

IPCE Institute for Policy and Civic Engagement

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**TRANSPARENCY, CIVIC ENGAGEMENT, AND
TECHNOLOGY USE IN LOCAL GOVERNMENT
AGENCIES: FINDINGS FROM A NATIONAL SURVEY**

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Executive Summary

This report presents findings from a 2010 national survey of local governments on transparency and information dissemination, public participation, and technology use and its effects, as part of a long-term research study interested in understanding the relationships between technology and civic engagement in local governments sponsored by Institute for Policy and Civic Engagement at University of Illinois at Chicago.

The report draws from the statistical analysis of the survey data, and is organized into three sections. Description of these sections, and key findings and discussions in each section are summarized below.

1) Transparency and Information Dissemination: Transparency refers to the willingness of an organization to allow citizens to monitor its performance and to participate in its policy processes (Curtin & Meijer, 2006). Information dissemination, which is one of the means to achieving transparency in government, is communication of information and knowledge held by the public organization to citizens and other stakeholders outside of the organization.

This section of the report captures local government organizations' degree of openness to the public input, and correlations with department type, external stakeholder influence, and city size; and frequency of announcing key decision meetings and disseminating information to the public using different mechanisms.

Key findings and observations:

- More than half of key decision meetings in local government organizations surveyed are open to the public, and openness to the public is related to department type, external stakeholder influence, and city population size.
- Web technology, newspaper, and email are the most frequently used mechanisms to announce meetings to the public.
- Similarly, web technology and email are used often to disseminate information to the public by local government agencies.
- It may be that organizations that require more political responsiveness are more likely to provide opportunities for input from the public into their decision processes, whereas organizations that are more rule bound and require greater control may choose not to enable the public to influence important department and agency policy decisions.

2) Public Participation: Public participation broadly refers to the process in which citizens and external stakeholders take part in agency decisions. This section of the report explores frequency of participation by the public in local government agency decision and policy making and comparisons across city size; frequency of public engagement in different settings and the ways in which members of the public interacted with the public agency; and correlations among frequency of information dissemination to the public and public participation.

Key findings and observations:

- The individuals or groups that participate most frequently in local government decision and policy making are internal department staff, mayor, and other city departments, followed by individual citizens, neighborhood associations, and interest groups.
- Frequency of citizen participation varies by department type, but not by population size.
- The most frequent interaction with the public, on average, takes place in individual face-to-face meetings with citizens and public hearings, followed by community or neighborhood meetings.
- The most frequent type of public interaction with the local government agencies is voicing concerns or opinions about community issues.
- The mean frequency of overall public participation is significantly higher in parks and recreation departments than mayor's offices, community development departments, finance departments, and police departments.
- The results for this group of analyses also indicates a significant and positive relationship between the level of information dissemination to the public and frequency of participation, which varied by department type and city size. This implies that information dissemination to the public may be more essential for some departments than others.

3) Technology Use: This section includes findings and discussions on local government agencies' use of different technologies to enable or facilitate participation by the public in government activities and events; online provision of services; managers' perceptions about the effects of online initiatives, the Internet, and city website qualities; and the relationship between managers' opinions about the effects of online initiatives and their opinions about city websites.

Key findings and observations:

- Nearly all local government departments use email to communicate with citizens and external stakeholders. Somewhat surprisingly, more than half of departments have adopted social networking technologies such as Facebook and Twitter while few departments use wikis or online chat.
- Analysis on public managers' perceptions about technology use reveals that technology adoption has lead to an increase in interaction between local governments, citizens and stakeholders and to a lesser degree improvements in government services, public policy making and citizens' trust of government.
- A majority of the managers agrees that the Internet helps to make people feel connected to the city, and online initiatives increase citizen contact with people in their department as well as reduce the amount of face-to-face time spent with clients and citizens.
- Managers' opinions about technology use and its outcomes are positive indications that web-based technologies can and are being used by local governments to increase civic engagement.

- Overall, public managers are satisfied with the city website quality, however, they also think that information on the websites should be improved to make it more relevant to the public.
- Although the city websites are pervasively used for information dissemination purposes, they are less extensively utilized as tools to facilitate two-way interaction between the public and the local government agencies.
- Local government website quality is related to positive outcomes from online initiatives. When city websites are adequate in terms of providing the citizens with the information they need, citizens' need for face-to-face interaction with public agencies may be reduced.

About this Survey

The national web-based survey of local governments, sponsored by Institute of Policy and Civic Engagement at University of Illinois at Chicago, was conducted by the Science, Technology and Environmental Policy Lab at the University of Illinois at Chicago between August 2, 2010 and October 11, 2010.

The survey was administered to government managers in 500 local governments with citizen populations ranging from 25,000 to 250,000. For each city, lead managers were identified in each of the following five departments: general city management, community development, finance, police, and parks and recreation. A total of 902 responses were received for a final response rate of 37.9%.

Detailed methodology and the exact questionnaire items for the survey questions referenced in the report are provided in Appendix A and Appendix B.

Introduction

The Open Government Directive released on December 8, 2009 by President Obama's Administration underlined transparency, participation, and collaboration as the cornerstones of an open government, and emphasized the use of technology in achieving these principles. This report aims to provide a descriptive understanding of the status of transparency, information dissemination to the public, and public participation in local government agencies and the role of technology in these activities.

The report presents findings from a national survey of local governments on technology use, transparency, and citizen participation, conducted in 2010 as part of a long-term research study interested in understanding the relationships between technology and civic engagement in local governments. The study is sponsored by Institute for Policy and Civic Engagement at University of Illinois at Chicago.

The report draws from the statistical analysis of the survey data described above, and is organized into three sections:

- 1) Transparency and Information Dissemination: This section captures local government organizations' degree of openness to the public input, and correlations with department type, external stakeholder influence, and city size. It also captures frequency of announcing key decision meetings and disseminating information to the public using different mechanisms.
- 2) Public Participation: This section explores frequency of participation by different groups in agency decision and policy making and comparisons across city size; frequency of public engagement in different settings and the ways in which members of the public interact with the public agency. Additionally, it presents correlations among frequency of information dissemination to the public and public participation.
- 3) Technology Use: In this section, we present findings on the use of different technologies for public participation and online provision of services; manager opinions about the effects of technology use; managers' perceptions about the effects of online initiatives and the Internet; managers' perceptions about city website qualities; and the relationship between managers' opinions about the effects of online initiatives and their opinions about city websites.

The report begins with an analysis of transparency and information dissemination to the public in local government agencies and continues with the other two sections. The conclusion of the report summarizes the findings and briefly discusses their implications. Detailed methodology for the study and the exact questionnaire items for the survey questions referenced in the report are provided in Appendix A and Appendix B.

Part I. Transparency and Information Dissemination

Transparency can be conceptualized as the willingness of an organization to allow citizens to monitor its performance and to participate in its policy processes (Curtin & Meijer, 2006¹). It may be promoted by providing the public with information about what the government is doing.

In order to understand the extent to which and how local government organizations enable the public to provide input for agency policy decisions and disseminate information to them, we asked the respondents three questions:

- 1) During the last year, approximately what percent of your organization's key decision meetings were open to the public, including citizens and other stakeholders?;
- 2) For those key decision meetings that were open to the public, how does your organization announce them?
- 3) Over the past year, how often did your organization use the following mechanisms to disseminate information to the public? (Several options were listed in the question.)

Findings are summarized in the following paragraphs.

1.1. On average, more than half of key decision meetings in local government organizations are open to the public.

Each organization holds key decision meetings where important agency and department policy decisions are discussed and decided upon. These key decision meetings include most or all top decision makers in the organization. The analysis on the survey data shows that, on average, more than half of key decision meetings (64%) in local government organizations surveyed are open to the public. About half of the public managers respond that the degree of openness of key decision meetings in their organization is between 75%-100%. Among all respondents, 32.8% report that all key decision meetings are open to the public, whereas 10.8% indicate that the meetings are not open to the public at all.

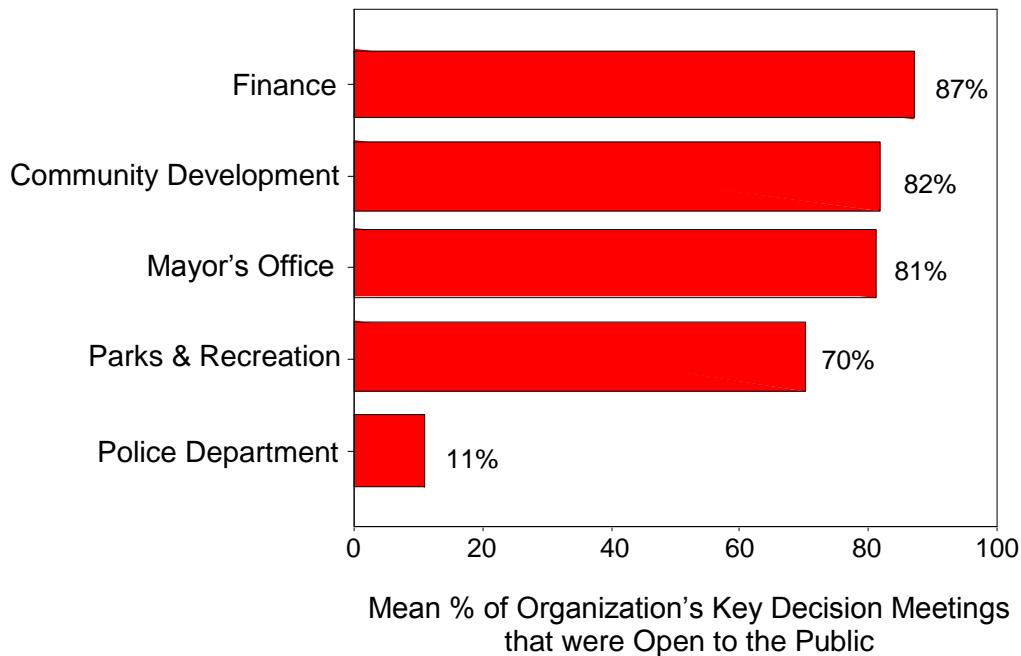
1.2. The degree of openness of key decision meetings to the public in local government organizations varies by department type.

