party organizations (69%) and religious groups (77%) on the issue. And about half have no contact with civic groups.
- If one considers the size of the locality, more extensive contacts are reported by elected officials in larger municipalities. [In this report, we define large cities as those with more than 100,000 population, medium-sized cities are between 25,000-100,000, and small cities are less than 25,000]. For example, neighborhood associations are most widely engaged in contacts with local officials in large cities, with 50% of elected officials in these cities reporting extensive contact, in contrast to only 23% of elected officials in small cities (and 37% in medium-sized cities). Similarly, 40% of elected officials in large cities report extensive contact with business interests, compared to 22% in medium-sized cities and 26% in small cities. City size is also associated with the likelihood that issue groups will have extensive contact with elected officials, ranging from 20% reporting substantial contact in small and medium-sized cities in contrast to 32% of the elected officials in large cities.



**Figure 1. Extent of Contact With Local Groups** 

Extent of use of information resources. In addition, the local elected officials consult various information sources to assist them in forming an opinion about policy issues. Figure 2 provides the frequency with which selected information sources are consulted.

- On average, the local elected officials consulted about 3 information sources (2.98) on at least a weekly basis when forming their opinions on the key local government issue.
- When seeking information for making a decision or forming an opinion on an issue, the source elected officials use most frequently is council staff. Interestingly, they consult citizens and/or citizen groups with virtually the same frequency as staff. About 40% indicate that they seek information from council staff and from citizen groups at least several times a week, and less than 10% report that they do not consult either of these two sources of information. Other local government staff or other elected officials are also a source of information that is widely used, with 31% of the officials consulting this information source at least several times each week.
- In contrast, local elected officials are far less likely to look to state and federal government or to national organizations such as the National League of Cities as sources of information on key

- policy issues. In fact, half indicate they did not consult higher levels of government on the key policy issue under consideration and more than 70% did not consult with national organizations.
- These patterns regarding frequency of seeking information from most of these sources do not vary much across municipalities of different sizes. City size is not associated with frequency of consulting council staff, other local government staff or elected officials, business interests, state and federal government, and national organizations.
- However, the extent of consulting citizens and citizen groups does vary significantly by city size. The majority (52%) of public officials in large cities report consulting citizens for information at least several times a week, in contrast to 39% of the officials in medium-sized cities and 31% in small cities.

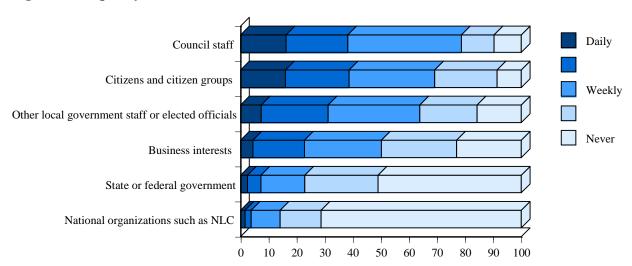


Figure 2. Frequency of Use of Information Sources

*Modes of communication.* Elected officials communicate with individuals and groups by means of personal interactions as well as through the media of telephone, mail, email, and fax. Figure 3 shows the frequency with which the elected officials use these various methods to communicate with individuals and groups.

- On average, council members rely on three different modes of interaction when engaged in information gathering and information sharing prior to forming an opinion or making a decision on a key issue.
- Email is now the most extensively used mode of communication, surpassing telephones and one-on-one interactions. Half of the council members report that they rely heavily on email (daily or several times per week) and only 13% report that they did not use email at all during the policy process on the issue. Telephone conversations and face-to-face interactions do remain very important modes of communication, with 45% of elected officials using the telephone at least several times per week and 44% engaging in one-on-one personal interactions. It is also the case that a larger proportion of the elected officials report no email communications than the proportion who did not have one-on-one interactions or telephone conversations.
- Although about half of the council members do report at least one meeting per week with a group, there is not extensive reliance on group meetings. And traditional mail is an even less frequent mode of communication, with only about one in five council members receiving mail on the issue more frequently than once per week. And very few council members use fax, with about 70% of the members indicating that faxes were not used at all as a mode of communicating on the policy issue.

- The size of the city seems to matter more for some modes of communication than others. The frequency of one-on-one interactions and telephone interactions occur equally in small, medium and large-sized cities. In contrast, email is used much more frequently by elected officials in large cities (52% report daily use on the policy issue) than in medium-sized cities (33%) and small cities (21%).
- Similarly, the frequency of group meetings, mail, and fax are differentiated by the size of the city. Group meetings occur with significantly higher frequency in large cities (24% report meeting at least several times a week) than in small (7%) and medium-sized (11%) cities. Elected officials in small cities are also much less likely to have interaction with individuals and groups through the mail. Thirty-three percent of elected officials in small cities and 22% in medium-sized cities report that they received no mail communications on the policy issue, in contrast to only 12% of the elected officials in large cities.

