# 2017 Government Technology Solutions Survey

## Summary Report of Results

## Introduction

Technology solutions have become essential to residential services, business development, and other local government priorities. The International City/County Management Association (ICMA), in partnership with OnBase by Hyland, conducted a 2017 survey to assess the information technology and e-government solutions being used by local governments. The results of this survey are meant to give an overview of the capabilities, priorities, and difficulties local governments have in implementing technology solutions. This report summarizes the survey methodology, highlights, and overall responses.

## Methodology

This survey was delivered to 1,422 US local governments, addressed to chief administrative officers. The sample was limited to counties with at least 50,000 residents and municipalities with at least 75,000 residents. This yielded 190 responses for a 13.4% response rate.

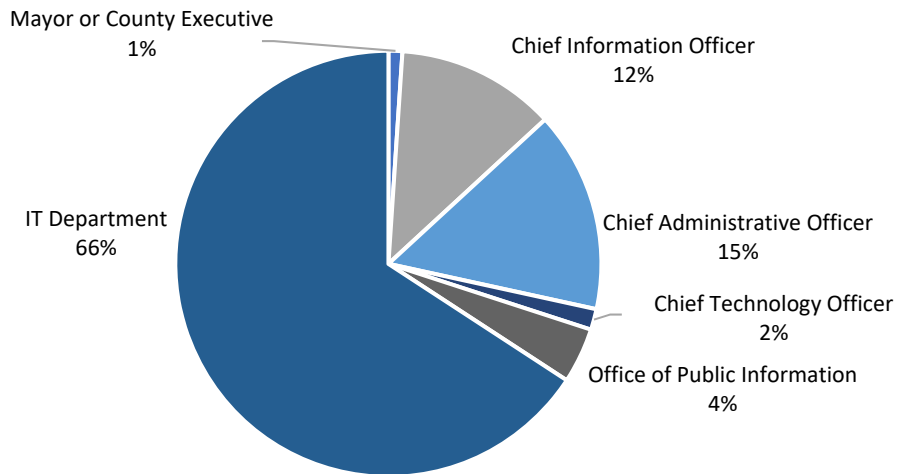| | Number Surveyed | Number Responding | Response Rate |
|---|---|---|---|
| **Total** | 1,422 | 190 | 13.4% |
| **US Census Bureau Geographic Region** | | | |
| Northeast | 199 | 19 | 9.5% |
| Midwest | 365 | 44 | 12.1% |
| South | 543 | 73 | 13.4% |
| West | 315 | 54 | 17.1% |
| **Type of Government** | | | |
| County | 916 | 122 | 13.3% |
| Municipality | 506 | 68 | 13.4% |
| **Population Size** | | | |
| Over 1,000,000 | 42 | 6 | 14.3% |
| 500,000 - 1,000,000 | 97 | 11 | 11.3% |
| 250,000 - 499,999 | 168 | 33 | 19.6% |
| 100,000 - 249,999 | 532 | 81 | 15.2% |
| 50,000 - 99,999 | 583 | 59 | 10.1% |
| **Form of Government** | | | |
| Mayor-Council | 212 | 19 | 9.0% |
| Council-Manager | 288 | 49 | 17.0% |
| Commission | 6 | 0 | 0.0% |
| County Commission | 283 | 34 | 12.0% |
| County Council-Manager | 380 | 63 | 16.6% |
| County Council-Elected Executive | 253 | 25 | 9.9% |

# Survey Highlights

## Organizing, Purchasing and Delivering Information Technology

With information technology (IT) serving as an important part of local government infrastructure, the survey was interested in several aspects of IT oversight, delivery, and selection.
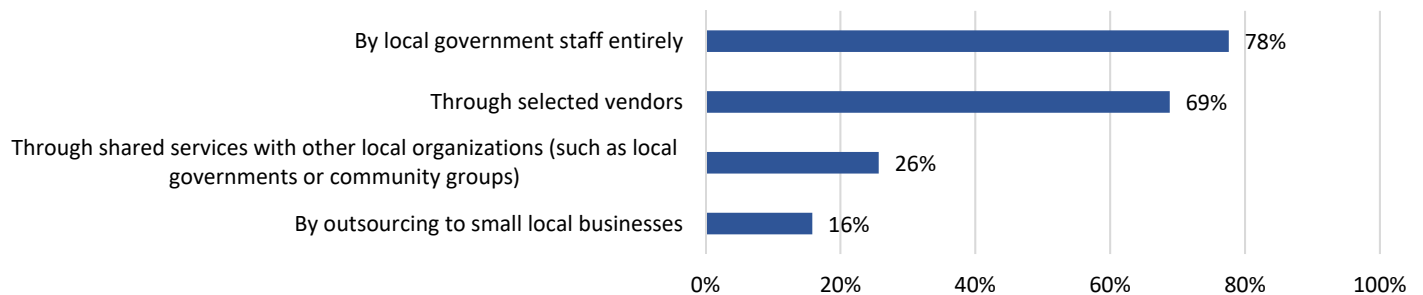
Primary responsibility for overall IT efforts most often rests with the IT department (66%), but 15% of respondents indicated principal responsibility lay in the office of the chief administrative officer.