As shown in Figure 1, finance departments are the most open departments with 87% of the key decision meetings being open to the public on average, followed by community development departments (82%) and mayor's offices (81%). On the other hand, managers in police departments are more likely to report lower levels of openness in key decision meetings as compared to respondents in other departments. On average, respondents in police departments state that only 11% of key decision meetings were open to the public last year. It may be that organizations that require more political responsiveness are more likely to provide opportunities for input from the public into their decision processes, whereas

¹ Curtin, D. & Meijer, A. J. (2006). Does transparency strengthen legitimacy? *Information Polity: The International Journal of Government & Democracy in the Information Age*, 11(2), 109-122.

organizations that are more rule bound and require greater control may choose not to enable the public to influence important department and agency policy decisions.

Figure 1. Degree of Openness of Key Decision Meetings to the Public by Department Type



1.3. *Organizations in more politicized environments tend to adopt a more transparent approach. The higher the level of influence from the governor, state legislature, and state courts, the lower the percent of key decision meetings that are open to the public.*

In order to further explore how organizational openness is related to external stakeholder influence, we looked at the correlation between the percentage of organization's key decision meetings that are open to the public and level of civil society, state, and city influence over departments. The results of the correlation analysis are shown in Table 1.

For the analysis presented in Table 1, we used the survey question that asked the respondents to indicate how much influence the following institutions or individuals exert over their department: the mayor, mayor's council or executive board, other city departments, the governor, state legislature, state courts, business groups, advocacy groups, public opinion, and media. The response scale ranges from one to five, where one is 'no influence' and five is 'very strong influence'.

Table 1. Correlation between Level of Openness of Key Decision Meetings to the Public and Level of Influence from External Stakeholders

	Percent of Key Decision Meetings Open to the Public
City Influence	
Mayor influence	0.03
Mayor’s council or executive board influence	0.05 *
Influence from other city departments	0.23 **
State Influence	
Governor influence	-0.07 **
State legislature influence	-0.07 **
State courts’ influence	-0.21 **
Civil Society Influence	
Business groups’ influence	0.07 **
Advocacy groups’ influence	0.06 **
Public opinion influence	0.04
Media influence	-0.01

Significance levels * $p < 0.05$; ** $p < 0.01$

The analysis indicates that influence from city and civil society is positively associated with the level of openness of key decision meetings to the public. Local government departments that report higher influence from mayor’s councils or executive boards, other city departments, business groups, and advocacy groups tend to provide more opportunities for public input. On the other hand, strong influence from the state has a significant and negative effect on seeking input from the public into local government departments’ decision processes. The higher the level of influence from the governor, state legislature, and state courts, the lower the percent of key decision meetings that are open to the public. These findings seem to confirm the earlier expectation that organizations in more politicized environments tend to adopt a more transparent approach, whereas in organizations reporting stronger influence of state institutions, openness to citizen input tends to be more limited.

1.4. Local government organizations in more populated cities tend to be less open to public input than smaller cities.

Further analysis of the survey data suggests that, besides external stakeholder influence, population size of the city also seems to matter for the openness of key decision meetings to the public. The correlation between city population size and the percent of key decision meetings open to the public is negative and significant, meaning that local government organizations in more populated cities tend to be less open to public input than smaller cities, and vice versa.

As shown in Table 2, about half of the public managers (45.7%) in cities with populations between 200,000 and 250,000 reported that only up to 25% of key decision meetings were open to the public last year, whereas public managers in cities with a population less than 49,999 indicated that more than half of the key decision meetings were

open to the public. This may show that local government agencies find it easier, more efficient, and more effective to seek and incorporate public input into their policy decisions in smaller cities than in larger cities.

Table 2. Population Size in Relation to Openness of Key Decisions to the Public

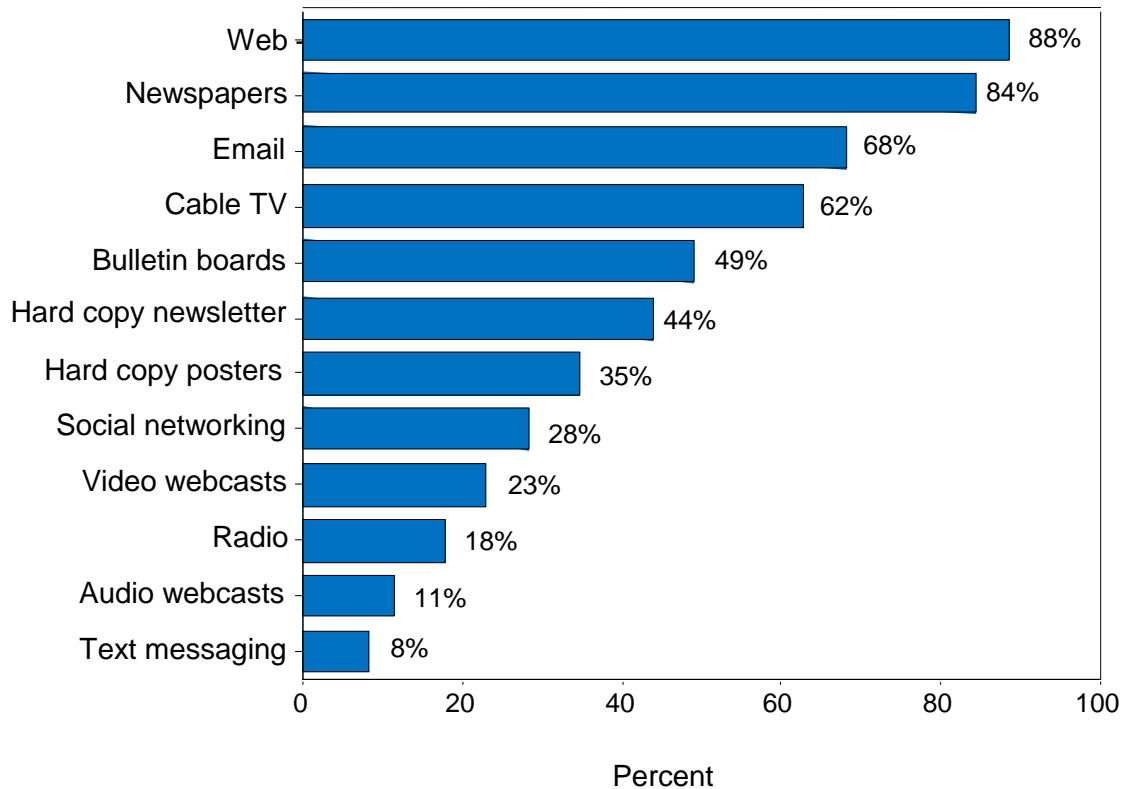
<i>% of Key Decision Meetings Open to the Public</i>	<i>Population Size of the City</i>				
	0-49,999	50,000-99,999	100,000-149,999	150,000-199,999	200,000-250,000
0%-25%	26.1%	32.4%	30.4%	25.8%	45.7%
26%-50%	9.1%	9.5%	8.9%	15.2%	11.4%
51%-75%	5.9%	5.1%	13.3%	4.5%	8.6%
76%-100%	58.8%	53.0%	47.5%	54.5%	34.3%

1.5. Web technology is the most frequently used mechanism to announce key decision meetings and disseminate information to the public in local governments.

To understand how local government organizations seek public input into their key policy decisions, we explored the survey data for the use of different mechanisms to announce key decision meetings. The survey asked respondents about 12 online and offline mechanisms for announcing key decision meetings including hard copy posters, newspapers, hard copy newsletter, web (including online newsletters), bulletin boards, email, video webcasts, audio webcasts, text messaging (SMS), social networking tools (e.g. facebook, myspace, twitter), radio, and cable TV.

As shown in Figure 2, 88% of the managers indicate that their organization uses web technology to announce key decision meetings. Newspapers appeared as the second most frequently used mechanism (84%). Email use, on the other hand, is mentioned by 68% of the managers. The least frequently used mechanisms for announcing key decision meetings in local government agencies are video webcasts, radio, audio webcasts, and text messaging.

Figure 2. For those key decision meetings that were open to the public, how does your organization announce them?