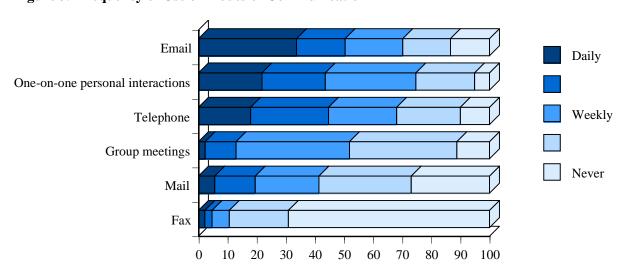


Figure 3. Frequency of Use of Modes of Communication

### Information and Communication Technology Resources.

One particular interest in this study is the use of personal electronic devices such as personal computers, smart phones, and personal digital assistants (PDAs) by elected officials in performing their duties.

*Types of computer technology use.* Fully 94% of the elected officials reported that they use at least one of these types of sophisticated ICT (an information and communication technology) in the course of their various activities as an elected official. See Figure 4 for a breakdown of the types of ICT used.

- By far, the most frequently used ICT was a desktop computer, used in council work by 75% of the elected officials. About half (47%) use a laptop computer. One in four (25%) use a smart phone, and handheld devices are used by only 10%.
- Of those elected officials using any of these ICTs, 41% use only a desktop computer, while the remaining 59% have at least one type of portable ICT (laptop, smart phone or handheld).
- Slightly less than half of the computer-using elected officials report using more than one of these electronic devices in their governmental work. The most frequent combination is a desktop and a laptop (for 14% of the elected officials) followed by the combination of desktop, laptop and smart phone (11%).

- There are notable differences in the use of these technologies related to the size of the city. In large cities, virtually all of the elected officials use a computer for their governmental work, while 6% of those in small cities and 11% in medium-sized cities report not having a computer, PDA or smart phone for council work.
- Laptop computers are more prevalent among elected officials in large cities (57% have a laptop) than in small (41%) and medium-sized (42%) cities. Smart phones are much more likely to be used by elected officials in large cities (45%) than in small (18%) and medium-sized (14%) cities. PDA ownership is very low, but even with PDAs elected officials in large cities are more likely to have a PDA than those in medium-sized and small cities.
- Elected officials in large cities are also much more likely to have more than one device. Only 36% of elected officials in large cities report having only a single device, while 61% of elected officials in small cities and in medium-sized cities report having only a desktop or a laptop for governmental work. The most frequent combination of devices for large city elected officials is a desktop, laptop and smart phone (18%).

100 90 80 70 60 50 40 30 20 10 0 Smart Desktop Laptop Handheld None Phone

Figure 4. Types of Computer Technology Used

Sources of electronic accounts for elected officials. Not all local elected officials are provided with email accounts for performing their duties. Figure 5 provides a breakdown of the sources of the computer accounts.

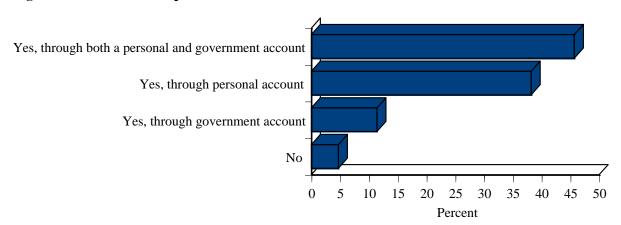


Figure 5. Sources of Computer-based Communications Accounts Used For Elected Official Activity

- More than 95% of the elected officials use the Internet, email or text messaging in the course of their activities as a local elected official.
- Nearly half (46%) of the elected officials use their personal email account as well as a government account in communicating with others on governmental topics. However, more than a third (38%) of the elected officials do not have a government account, but use a personal email account for conducting official business.
- The use of a government email account increases substantially with the size of the city. While 42% of the elected officials in small cities are provided with a government account and 53% in medium-sized cities, fully 78% of elected officials in large cities are provided with a government email account.

Information and communication uses of the Internet. Both the types and frequency of uses of the Internet as part of the activities of a council member vary. It is apparent that the Internet has become an integral communication tool for public officials, with 43% reporting daily use, and nearly 80% using the Internet at least weekly. Less than one in ten (8%) do not use the Internet in their work as a public official. Figure 6 displays the uses of the Internet and the frequency of use.