**Which department/office in your local government has principal responsibility for government information technology projects and activities? (n=190)**



- Mayor or County Executive — 1%
- Chief Information Officer — 12%
- IT Department — 66%
- Chief Administrative Officer — 15%
- Chief Technology Officer — 2%
- Office of Public Information — 4%

The most popular methods of providing enterprise-wide technology solutions are using only in-house staff (78%) or through selected vendors (69%). A smaller portion of local governments partner with other local governments and community groups (26%).

**How does your local government most frequently provide enterprise-wide technology solutions? (n=183)**



- By local government staff entirely — 78%
- Through selected vendors — 69%
- Through shared services with other local organizations (such as local governments or community groups) — 26%
- By outsourcing to small local businesses — 16%

The favored approach to determining an IT solution is conducting a departmental need assessment (89%), followed by research and recommendations to solve specific challenges (77%). The continuing need to modernize is shown by a high percentage saying that they are conducting assessments of the age of their solutions (69%). While the survey did not specifically ask about method, a similarly high percentage said that cost-benefit analysis prior to purchase was a key approach to selection (64%).
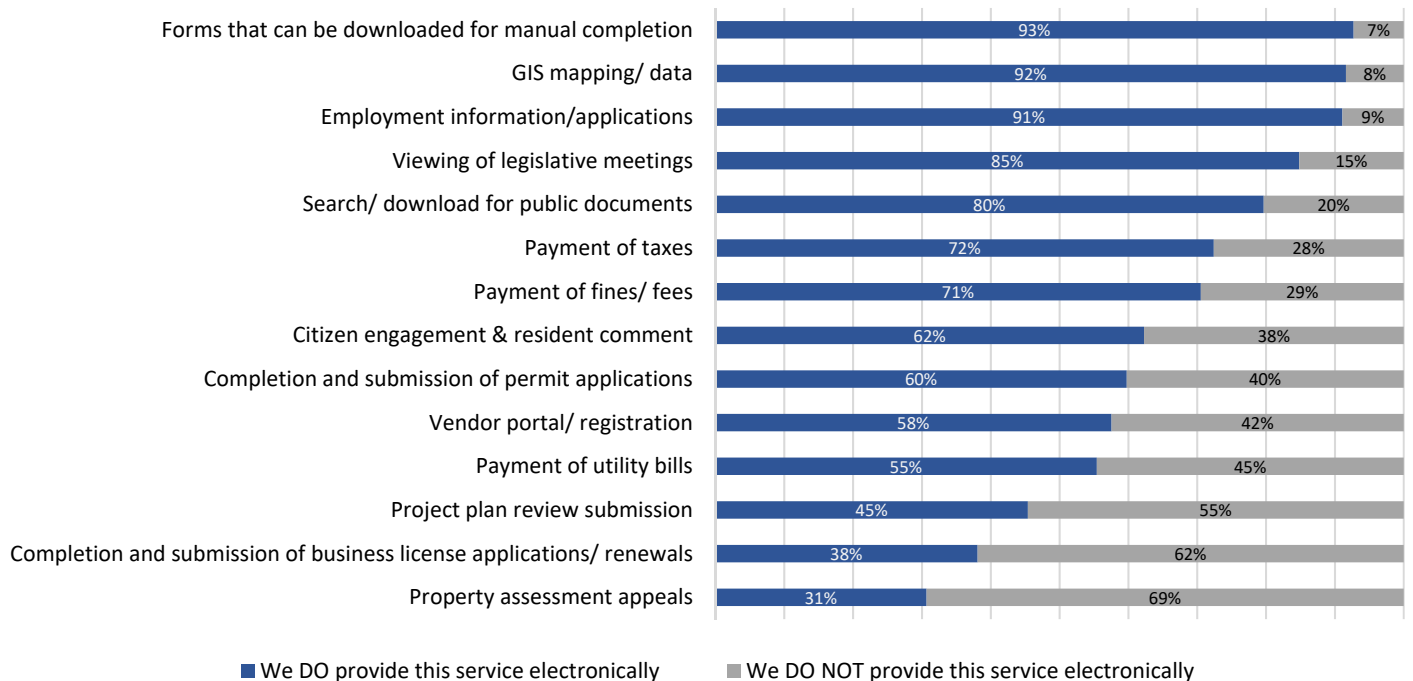
**Which management and engagement approaches does your local government use to identify and select information technology solutions? (n=182)**