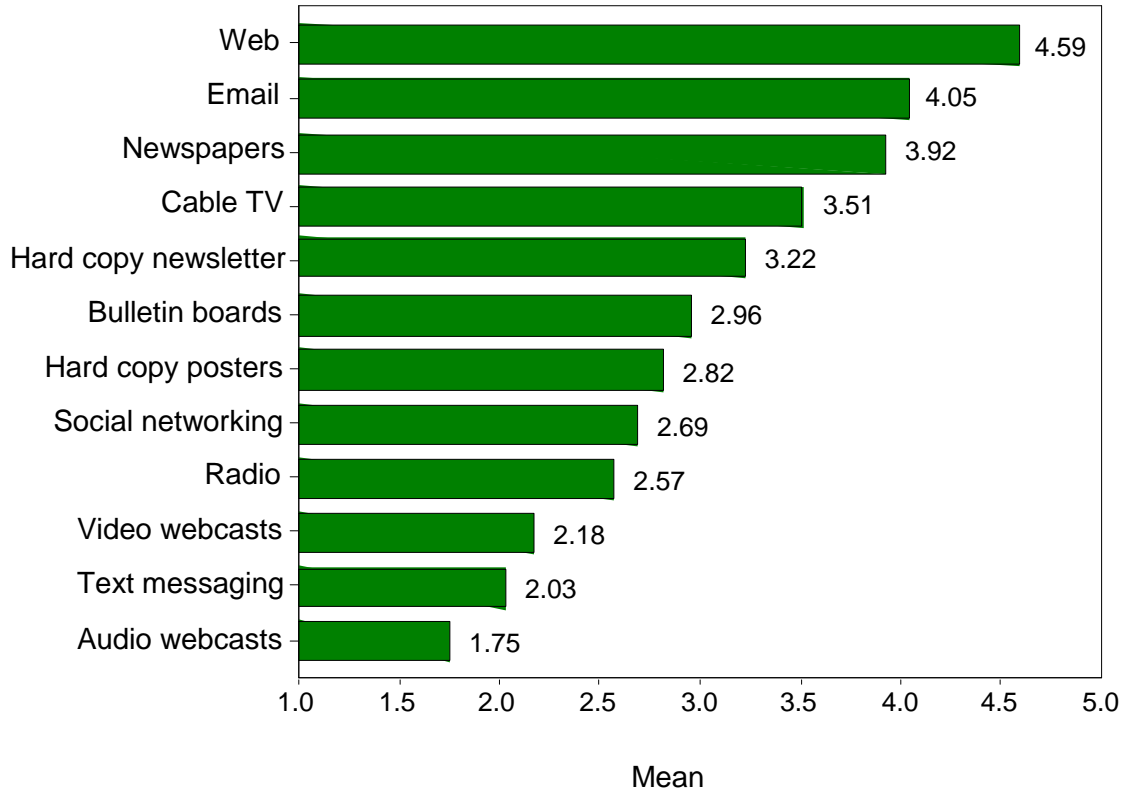


The final step of our survey data analysis for this section focuses on the frequency of information dissemination to the public, using the mechanisms mentioned above. Information dissemination is defined as communication of information and knowledge held by the organization to citizens and other stakeholders outside of the organization. The frequency scale ranges from one to five, where five is ‘very often’ and one is ‘never’.

The distribution of the mean frequencies for each response category is presented in Figure 3. Results are similar to the findings on key decision meetings and show that the most frequently used mechanisms to disseminate information to the public among local governments are web technology and e-mail. Two out of three public managers (69.8%) report that their organization uses web technology ‘very often’ to disseminate information to the public, while about half of all managers report using e-mail. Newspaper, hardcopy newsletter, and cable TV are other frequently used mechanisms. On the other hand, audio webcasts, video webcasts, and text messaging are least frequently used by local governments to disseminate information.

Figure 3. Mean Frequencies of Using Different Mechanisms to Disseminate Information

5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never



Part II. Public Participation

Public participation broadly refers to the process in which citizens and external stakeholders take part in agency decisions. Government make benefit from receiving ideas and expertise provided through participation by the public. In addition, it may help to ensure that public policies reflect public's needs and concerns.

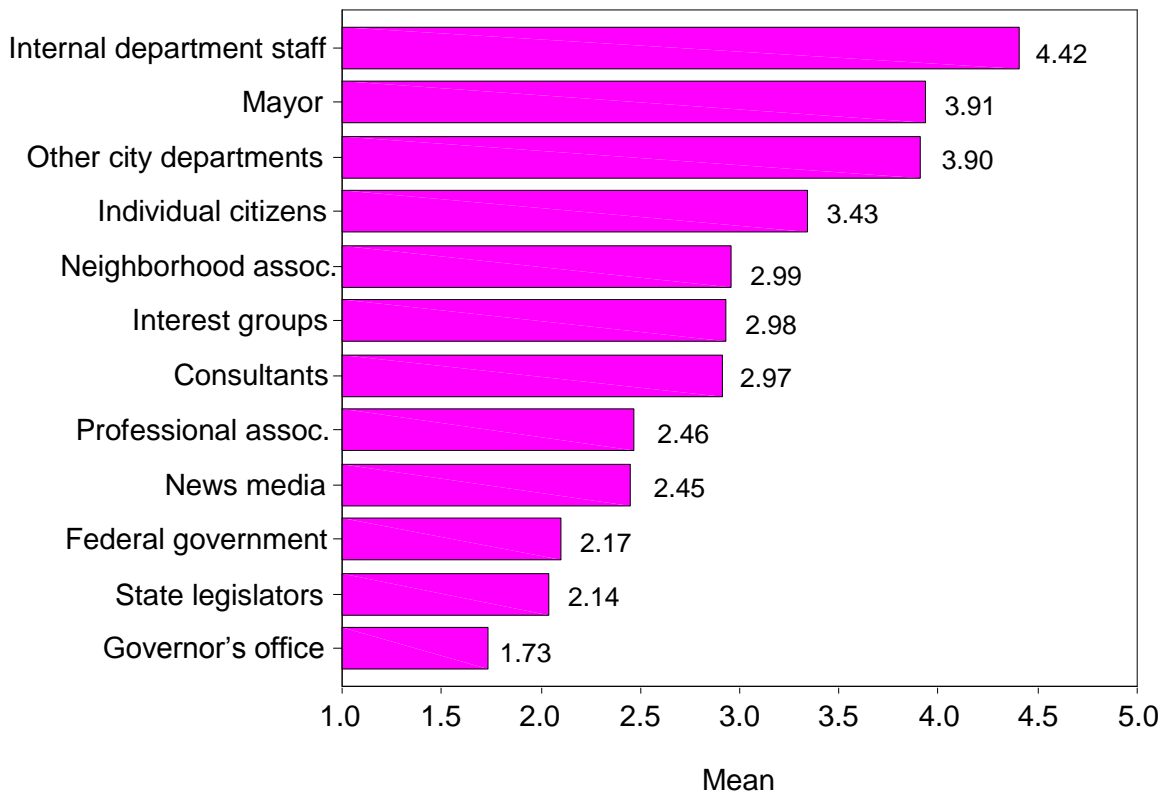
This section explores the extent to which and mechanisms by which the public participates in local government agency decision and policy making. The analyses presented here are organized into three groups: 1) the frequency of participation by citizens and various other stakeholders; 2) frequency of public engagement in different settings and the ways in which members of the public interact with the public agency; and 3) correlations among frequency of information dissemination to the public and public participation.

2.1. Among all stakeholder groups, internal department staff, the mayor, and other city departments participate most frequently. Almost half of all public managers state that individual citizens participate ‘often’ or ‘very often’ in local government decision and policy making.

To assess the frequency of public participation by different groups we asked the public managers to indicate how often various stakeholder groups and citizens participate in agency decision and policymaking in their organization. Stakeholders include organizations and individuals outside the department such as local community organizations, nonprofit or educational groups, or other government agencies. The frequency scale ranges from one to five, where one is ‘never’ and five is ‘very often’. The distribution of the mean frequencies of participation by citizens and stakeholder groups is presented in Figure 4.

Figure 4. Frequency of Participation in Agency Decision and Policy Making by Citizens and Stakeholder Groups

5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never

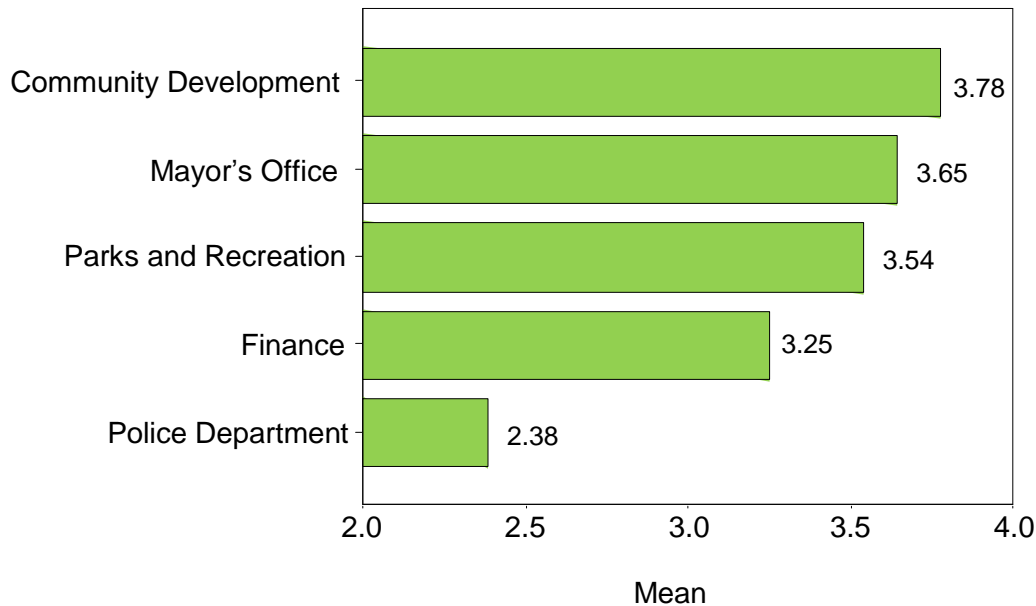


Results indicate that, on average, the individuals or groups that participate most frequently in local government decision and policy making are internal department staff, the mayor, and other city departments. These groups are followed by individual citizens, neighborhood associations, and interest groups.

A closer look at the level of individual citizen participation shows that, overall, almost half of the public managers (43.7%) surveyed state that individual citizens participate ‘often’ or ‘very often’ in decision making in their organization. The statistical comparison further indicates that the average frequency of citizen participation tends to be significantly higher in community development departments compared to finance, parks and recreation, and police departments. In addition, managers from police departments tend to state significantly lower levels of citizens participation in decision making than managers in all other departments surveyed. We also find that the mean frequency of citizen participation in local government agency decision making does not significantly vary by population size of the city. Figure 5 summarizes the mean frequency of citizen participation by department type.