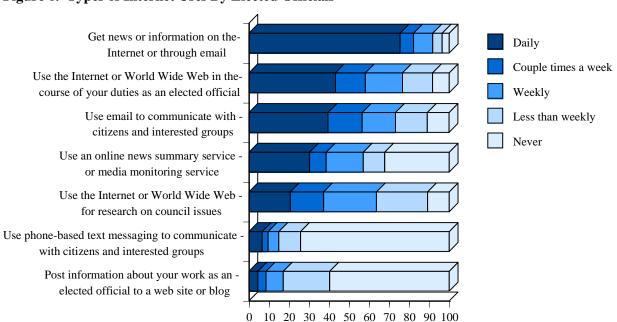


Figure 6. Types of Internet Uses By Elected Officials

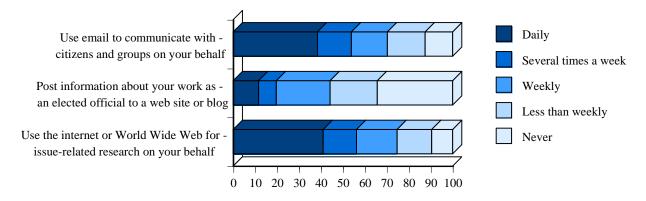
- Broadly, elected officials are mainstream users of the Internet, using it most extensively for research and to communicate with their constituency through email.
- Like many people, the Internet has become a key source of information and news for most council members. Three-quarters use the Internet every day to get news and information.
- Email is a key communications tool, with 40% reporting daily contact with citizens and groups through email while only 11% report never communicating with citizens through email.
- In contrast, web-based communication and blogging are still relatively rare with 60% of the elected officials never engaging in such activity and only 5% reporting daily communication. Similarly, phone-based text messaging is rarely used, with fully 74% reporting having never text-messaged citizens.

- The frequency with which elected officials use the Internet in the course of their duties as elected officials differs significantly by size of city. Fully 61% of elected officials in large cities use the Internet daily in conducting their official business versus 49% of elected officials in medium-sized cities and only 27% in small cities. One mode of use -- research on council issues -- also differs by city size. More elected officials in large cities use the Internet for research on council issues at least several times a week (47%) than in small cities (32%) or in medium-sized cities (38%).
- Elected officials do not differ by city size in the use of the Internet for obtaining news or information or in the use of online news summary services and media monitoring services. City size is also not a factor in the elected officials' use of phone-based text messaging as a way of communicating with citizens and other groups.
- Posting information on a website or blog is also linked with city size, since 61% of those in large cities have done this at least occasionally and more than one in four post on at least a weekly basis. In contrast, fully 74% of elected officials in small cities and 56% in medium-sized cities have never posted to a website or blog. Only 11% of small-city council members and 16% of medium-sized city council members post to a website or blog at least once per week.
- Finally, what seems to most distinguish among the elected officials in relation to city size is the frequency with which they use email as a means of communication with citizens: 67% of elected officials in large cities report daily email for such communications, compared to only 38% in medium-sized cities and 20% in small cities.

Staff use of ICTs on behalf of council members. Among those in the study, about 75% of the council members indicated they have staff support, although these staff are not always specific to their office. Figure 7 displays the frequency the council member's staff use the Internet for specific tasks.

- Forty-one percent of the council members indicated that their staffs use the Internet or World Wide Web daily for issue-related research on their behalf, with an additional 15% indicating staff-based Internet research at least a couple days a week. The more extensive daily Internet research tends to occur in the large rather than the small cities, with staff in 54% in the large cities engaging in daily research in contrast to 23% in small cities (medium-sized cities were at 44%).
- Rather equivalent percentages were also reported in terms of staff using email to communicate with citizens and groups on behalf of the council member: 39% indicate that staff communicate with constituents daily via email, with fully 58% reporting this activity in the large cities versus 32% in medium-sized cities versus 22% in small cities.

Figure 7. Staff Uses of the Internet



• One area which has not become commonplace is that of using the Internet to post information about the council member's work as an elected official on either a website or a blog. It was noted above that this was not a common use for the council member and it also is not something which has been assigned to staff to create or maintain. Only 12% of council members have staff who post information to a website or blog on their behalf. While the Internet is being used as a means of research and email communication not only by the council member but also the council member's staff, the more proactive actions of agenda-setting or personal communication to the constituency by means of a website or blog has not yet gained high use.

Another type of staff support might be that of dealing with all constituency email for the elected official. The council members were asked whether a staff member or automatic software sorted their email or whether they took care of sorting through their own email. Seventy-six percent of the council members sort their own email, while 14% report that a staff member does that for them and 10% use a software package to initially sort their mail. [These data are not displayed in a figure]. City size is associated with whether staff initially sorts the mail, with 24% of council members in large cities having staff do the initial sorting in contrast to 10% in the medium-sized cities and 8% in the small cities.