| Approach | Percentage |
|---|---|
| Departmental needs assessment | 89% |
| Research and recommendation to solve specific challenges | 77% |
| Inventory & age assessment of legacy technology solutions in use | 69% |
| Cost-benefit analysis prior to purchase | 64% |
| Enterprise-wide committee or working group recommendations | 62% |
| Funding was available to make the purchase | 46% |
| Return on investment (ROI) analysis after implementation | 37% |
| Individual staff member request | 35% |

## Key Electronic Services to Residents

Local governments are most frequently making electronic versions of paper forms available for download (93%), using GIS software (92%), making employment information/applications available electronically (91%), making their meetings available online (85%), and making their public documents available for search (80%).
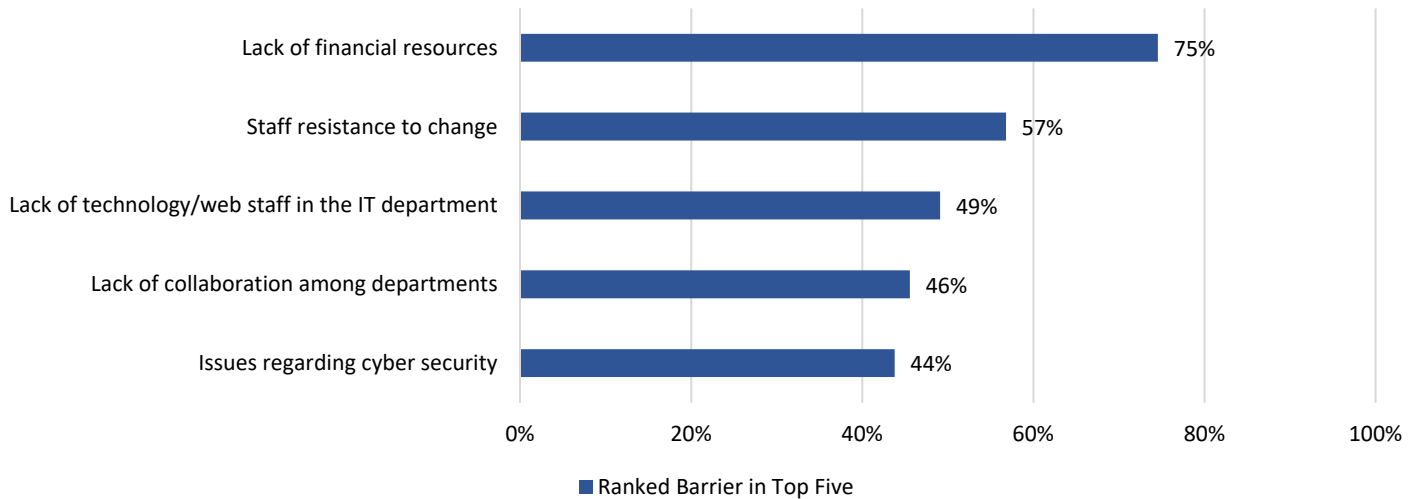
**Please provide the following information about services available electronically for your residents.**

| Service | We DO provide this service electronically | We DO NOT provide this service electronically |
|---|---|---|
| Forms that can be downloaded for manual completion | 93% | 7% |
| GIS mapping/ data | 92% | 8% |
| Employment information/applications | 91% | 9% |
| Viewing of legislative meetings | 85% | 15% |
| Search/ download for public documents | 80% | 20% |
| Payment of taxes | 72% | 28% |
| Payment of fines/ fees | 71% | 29% |
| Citizen engagement & resident comment | 62% | 38% |
| Completion and submission of permit applications | 60% | 40% |
| Vendor portal/ registration | 58% | 42% |
| Payment of utility bills | 55% | 45% |
| Project plan review submission | 45% | 55% |
| Completion and submission of business license applications/ renewals | 38% | 62% |
| Property assessment appeals | 31% | 69% |