Figure 5. Comparison of the Mean Citizen Participation by Department Type

5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never



2.2. *The most frequent interaction with the public, on average, takes place in individual face-to-face meetings with citizens and public hearings, followed by community or neighborhood meetings.*

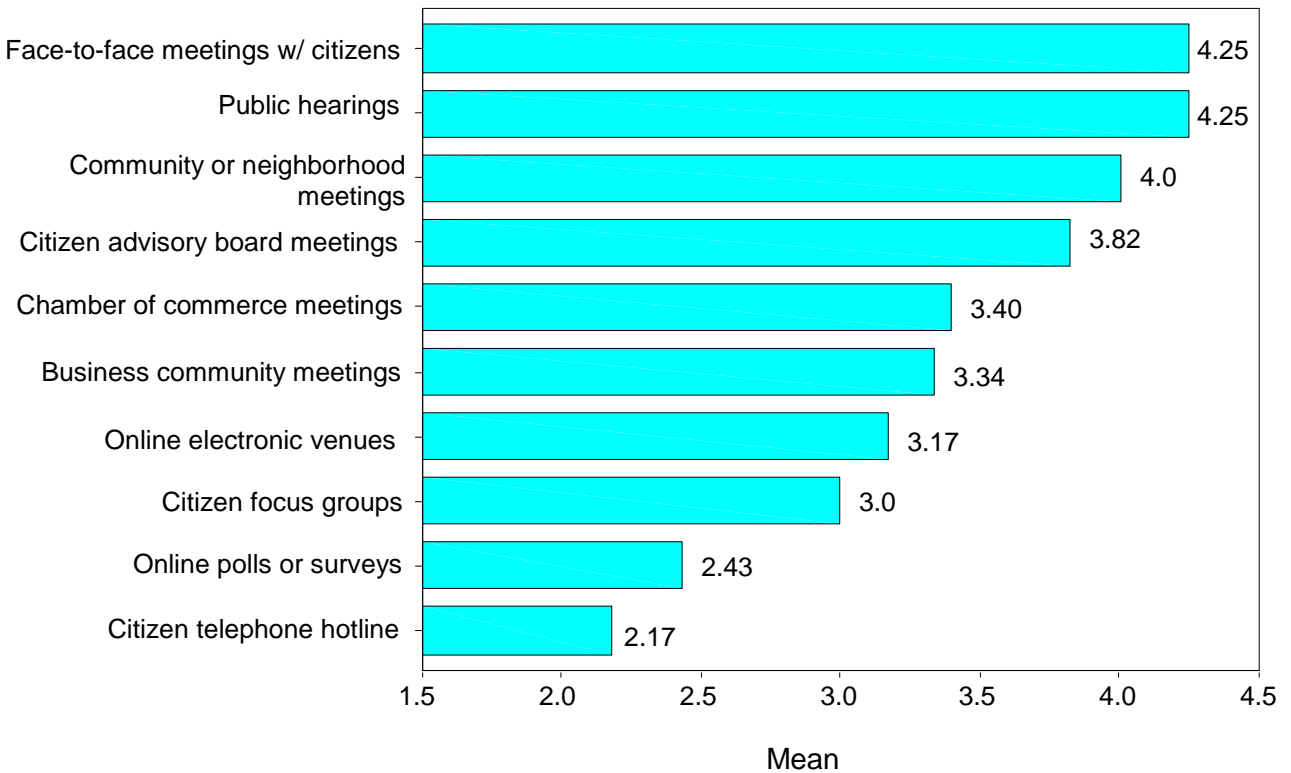
In addition, we investigated how frequently local government organizations interacted with citizens and external stakeholders in different settings over the past year. Specifically, we

asked the public managers about frequency of interaction with the public through online polls or surveys, individual face-to-face meetings with citizens, online electronic venues, citizen telephone hotline, citizen focus groups, business community meetings, chamber of commerce meetings, citizen advisory board meetings, community or neighborhood meetings, and public hearings. The response choices ranges from one to five, where one is ‘never’ and five is ‘very often’.

Figure 6 shows the mean responses of public managers for the question on frequency of interaction with the public in different settings. The most frequent interaction with the public, on average, takes place in individual face-to-face meetings with citizens and public hearings, followed by community or neighborhood meetings. Four out of five public managers (81%) report that their organization interacts with the public ‘often’ or ‘very often’ with face-to-face meetings and in public hearings (82%).

Figure 6. Mean Frequency of Interaction with Citizens and Stakeholders in Different Settings

5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never



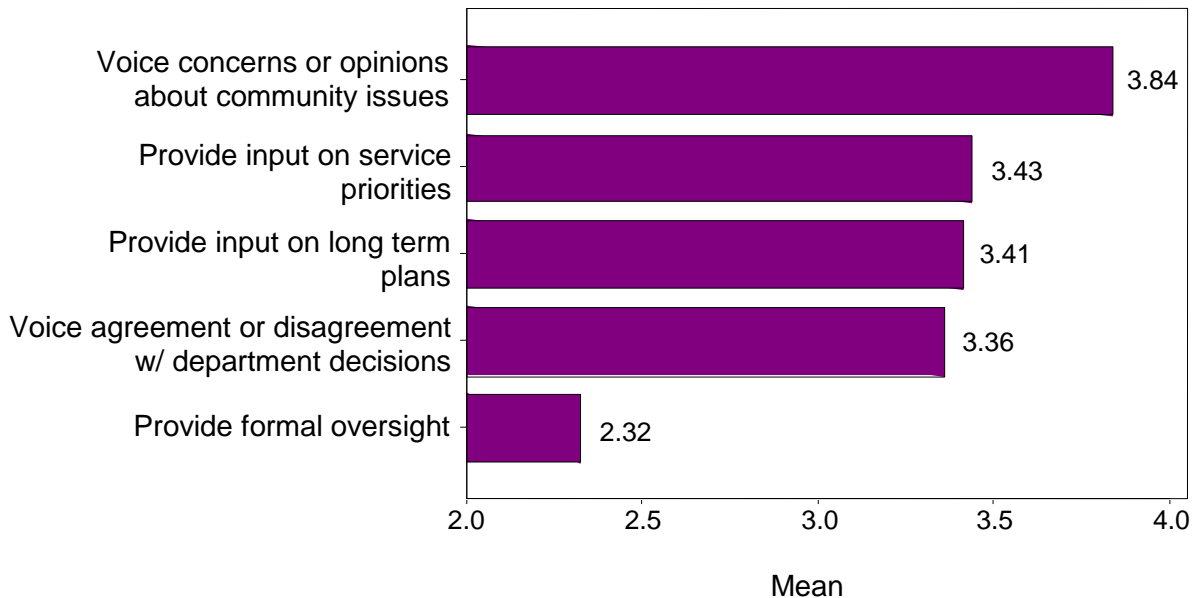
In comparison, least frequent interaction with the public occurs through citizen telephone hotlines and online polls or surveys. About half of the managers surveyed indicate that online opinion polls or surveys were ‘rarely’ or ‘never’ used in their organization over the past year. Two thirds of the managers report the same for interaction through citizen telephone hotline.

2.3. *The most frequent reason for public interaction with the local government agencies is for the public to voice concerns or opinions about community issues.*

As a next step, we looked at the specific ways in which local government agencies interacted with the public (Figure 7). Public managers on average report that the most frequent reason for public interaction with the local government agencies is to voice concerns or opinions about community issues. About two out of three managers (63.5%) responded that the public interacts with their organization ‘often’ or ‘very often’ through voicing concerns or opinions about community issues. On the other hand, according to public managers, public participation in the form of providing formal oversight of the organization takes place less often. More than half of the managers (58.5%) report that members of the public ‘rarely’ or ‘never’ provided formal oversight of their organization over the past year.

Figure 7. Mean Frequency of Reasons for Public Participation

5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never



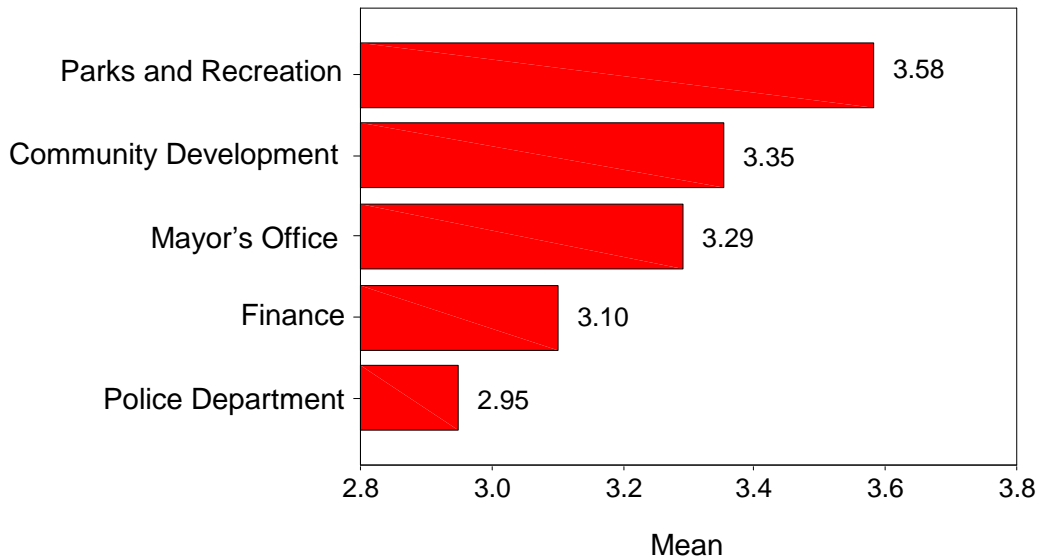
2.4. The mean frequency of overall public participation is significantly higher in parks and recreation departments than mayor’s offices or community development, finance, and police departments.