Online interaction with groups. To this point, the large majority of council members do not engage in online dialogues via community-oriented or issue-oriented chat rooms, email lists, or listservs (Figure 8).

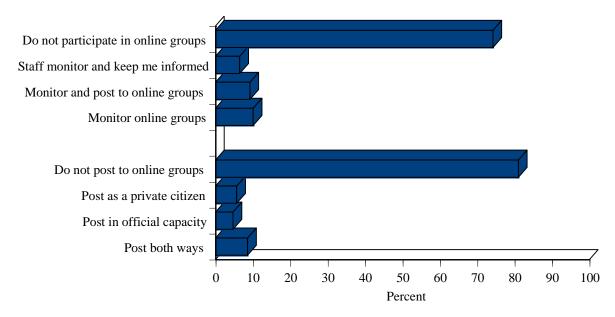


Figure 8. Participation in Online Groups

- About one quarter (26%) of the council members report that either they or their staff monitor online groups (17%) or actively participate and post to community- and issue-oriented online groups (9%). Council members in large (32% of members) and medium-sized (30%) cities are significantly more likely to participate in or monitor these online forums than those in small cities (17%).
- Those one in five council members who do post to online community and issue-oriented chat groups tend to be slightly more likely to post as both a private citizen and in their official capacity than to post in only one or the other identity. These proportions are relatively small, with only about one-fifth of those who visit these online groups actually participating in the discussion.

*Policy communication on the Internet.* While council members actively use the Internet for research and emailing, more explicit political uses of the Internet are relatively infrequent. Figure 9 displays the distribution of council members who use the Internet for various policy and political purposes.

- About 30% have used the Internet to defend a policy position, one in four have solicited input on an issue, and one in five have gone online to garner support for a policy or float a new idea to their constituents. An increasing number of the council persons do have a website and do provide additional information on issues of importance to themselves.
- While council members in larger cities are more likely to issue an explanation or defense of a
  position online, the incidence of using the rest of the types of activities in Figure 9 does not differ
  by size of city.

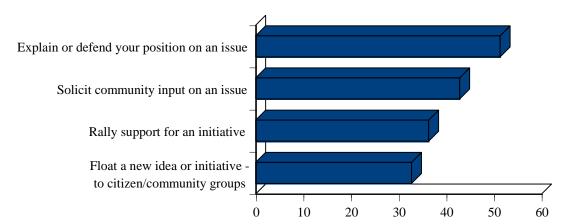
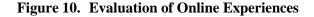


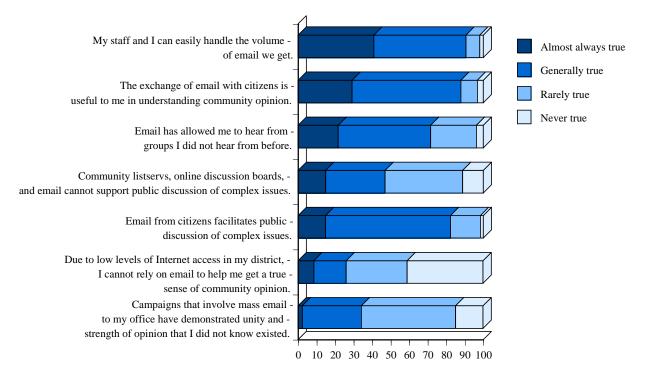
Figure 9. Political and Policy Uses of the Internet

### **Evaluation of Digital Communications**

While it is important to measure the types and frequency and uses of digital technologies by elected officials, it is also important to consider how the officials evaluate their online activities. There is variation in the extent to which elected officials are positive about the uses and impacts of these new technologies as part of their political practices (see Figure 10).

- Email overload does not seem to be a problem, since 91% of the council members report that it is generally true or almost always true that they and their staff can easily handle the volume of email they receive. Elected officials in large cities are somewhat more likely (14%) to report email overload than those in medium-sized cities (8%) and small cities (5%).
- Almost nine in ten elected officials believe that the exchange of email with citizens is useful to
  the council members in understanding community opinion. This assessment is most common
  among council members in the large cities, where 95% feel that it is true, while this level of
  agreement drops to 89% for those in medium-sized cities and further drops to 79% for council
  persons in small cities.
- Nearly three-quarters of the council persons (72%) believe that email has enabled them to hear from groups not heard from before. This lends credence to the argument that the Internet has a democratizing effect by enabling a broader array of citizens to voice their opinions. As with many other effects, this benefit is reported more frequently by those in the large cities (79%) than in medium-sized cities (72%) or small cities (63%).