## Barriers to E-Government Initiatives

This survey asked respondents to rank their top five barriers to e-government initiatives, such as technology demands, institutional support, and resident interest. Lack of financial resources (75%), staff resistance to change (57%), lack of IT technology and staff (49%), a lack of departmental collaboration (46%), and cyber security (44%) were the most common barriers indicated.
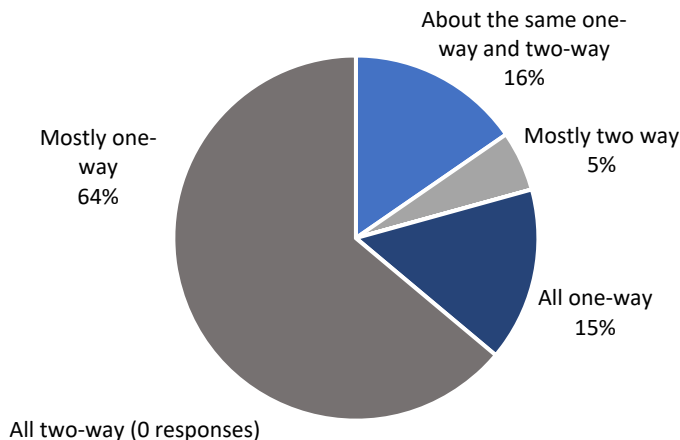
**Please identify the top five barriers to e-government initatives that your local government has encountered.**

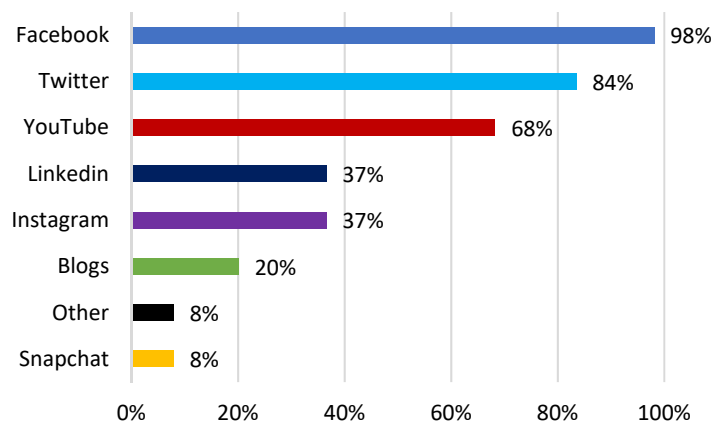| Barrier | Percentage |
|---|---|
| Lack of financial resources | 75% |
| Staff resistance to change | 57% |
| Lack of technology/web staff in the IT department | 49% |
| Lack of collaboration among departments | 46% |
| Issues regarding cyber security | 44% |

■ Ranked Barrier in Top Five

## Social Media and Communicating with Residents

This survey asked about local government social media usage and method of communication. Two-way communication was defined as information that is produced and shared by both the local government and residents, while one-way communication was defined as information being exclusively produced by the local government and shared with residents. Social media communication was frequently characterized as mostly one-way (64%); Facebook (98%), Twitter (84%), and YouTube (68%) were the most commonly-used platforms.

**Please select the answer that most accurately describes how you use social media to communicate with residents. (n=169)**

- About the same one-way and two-way 16%
- Mostly two way 5%
- All one-way 15%
- Mostly one-way 64%
- All two-way (0 responses)

**If your local government uses social media, please indicate which social media you use. (n=164)**

| Platform | Percentage |
|---|---|
| Facebook | 98% |
| Twitter | 84% |
| YouTube | 68% |
| Linkedin | 37% |
| Instagram | 37% |
| Blogs | 20% |
| Other | 8% |
| Snapchat | 8% |

## Appendix: Survey Results

**1. Which department/office in your local government has principal responsibility for government information technology projects and activities?** *(Check only one.)*

| n=190 | | |
|---|---|---|
| a. | Office of the City-County Manager/Chief Administrative Officer | 15.3% |
| b. | Office of the Mayor or county executive | 1.1% |
| c. | IT department | 65.8% |
| d. | Office of the Chief Information Officer (CIO) | 12.1% |
| e. | Office of the Chief Technology Officer (CTO) | 1.6% |
| f. | Office of Public Information | 0.0% |
| g. | Other | 4.2% |

**2. How does your local government most frequently provide enterprise-wide technology solutions?** *(Check all that apply.)*

| n=183 | | |
|---|---|---|
| a. | By local government staff entirely | 77.6% |
| b. | Through shared services with other local organizations | 25.7% |
| c. | By outsourcing to small local businesses | 15.8% |
| d. | Through selected vendors | 68.9% |