Further analysis indicates that overall public participation in local government agencies varies by department type. In order to understand whether there is a significant difference in overall public participation among different departments surveyed, we conducted difference of means tests on the survey data. Mean participation frequency levels by department type are illustrated in Figure 8.

The results show that, the mean frequency of overall public participation is significantly higher in parks and recreation departments than mayor’s offices, community developments, finance departments, and police departments. We also find that police departments have a significantly lower average public participation frequency as compared with the other departments surveyed.

Figure 8. Mean Public Participation by Department Type

5=Very often 4=Often 3=Sometimes 2=Rarely 1=Never



2.5. Information dissemination is significantly and positively related to overall frequency of public participation and frequency of citizen participation in agency decision and policy making.

The final step of our analysis for this section aims to understand the relationship between frequency of information dissemination to the public and frequency of overall public participation. We also examine separately the relationship between frequency of information dissemination to the public and frequency of citizen participation in agency decision and

policy making. Overall frequency of participation is an average of the frequency of all types of participation: community issues, voicing agreement or disagreement about department decisions, providing formal oversight of the organization, providing input on service priorities, and providing input on long range plans. Results from the bi-variate correlation analyses are reported by dissemination type in Table 3.

We can see from the table that each mechanism of information dissemination is significantly and positively related to overall participation frequency. Except in the case of radio, the same is true for the correlations between frequency of information dissemination and citizen participation in agency decision and policy making. The strongest correlation in the first column occurs for the use of hardcopy posters (0.28), which is followed by e-mail (0.26). The strongest association in the second column (citizen participation) occurs for email (0.28), followed by the web (0.25).

Table 3. Correlation between Information Dissemination Frequency and Participation Frequency, by Information Dissemination Type

Information Dissemination Mechanism	Overall Public Participation and Information Dissemination	Citizen Participation and Information Dissemination
Web (including online newsletters)	0.21 **	0.25 **
Hard copy newsletter	0.20 **	0.20 **
Newspapers	0.20 **	0.19 **
Cable TV	0.15 **	0.20 **
Radio	0.11 **	0.02
Hard copy posters	0.28 **	0.21 **
Social networking tools	0.21 **	0.15 **
Text messaging (SMS)	0.06 **	0.05 *
Audio webcasts	0.20 **	0.22 **
Video webcasts	0.19 **	0.23 **
Email	0.26 **	0.28 **
Bulletin boards	0.21 **	0.18 **

Significance levels * p < 0.05; ** p < 0.01

2.6. *The strength of correlations between overall information dissemination and overall public participation are higher in mayor’s office and community development departments compared to finance, parks and recreation, and police departments.*

Further analysis of the association between overall information dissemination (average across all mechanisms) and overall public participation reveals that while the correlations are consistently positive, the level at which they are related varies substantially by department type and city size (Table 4). Correlations between overall information dissemination and overall public participation are stronger for mayor’s offices and community development

departments than for finance, parks and recreation, and police departments. This may imply that information dissemination to the public may be more essential for some departments than others to enable the public to interact with local government organizations. For example, citizens may need to be more informed on community development issues in order to more effectively provide input on long range plans.

Table 4. Correlations between Overall Frequency of Information Dissemination and Overall Frequency of Public Participation, by Department Type and City Population Size

	Overall Frequency of Information Dissemination and Overall Frequency of Public Participation
Department Type	
Mayor’s Office	0.40 **
Community Development	0.42 **
Finance	0.28 **
Parks and Recreation	0.24 **
Police department	0.23 **
City Population Size	
0-49,999	0.34 **
50,000-99,999	0.33 **
100,000-149,999	0.42 **
150,000-199,999	0.29 **
200,000-250,000	0.59 **

Significance levels * p < 0.05; ** p < 0.01

Part III. Technology Use

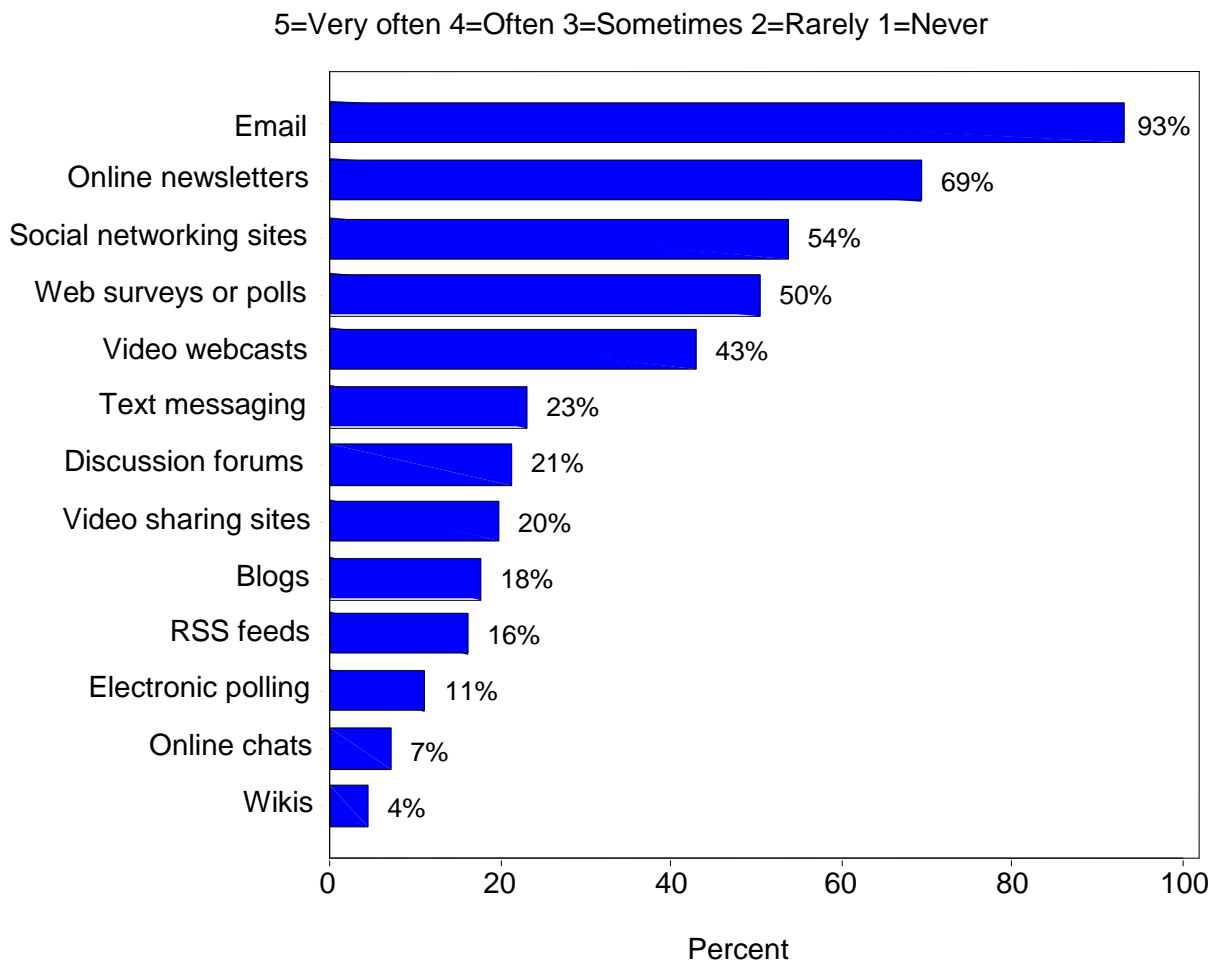
The use of information and communication technologies in public organizations hold the potential to improve government transparency and increase public participation by providing effective and efficient means of disclosing information to the citizens and organizations about the processes, structures, and products of government, and by enabling the public to interact with public organizations in a more convenient way. In addition, new online applications provide the means for stakeholders and government to communicate and record interactions.

This section of the report focuses on technology use in local government organizations and presents findings from the analyses on the extent to which local governments are using different technologies for enabling public participation, as well as manager perceptions about the outcomes of using information and communication technologies and the use of online initiatives.

3.1. E-mail and online newsletters are the most frequently used technologies to enable or facilitate public participation in local governments.

In order to gain a better understanding of how local governments interact with citizens using various technologies, we asked public managers how many of 14 specific digital technologies they used to enable or facilitate participation by citizens and external stakeholders in the past year. Figure 9 shows the summary of responses.

Figure 9. Does your organization use the following electronic technologies to enable or facilitate participation by citizens and external stakeholders?



The results indicate that email is the most prevalent technology in use. Nearly all local government managers (93%) report using email to enable or facilitate participation with citizens or external stakeholders. Online newsletters are the second most commonly used technology for public participation. Seven out of ten (69%) local managers report using the local government agency website to host online newsletters.

3.2. *The use of social networking tools by local government is also prevalent.*

More than half of the local government managers (54%) report that their departments were using social networking tools such as Facebook and Twitter to enable participation by citizens and external stakeholder groups. Similarly, half of the managers surveyed state that they use web surveys or polls. In addition, 43% of managers indicate that their department uses video webcasts to enable or facilitate public participation. One in five managers (20%) report that their department uses video sharing sites, such as YouTube. Fewer managers state they have adopted electronic polling during meetings, online chats, and wikis (11%, 7%, and 4%, respectively).

3.3. *The most commonly offered online service among local governments is online requests for services that the department is responsible for delivering.*

The survey assessed the extent to which local government agencies offer different types of online services to citizens. The results are summarized in Table 5.

Table 5. Does your department currently offer the following online services?