- Four-fifths (82%) of council members agree that email from citizens facilitates public discussion of complex issues. This positive assessment is slightly more common in large cities but is widespread among council members in cities of all sizes.
- However, council members are more divided on the value of community listservs, online discussion boards and email when considering the public discussion of complex issues. About half (53%) of the elected officials believe that these online communication avenues support public discussion, while the rest (47%) feel that they do not. Those in larger cities are somewhat more positive about the value of these types of public discussion (although the differences by city size are not statistically significant).
- Overall, 74% of the council persons disagreed with the statement: "Due to low levels of Internet access in my district, I cannot rely on email to help me get a true sense of community opinion." But city size has an effect. While only 15% of council persons in large cities feel they cannot rely on email for opinion gathering, the group skeptical of the value of the Internet in providing a true sense of community opinion rises to 27% in medium-sized cities and 39% in small cities. It is not clear whether this is due to variation in Internet penetration or the dynamics of different modes of political communication across cities of different scale.
- Even though the local elected officials are generally positive towards the use of email as a means of hearing from a larger segment of the population and gaining information about constituency opinions, they do distinguish between individual emails and mass email campaigns. Roughly two-thirds of the council members do not believe that mass email campaigns demonstrate unity and strength of opinion. City size has no effect on this belief.

#### CONCLUDING REMARKS

The purpose of this report is to provide general descriptive information about the experiences and assessments of using the Internet and other ICTs (information and communications technologies) by more

than 300 elected officials in American cities. Apart from considering the size of the local government jurisdiction, this report does not attempt to explain differences in the council members' utilization of these technologies. It is clear that ICTs are now an important element in the communications network of most local government elected officials. Email has become the most extensive means of frequent contacts with citizens and other stakeholders, and there seems to be growing use of a variety of online means for officials and citizens to communicate with each other. The substantial use of ICTs and the Internet does suggest the possibility of changes in governance with respect to both e-democracy – the active engagement between government officials, citizens and stakeholders -- and e-government – the uses of ICTs in policymaking and policy implementation.

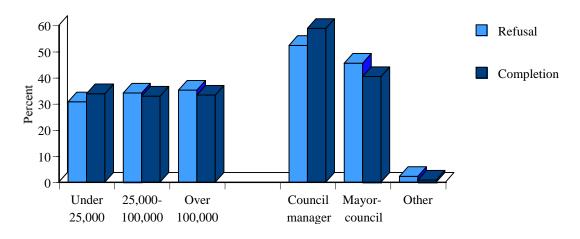
#### **APPENDIX**

The sample of cities for the survey was drawn from a stratification of U.S. cities by a matrix of size (less than 25,000, 25,000-100,000 and over 100,000) and type of government (mayor-council vs. councilmember). Within each of the 6 cells, roughly 50 cities were randomly drawn. Then, within each sampled city, 3 elected officials were randomly selected. Since the pretest instrument did not differ from the final survey instrument and the pretest respondents were randomly sampled using the same methodology, the pretest sample was combined with the general survey.

The survey was conducted using both a mail survey and an on-line version. All respondents were contacted and given the option of completing the survey by mail or on-line. Twenty-nine percent of the respondents completed the survey online. The data collection period (including pretest) was from December 1, 2006 through June 28, 2007.

The final sample after replacements consisted of 950 elected officials in 316 cities. Of the 950 elected officials, 348 responded to the survey, resulting in a 36.63% response rate for the elected officials. Of the 316 cities sampled, at least one elected official from 228 of the cities responded, resulting in a 72.15% response rate for the sampled cities. Figure 11 displays the comparison of the respondent and non-respondent cities in terms of size of the city and type of government in the city. There were no statistically significant differences between responding cities and non-responding cities.

Figure 11. Comparison of Size of City and Form of Government between Respondent Cities and Non-Respondent Cities



### **SOURCES**

- Bimber, B. 2003. *Information and American Democracy: Technology in the Evolution of Political Power*. New York: Cambridge University Press.
- Chadwick, A. 2006. *Internet Politics: States, Citizens, and New Communication Technologies*. New York: Oxford University Press.
- Danziger, J. 2009. *Understanding the Political World*. 9<sup>th</sup> edition. New York: Pearson Longman.
- Jensen, M., Danziger, J., and Venkatesh, A. 2007. Civil Society and Cyber Society: The Role of the Internet in Community Associations and Democratic Politics. *The Information Society*. Vol. 23, No. 1: 39-50.