**3. Which management and engagement approaches does your local government use to identify and select information technology solutions?** *(Check all that apply.)*

| n=182 | | |
|---|---|---|
| a. | Enterprise-wide committee or working group recommendations | 62.1% |
| b. | Inventory & age assessment of legacy technology solutions in use | 68.7% |
| c. | Cost-benefit analysis prior to purchase | 63.7% |
| d. | Return on investment (ROI) analysis after implementation | 37.4% |
| e. | Departmental needs assessment | 89.0% |
| f. | Individual staff member request | 34.6% |
| g. | Research and recommendation to solve specific challenges | 76.9% |
| h. | Funding was available to make the purchase | 45.6% |
| i. | Other | 4.9% |

**4. How does your IT department function within your organization?** *(Check only one.)*

| n=183 | | |
|---|---|---|
| a. | Centralized system that delivers services to the enterprise | 34.4% |
| b. | Decentralized system with IT personnel located within each department | 1.6% |
| c. | Hybrid system with a central enterprise office and IT personnel in departments | 63.9% |

**5. How many IT personnel (FTEs) does your organization have?**

| n=179 | | Mean | Median |
|---|---|---|---|
| a. | In a centralized enterprise office | 30.7 | 16.0 |
| b. | Within departments | 35.8 | 5.0 |
| c. | Other IT personnel not included in part [a] and [b] | 11.9 | 6.5 |

**6. Does your jurisdiction currently have specific "off-the-shelf" technology solutions dedicated for the purposes listed below?** *(Check only one per row.)*

| Technology Solution | | n | Answering "yes" |
|---|---|---|---|
| a. | Online permitting | 179 | 74.9% |
| b. | Digital procurement & purchasing systems | 177 | 70.1% |
| c. | Contract management | 176 | 47.7% |
| d. | Enterprise Resource Planning (ERP) | 178 | 62.4% |
| e. | Electronic plan review | 175 | 47.4% |
| f. | Asset management | 177 | 84.2% |
| g. | Paperless agendas | 180 | 74.4% |
| h. | Document management | 179 | 87.7% |
| i. | Freedom of Information (FOI)/ Public records requests | 172 | 44.8% |
| j. | Grants management | 166 | 34.9% |
| k. | Geographic Information System (GIS) | 182 | 97.3% |
| l. | Human services case management | 173 | 63.6% |
| m. | Customer service/CRM technologies | 164 | 50.0% |
| n. | Networking/data communications | 176 | 93.8% |
| o. | Cloud storage for data | 174 | 76.4% |
| p. | Other | 183 | 8.7% |

7. What is your annual budget for government technology solutions? Your estimate should be based only on cost of application solutions, i.e., software, SaaS, etc. Do not include hardware and personnel costs. *(Check only one.)*

| n=175 | |
|---|---|
| $5,000,001 + | 12.6% |
| $2,500,001 - $5.0 million | 6.9% |
| $1,000,001 - $2.5 million | 19.4% |
| $500,001 - $1 million | 24.0% |
| $250,001 - $500,000 | 14.9% |
| $100,001 - $250,000 | 14.3% |
| Under $100,000 | 8.0% |

8. Please provide the following information about services available electronically for your residents. *(Check only one per row.)*

| Online Service | n | Service is provided electronically |
|---|---|---|
| a. Online payment of taxes | 174 | 72.4% |
| b. Online payment of utility bills | 166 | 55.4% |
| c. Online payment of fines/ fees | 173 | 70.5% |
| d. Online search/ download for public documents | 177 | 79.7% |
| e. Online viewing of legislative meetings | 178 | 84.8% |
| f. Online project plan review submission | 174 | 45.4% |
| g. Online citizen engagement & resident comment | 175 | 62.3% |
| h. Online vendor portal/ registration | 172 | 57.6% |
| i. Online completion and submission of permit applications | 174 | 59.8% |
| j. Online completion and submission of business license applications/ renewals | 168 | 38.1% |
| k. Forms that can be downloaded for manual completion (e.g., voter registration, building permits, etc.) | 179 | 92.7% |
| l. Online employment information/applications | 180 | 91.1% |
| m. Online GIS mapping/ data | 179 | 91.6% |
| n. Online property assessment appeals | 163 | 30.6% |
| o. Other | 183 | 5.5% |