	“Yes”
Online payment for services including fees and fines	46.0%
Online delivery of local government records or department information to citizens who request information.	55.9%
Online requests for services that your department is responsible for delivering	66.7%
Online completion and submission of job applications.	56.6%

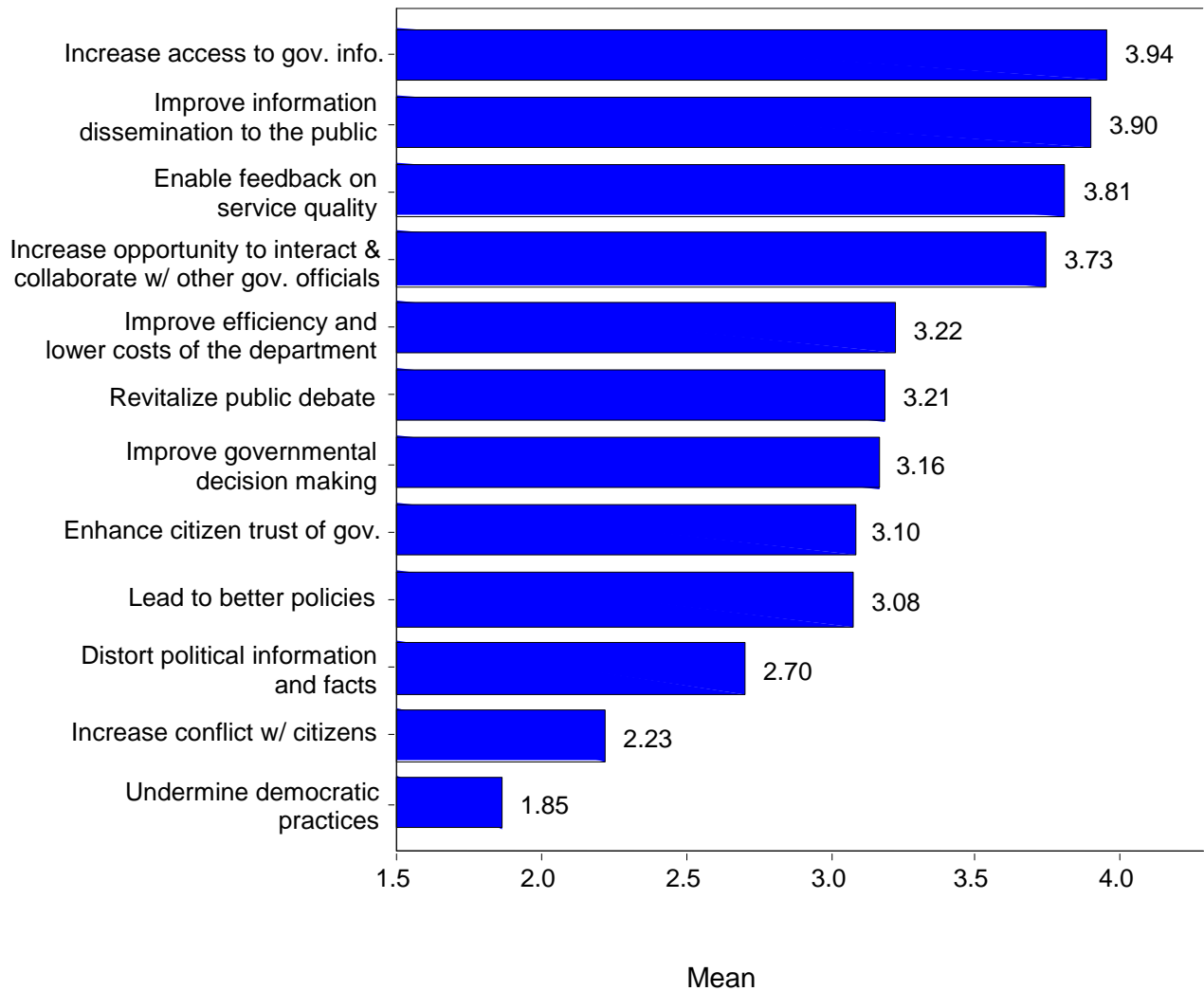
Results show that about half of the managers report that their organization offers online services. The most commonly offered online service among local governments is online requests for services that the department is responsible for delivering. Online transactions are less common compared to other services.

3.4. *Increased interaction between government and citizens is the biggest perceived impact of information communication technologies. Negative impacts are less frequently reported by public managers.*

As the second part of our analyses, we investigated managers’ opinions about the outcomes of information communication technologies (ICT). The survey asked local government managers the extent to which they believe electronic ICTs led to certain outcomes related to service delivery, government decision making, and citizen attitudes about government. The response options range from one ‘to a very small extent’ to five ‘to a very large extent’. Mean frequencies of the responses are shown in Figure 10.

Figure 10. In your opinion, to what extent do electronic information and communication technologies lead to the following outcomes?

5=To a very great extent 4=To a great extent 3=Somewhat 2=To a small extent 1=To a very small extent



About three out of four public managers (74.4%) report that the use of technology has improved citizen access to local government services in their department to a ‘great extent’ or ‘a very great extent’. These technologies are also thought to have improved collaboration with other government officials.

Department managers also perceive that technology adoption had less of an impact on government decision making and in improving citizen's perceptions of government. The results indicate that effects of technology on items related to policy making and policy outcomes such as revitalizing public debate, improving government efficiency and decision making, increasing trust in government and improving public policy are perceived to be lower.

In order to capture public managers' opinions about any potential negative effects of information and communication technologies, the survey also asked about the extent to which electronic information and communication technologies distort political information, increase conflict with citizens, and undermine democratic practices. Although managers generally scored these items lower than the positive outcomes discussed earlier, negative effects were still present. Managers are more concerned that technologies "distort political information and facts" than "undermine democratic principles".

Comparison of the means of manager perceptions across different departments showed no significant differences on any of these questionnaire items.

3.5. Local government managers tend to have positive perceptions about on-line initiatives and the Internet. These perceptions vary by department type.

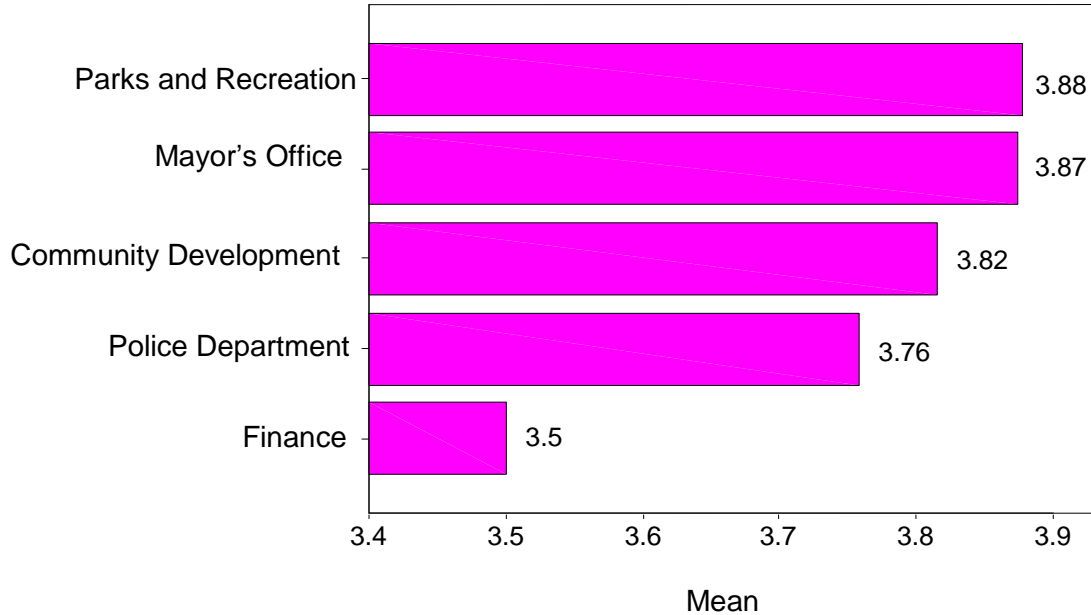
The survey also asked respondents their opinions about the effects of online initiatives and the Internet. The majority 'agreed' or 'strongly agreed' that the Internet helps to make people feel connected to the city (78%), online initiatives increase citizen contact with people in their department (67%), and reduce the amount of face-to-face time spent with clients and citizens (57%).

Comparison of the mean responses across department types, shown in Figure 11, indicates that managers working in mayor's offices and parks and recreation departments are most likely to agree that online initiatives increase citizen contact with the department.

This is likely the result of mayor's offices providing information and seeking citizen input on their website and parks and recreation departments offering information about classes and registration services on their websites. On the other hand, managers working in finance departments are least likely to agree that online initiatives increase citizen contact with the people in the department and the most likely to disagree about online initiatives connecting citizens to people in the department. It may be that those working in finance departments, due to the nature of their work, operate more through face-to-face contact with citizens as compared to other departments (see Figure 1 of this report).

Figure 11. Online Initiatives increase citizen contact with people in my department

5=Strongly Agree, 4=Agree 3=Neither agree nor disagree
2=Disagree 1=Strongly Disagree

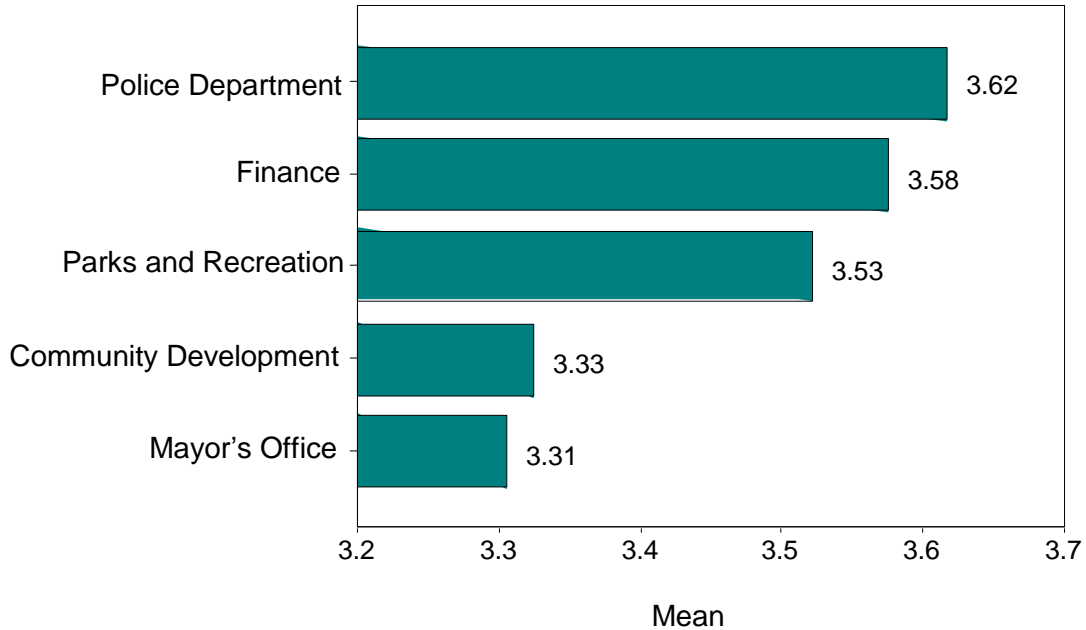


Additionally, it is probable that online initiatives in finance departments are aiming toward organizational goals other than citizen contact with personnel in the department. The statistical comparison of the means further indicate that average manager perceptions about online initiatives and citizen contact are significantly lower in finance departments compared to the other four departments.

Comparison of the manager opinions about how online initiatives relate to face-to-face contact across all departments also reveals some variation. As shown in Figure 12, the results indicate that on average managers in police, parks and recreation, and finance departments believe online initiatives reduce the amount of face-to-face time spent with clients and citizens slightly more than managers in mayor's office and community development departments. However, the difference in mean responses across departments is only statistically significant between police and community development departments.

Figure 12. Online Initiatives reduce the amount of face-to-face time I spend with clients and citizens

5=Strongly Agree, 4=Agree 3=Neither agree nor disagree
2=Disagree 1=Strongly Disagree



Stronger perceptions from some departments may indicate greater ability to transform routine administrative tasks, such as filing reports and complaints, from walk-in service counters to online self-service systems. For example, many finance departments now offer online payment systems for municipal bills and it is increasingly the norm for parks and recreation to offer online registration for classes and activities. For more complex tasks, such as when community development departments work directly with citizens to plan projects, online interaction may be less likely. In sum, lower level of agreement here may reflect general differences in tasks and services.

3.6. Managers are generally satisfied with city website quality. They also think that the websites tend to be used to disseminate basic information rather than to provide opportunities for citizens to monitor agency policies and participate in agency decision making.

The next set of analyses focus on understanding how public managers perceive the quality of city websites. We first asked the respondents to indicate the extent to which they agree with various statements related to the city website. The response options ranges from one to five, where one is ‘strongly disagree’ and five is ‘strongly agree’. Table 6 summarizes the responses to three questions about city website quality.

Table 6. Manager Perceptions of City Website

	The city's website is easy to navigate.	The information on the city's website is up-to-date.	The city's website should have more information relevant to citizens and external stakeholders.
Strongly agree	13.1%	12.6%	13.4%
Agree	51.6%	54.3%	38.6%
Neither agree nor disagree	19.3%	18.7%	33.5%
Disagree	12.2%	10.8%	13.5%
Strongly disagree	1.8%	1.2%	1.0%

The results indicate that overall public managers are satisfied with the city website quality. Two-thirds of the managers 'agree' or 'strongly agree' that the information on the website is up-to-date, and 64.7% report that the website is easy to navigate. On the other hand, about half of the managers (52%) think that the information on the website can be improved and agree that it should have more information relevant to citizens and external stakeholders.

To further investigate public manager opinions about city websites, we asked respondents to rate various components of the city websites, ranging from one to five, five being 'excellent' and one being 'poor'. The frequency distributions and means for each question are summarized in Table 7.

According to the results, the highest rated city website quality is that the website provides information about what the department does (3.55). About half of the public managers (53.3%) think that their city website successfully communicates what their department does. The other two highest rated qualities are provision of employee contact information (3.44) and provision of department documents of interest to citizens and other external stakeholders (3.43). On the other hand, public managers in local government organizations have relatively low ratings for opportunities on the website for citizens and other external stakeholders to ask questions online (2.86) and for online information about department decision making (2.74).

Table 7. Manager Ratings of Various City Website Qualities

	Excellent (5)	Very Good (4)	Good (3)	Fair (2)	Poor (1)	Mean Rating
Provision of employee contact information.	21.4%	26.1%	33.2%	13.8%	5.5%	3.44
Provision of department documents of interest to citizens and other external stakeholders.	17.8%	30.1%	34.4%	13.8%	4.0%	3.43
Opportunities for citizens and other external stakeholders to ask questions online.	12.7%	22.6%	22.9%	22.2%	19.5%	2.86
Information about what our department does.	19.1%	34.2%	32.4%	11.3%	3.0%	3.55
Information about the decisions our department makes.	7.4%	16.4%	33.8%	28.1%	14.3%	2.74
Clarity of information assessing or analyzing activities our department is responsible for.	9.7%	24.5%	37.4%	20.2%	8.2%	3.07
Information about department meetings, including agendas, minutes and other postings.	22.2%	24.0%	22.0%	14.1%	17.7%	3.18

These findings may imply that although the city websites are pervasively used for information dissemination purposes, they are less extensively utilized as tools to facilitate two-way interaction between the public and the local government agencies. According to the public managers surveyed, the websites tend to be used to disseminate basic information relevant to the public and other stakeholders, rather than providing information that can enable the public to monitor agency policies and be used as a medium to provide opportunities for citizens to participate in agency decision making.

3.7. Local government website quality relates to positive outcomes from online initiatives.

To explore whether there is a relationship between manager perceptions of website qualities and their perceptions about online initiatives and the Internet, we conducted bivariate correlation analyses. The results indicate that higher ratings for each of the website qualities reviewed above are significantly and positively related to higher levels of agreement by public managers that online initiatives increase citizen contact with people in their department.

Similarly, findings also show that public managers who rated these website qualities higher tend to think that the Internet helps to make people feel connected to the city. These findings may show that local government website quality relates to positive outcomes from online initiatives.

On the other hand, we find only two significant relationships between manager perceptions that online initiatives reduce the amount of face-to-face time they spend with clients and citizens and the managers' city website ratings. The analysis indicates that public managers who rated the city websites higher for 'information on what the department does' and 'information about department meetings, including agendas, minutes and other postings' also tend to agree that online initiatives reduce the amount of face-to-face time they spend with clients and citizens. These findings may imply that, when city websites are adequate in terms of providing the citizens with the information they need, citizens' need to interact face-to-face with public agencies may be reduced.

Summary and Conclusions

The purpose of this report is to describe the status of and relationships between transparency, participation, and technology used in local governments in the United States. The report presents findings from a national survey of local governments on transparency and information dissemination, public participation, and technology use and its effects, as part of a long-term research study interested in understanding the relationships between technology and civic engagement in local governments. Findings and observations are summarized in the following paragraphs.

Transparency and Information Dissemination

- More than half of key decision meetings in local government organizations surveyed were open to the public, and openness to public relates to department type, external stakeholder influence, and city population size. It may be that organizations that require more political responsiveness are more likely to provide opportunities for input from the public into their decision processes, whereas organizations that are more rule bound and require greater control may choose not to enable the public to influence important department and agency policy decisions.
- Web technology, newspaper, and email are the most frequently used mechanisms to announce these meetings to the public.
- Similarly, web technology and email are used often to disseminate information to the public by local government agencies.

Public Participation

- Individuals or groups that participate most frequently in local government decision and policy making are internal department staff, mayor, and other city departments, followed by individual citizens, neighborhood associations, and interest groups.

- Frequency of citizen participation varies by department type, but not by population size.
- The most frequent interaction with the public, on average, takes place in individual face-to-face meetings with citizens and public hearings, followed by community or neighborhood meetings.
- The most frequent reason for the public to interact with the local government agencies is voicing concerns or opinions about community issues.
- The mean frequency of overall public participation is significantly higher in parks and recreation departments than mayor's offices, community development departments, finance departments, and police departments.
- The results for this group of analyses also indicate a significant and positive relationship between level of information dissemination to the public and frequency of participation, which varies by department type and city size. This may imply that information dissemination to the public may be more essential for some departments than others to enable the public to interact with local government organizations.

Technology Use

- Nearly all local government departments use email to communicate with citizens and external stakeholders. Somewhat surprisingly, more than half of all departments have adopted social networking technologies such as Facebook and Twitter. Few departments use wikis or online chats.
- Information and communication technologies are perceived by managers to increase interaction between local governments, citizens and stakeholders. To a lesser degree, the technologies are viewed to improve government services, public policy making, and citizen's trust of government.
- The majority of the managers agree that the Internet helps to make people feel connected to the city, and online initiatives increase citizen contact with people in their department and reduce the amount of face-to-face time spent with clients and citizens.
- These are positive indications that web-based technologies can and are being used by local governments to increase civic engagement. At the same time, with services increasingly offered completely online, it is possible that municipal officials learn less about their constituents' personal lives and needs, though local government managers overwhelmingly believe that on-line initiatives have positive outcomes.
- Overall, public managers are satisfied with the city website quality. However, they also think that information on the websites should be improved to make it more relevant to the public.
- Although the city websites are pervasively used for information dissemination purposes, they are less extensively utilized as tools to facilitate two-way interaction between the public and the local government agencies.
- Local government website quality is related to positive outcomes from online initiatives. When city websites are adequate in terms of providing citizens with the information they need, citizens' need to interact face-to-face with public agencies may be reduced.