9. Please identify the top five barriers to e-government initiatives that your local government has encountered. *(Rank 1 to 5, with 1 being your top barrier.)*

| n=169 | | | | | | |
|---|---|---|---|---|---|---|
| Barrier | 1 | 2 | 3 | 4 | 5 | Total 1-5 |
| a. Lack of technology/web staff in the IT department | 13.0% | 16.6% | 7.7% | 3.6% | 8.3% | 49.1% |
| b. Lack of technology/web staff in the operating departments | 3.0% | 3.6% | 9.5% | 1.8% | 4.7% | 22.5% |
| c. Lack of information about e-government applications in the IT department | 0.0% | 2.4% | 3.6% | 5.9% | 7.1% | 18.9% |
| d. Lack of information about e-government applications in the operating departments | 3.6% | 5.3% | 7.7% | 10.7% | 5.9% | 33.1% |
| e. Lack of support from elected officials | 0.6% | 1.8% | 7.1% | 3.6% | 7.1% | 20.1% |
| f. Issues relating to convenience fees for online transactions | 3.6% | 3.0% | 4.7% | 5.9% | 7.1% | 24.3% |
| g. Lack of collaboration among departments | 5.3% | 10.1% | 8.9% | 13.6% | 7.7% | 45.6% |
| h. Difficulty justifying return on investment (ROI) | 4.1% | 6.5% | 7.7% | 10.7% | 8.9% | 37.9% |
| i. Staff resistance to change | 8.9% | 14.8% | 12.4% | 11.8% | 8.9% | 56.8% |
| j. Issues regarding privacy | 0.6% | 10.1% | 5.3% | 7.1% | 5.9% | 29.0% |
| k. Issues regarding cyber security | 10.7% | 13.6% | 11.2% | 3.0% | 5.3% | 43.8% |
| l. Lack of financial resources | 41.4% | 13.6% | 9.5% | 6.5% | 3.6% | 74.6% |
| m. Need to upgrade technology (PCs, networks, etc.) | 4.7% | 5.9% | 5.9% | 7.7% | 5.3% | 29.6% |
| n. Resident/business resistance to change | 1.2% | 1.8% | 4.7% | 7.1% | 3.6% | 18.3% |
| o. Lack of resident/business interest/demand | 3.6% | 3.6% | 5.9% | 6.5% | 8.3% | 27.8% |
| p. Website does not accept payment by credit card | 0.0% | 2.4% | 3.0% | 3.6% | 3.0% | 11.8% |
| q. Lack of support from top administrators | 1.2% | 1.8% | 2.4% | 3.0% | 6.5% | 14.8% |
| r. Other | 1.2% | 0.6% | 0.6% | 0.6% | 1.2% | 4.1% |

10. Has your organization used any of the following ways to provide online services?  *(Check all that apply.)*

| n=170 | | |
|---|---|---|
| a. | Developed in-house by local government staff | 78.8% |
| b. | Developed by consultants and local government staff | 64.7% |
| c. | Outsourced to Application Service Providers | 69.4% |
| d. | Purchased programs from vendors and integrated into our databases | 85.3% |
| e. | Developed by a local government association | 7.6% |
| f. | Developed through a public-private partnership | 7.6% |
| g. | Other | 1.2% |

11. If your local government uses social media, please indicate which social media you use. (*Check all that apply*.)

| n=164 | | |
|---|---|---|
| a. | Facebook | 98.2% |
| b. | Twitter | 83.5% |
| c. | YouTube | 68.3% |
| d. | Instagram | 36.6% |
| e. | Snapchat | 7.9% |
| f. | LinkedIn | 36.6% |
| g. | Blogs | 20.1% |
| h. | Other | 7.9% |

12. Please select the answer that most accurately describes how you use social media to communicate with residents. For the purposes of this survey, one-way communication refers to information being produced exclusively by the local government and shared with residents. Two-way communication refers to information that is produced and shared by both the local government and residents. (*Check only one*.)

| n=169 | |
|---|---|
| All one-way | 15.4% |
| Mostly one-way | 63.9% |
| About the same one-way and two-way | 15.4% |
| Mostly two way | 5.3% |
| All two-way | 0.0% |

13. Who in your local government is mostly responsible for handling social media?  (*Check only one*.)

| n=170 | | |
|---|---|---|
| a. | Office of the City-County Manager/Chief Administrative Officer | 17.6% |
| b. | IT department | 8.2% |
| c. | Office of Information/Public relations | 57.6% |
| d. | Other | 16.5% |

**To learn more about this survey, contact <u>surveyresearch@icma.org</u>.**