Appendix A- Methodology

The national web-based survey of local governments, sponsored by Institute of Policy and Civic Engagement at University of Illinois at Chicago, was conducted by the Science, Technology and Environmental Policy Lab at the University of Illinois at Chicago between August 2, 2010 and October 11, 2010. The survey instrument, developed by Dr. Mary Feeney, Dr. Megan Haller, and Dr. Eric Welch, was designed to collect data on the quantity and types of engagement activities, utilization of technology (Internet and non-Internet based) to seek input from citizens and other stakeholders, integration of citizen comments into decision processes, manager perceptions about technology use, as well as organizational factors such as financial and technological capacity of government, management and leadership qualities, and external contextual factors that may encourage or mitigate efforts by government to engage citizenry. The survey instrument with exact questionnaire items referenced in the report is provided in Appendix B.

The survey was administered to government managers in 500 local governments with citizen populations ranging from 25,000 to 250,000. The breakdown of cities by population is highly skewed to smaller cities (50%), with only 16% of cities being 100K-250K. Because larger cities tend to have more capacity for e-government and the ability to adopt innovative technology and there are fewer cities in these population ranges, the authors elected to do a census of the larger communities (100K-250K), and drew a proportional sample for the cities 25K-100K. The census of cities with a population 100K-250K resulted in 184 cities. For the remaining 316 cities, a proportional sample with 59% of the sample was drawn from 25K-50K, 28% from 50-75K, and 13% from cities 75K-100K. Table below presents the sampling strategy for the 500 cities included in this study.

US cities with population ranging from 25,000 to 250,000

CITY POPULATION	Overall NUMBER	Overall Proportion	NUMBER (small)	Proportion (small)	Sample (small)	Census (large)	TOTAL SAMPLE
25K-50K	591	50%	591	58.98%	186		186
50K-75K	278	23%	278	27.74%	88		88
75K-100K	133	11%	133	13.27%	42		42
100-125K	68	6%				68	68
125-150K	37	3%				37	37
150-175K	23	2%				23	23
175-200K	28	2%				28	28
200-225K	18	2%				18	18
225-250K	10	1%				10	10
Totals	1186		1002		316	184	500

For each city, lead managers were identified in each of the following five departments: general city management, community development, finance, police, and parks and recreation.

A total of 2,500 city managers were invited to take part in the survey. A total of 902 responses were received for a final response rate of 37.9%. Table below shows the response rate details.

Final Response Rate

Original Sample	2500
Bad Email Address	88
Not Working / Retired	32
Adjusted Sample	2380
Responses	902
Response Rate	37.90%

Data is weighted to correct for the representation of respondents from various city population sizes in the sample. The authors used the percentage of individuals per city grouping in the population and the percentage of individuals from those cities in the sample to calculate the following weights.

Weight factor	# indiv.	%Pop	# Samp.	% Samp.	WEIGHT (%pop / %samp.)	#cities pop	#cities sample	Weights (pop/sample)
25K-50K	2955	0.498313659	930	0.372	1.33955285	591	186	3.177419
50K-75K	1390	0.234401349	440	0.176	1.33182585	278	88	3.159091
75K-100K	665	0.112141653	210	0.084	1.33501967	133	42	3.166667
100-125K	340	0.057335582	340	0.136	0.42158516	68	68	1
125-150K	185	0.031197302	185	0.074	0.42158516	37	37	1
150-175K	115	0.019392917	115	0.046	0.42158516	23	23	1
175-200K	140	0.023608769	140	0.056	0.42158516	28	28	1
200-225K	90	0.015177066	90	0.036	0.42158516	18	18	1
225-250K	50	0.008431703	50	0.02	0.42158516	10	10	1
Total	5930		2500			1186	500	

Appendix B – Exact Questionnaire Items and Response Categories for the Survey Questions Presented in the Report

Information Dissemination and Decision Meetings

Each organization holds key decision meetings where important agency and department policy decisions are discussed and decided upon. These key decision meetings include most or all top decision makers in your organization. Thinking about key decision meetings at your organization, please respond to the following items:

During the last year, approximately what percent of your organization’s key decision meetings were open to the public, including citizens and other stakeholders? (enter 0 if none)

For those key decision meetings that were open to the public, how does your organization announce them? 1= Yes 0= No Don't Know

- Web (including online newsletters)
- Hard copy newsletter
- Newspapers
- Cable TV
- Radio
- Hard copy posters
- Social networking tools (e.g. Twitter, Facebook, LinkedIn)
- Text messaging (SMS)
- Audio webcasts
- Video webcasts
- Email
- Bulletin boards

Over the past year, how often did your organization use the following mechanisms to disseminate information to the public? *Information dissemination is communication of information and knowledge held by your organization to citizens and other stakeholders outside of your organization.* 5= Very Often Often Sometimes Rarely 1= Never Don't Know

- Web (including online newsletters)
- Hard copy newsletter
- Newspapers
- Cable TV
- Radio
- Hard copy posters
- Social networking tools (e.g. Twitter, Facebook, LinkedIn)
- Text messaging (SMS)
- Audio webcasts
- Video webcasts
- Email
- Bulletin boards

Participation

Over the past year, how often did members of the public interact in the following ways with your organization? 5= Very Often Often Sometimes 1= Rarely Never Don't Know

- Provide input on long range plans
- Provide input on service priorities
- Provide formal oversight of your organization
- Voice agreement or disagreement with department decisions
- Voice concerns or opinions about community issues

Over the last year, how often did the following citizens and stakeholder groups participate in agency decision and policymaking? Stakeholders include organizations and individuals outside your department including local community organizations, nonprofit or educational groups, or other government agencies. 5= Very Often Often Sometimes Rarely 1= Never Don't Know

- Individual citizens
- Neighborhood Associations
- News media
- Interest groups
- Consultants
- Professional associations
- Internal department staff
- Other city departments
- Mayor
- Governor's office
- State legislators
- Federal government agencies

Interaction with Citizens and Stakeholders

Over the past year, how frequently did your organization interact with citizens and external stakeholders in the following settings? 5= Very Often Often Sometimes Rarely 1= Never Don't Know

- Public hearings
- Community or neighborhood meetings
- Citizen advisory board meetings
- Chamber of commerce meetings
- Business community meetings
- Citizen focus group
- Citizen telephone hotline
- Online electronic venues
- Individual face-to-face meetings with citizens
- Online polls or surveys

Participation and Technology

To the best of your knowledge, does your organization use the following electronic technologies to enable or facilitate participation by citizens and external stakeholders? Participation is defined as the process in which citizens and external stakeholders take part in agency decisions. 1=Yes 0=No Don't Know

- Blogs
- Online chats
- Discussion forums
- E-mail
- Online newsletters
- Audio Webcasts
- Text messaging
- Really simple syndication (RSS feeds)
- Social networking sites (e.g., Facebook, MySpace, Twitter)
- Video sharing sites (e.g. YouTube)
- Video Webcasts
- Web surveys or polls
- Wikis
- Electronic polling during face-to-face meetings

During the last year, how often did your organization use electronic technologies to enable the following citizen and stakeholder groups to participate in government activities and events? 5=Very Often Often Sometimes Rarely 1=Never Don't Know

- Individual citizens
- Neighborhood Associations
- News media
- Interest groups
- Consultants
- Professional associations
- Internal department staff
- Other city departments
- Mayor
- Governor's office
- State legislators
- Federal government agencies

In your opinion, to what extent do electronic information and communication technologies lead to the following outcomes? 1=To a very small extent To a small extent Somewhat To a great extent 5=To a very great extent

- Improve governmental decision-making.
- Lead to better policies.
- Revitalize public debate.
- Distort political information and facts.
- Undermine democratic practices.
- Improve information dissemination to external stakeholders and citizens.
- Increase opportunity to interact and collaborate with other government officials.
- Increase access to government services.
- Enable feedback on service quality.
- Enhance citizen trust of government.
- Increase conflict with citizens.
- Improve efficiency and lower costs of the department.

Please indicate your level of agreement or disagreement with the following statements:

5=Strongly agree Agree Neither agree nor disagree Disagree 1=Strongly disagree

- On-line initiatives increase citizen contact with people in my department.
- Online initiatives reduce the amount of face-to-face time I spend with clients and citizens.

Technology in Your Department

Please indicate if your department currently offers the following online services or not.

1=Yes 0=No N/A

- Online payment for services including fees and fines
- Online delivery of local government records or department information to citizens who request information.
- Online requests for services that your department is responsible for delivering.
- Online completion and submission of job applications.

Thinking about your city's website, please indicate your level of agreement or disagreement with the following statements: 5=Strongly agree Agree Neither agree nor disagree Disagree

1=Strongly disagree

- The city's website is easy to navigate.
- I think that the city's website should have more information relevant to citizens and external stakeholders.
- The information on the city's website is up-to-date.

Now thinking about your department's website or webpage(s), please rate the following on a scale from excellent to poor: 5=Excellent Very good Good Fair 1=Poor

- Provision of employee contact information.
- Provision of department documents of interest to citizens and other external stakeholders.
- Opportunities for citizens and other external stakeholders to ask questions online.
- Information about what our department does.
- Information about the decisions our department makes.
- Clarity of information assessing or analyzing activities our department is responsible for.
- Information about department meetings, including agendas, minutes and other postings.