

E-Democracy, E-Commerce, and E-Research: Examining the Electronic Ties Between Citizens and Governments

John Clayton Thomas, Professor

Office: (404) 651-4591

Fax: (404) 651-1378

jcthomas@gsu.edu

Andrew Young School of Policy Studies
University Plaza
Georgia State University
Atlanta, GA 30303-3082

and

Gregory Streib, Professor

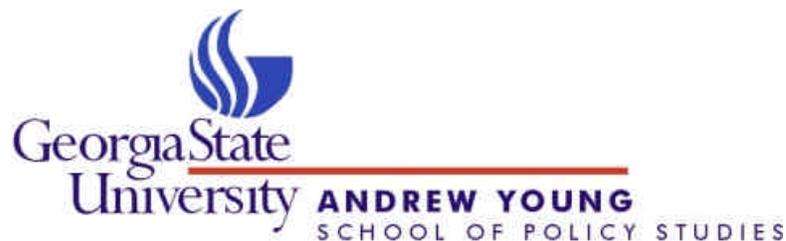
Office: 404-651-4448

Home: 404-378-7397

Fax: 404-651-1378

gstreib@gsu.edu

Andrew Young School of Policy Studies
University Plaza
Georgia State University
Atlanta, GA 30303-3082



Author Biographies

John Clayton Thomas is a professor in the Department of Public Administration and Urban Studies in the Andrew Young School of Policy Studies at Georgia State University. His research focuses on public administration and urban affairs, with a particular concern for how citizens connect with their governments and how those connections can be improved. Thomas has written three books and more than forty articles, including in such journals as *Public Administration Review*, *Journal of Public Administration Research and Theory*, and *Urban Affairs Review*.

Gregory Streib is a professor of public administration at Georgia State University, specializing in public management and applied research methods. His research has addressed a wide variety of public management issues, including strategic planning, pay-for-performance, health care cost reduction, performance measurement, reinventing government, and the implementation of E-governance initiatives.

Acknowledgements

We wish to thank the Applied Research Center in the Andrew Young School of Policy Studies at Georgia State University for collecting the data used in this study.

Abstract

Few doubt that the Internet is changing citizen interactions with government. To assess those changes, we analyze data from a telephone survey on how Georgia residents connect with government via the Internet. We find that citizens visit government Web sites for many reasons, which can be divided into three categories: e-commerce, e-research. E-democracy is the least common activity, and it alone resembles traditional political behavior by being more prevalent among respondents interested in politics and government. The conclusions discuss the implications of these findings for future citizen engagement with e-governance and for the role of government in facilitating that engagement.

E-Democracy, E-Commerce, and E- Research:

Examining the Electronic Ties Between

Citizens and Governments

The growth of the Internet has prompted much speculation about a possible new era of electronic government. Citizens might increasingly connect with government online, rather than by phone, in person, or other traditional means, with e-governance in time replacing much of traditional governance. Eventually, we may reach a point where “anyone anywhere can go online anytime, not only to get the information they need but also to actually receive services, complete transactions, communicate with their elected representatives and even to vote”(Verton, 2000).

A growing body of research on government Web sites suggests that governments are moving toward making these speculations a reality (American Society for Public Administration & United Nations Division for Public Economics and Public Administration [ASPS & U.N.], 2002). To be sure, governments may be more interested in promoting economic development than in promoting democracy through their Web sites (Stowers, 2001; West, 2000), but there is also evidence of American governments using the Web to facilitate democratic expression. For example, fully 72 percent of the cities in one recent survey claimed that their Web sites could be used for making requests or comments (Governing, 2000).

On the demand side of the picture, however, less is known about how and why citizens are actually connecting with their governments via the Internet. Some survey evidence

suggests that these connections have become extensive, with many or most citizens who go online reporting having connected with government Web sites (Pew Internet & American Life Project [Pew], 2002; Streib & Thomas, 2003). But what reasons prompt those connections? We do not know, for two examples, whether the connections are more a function of our work or of our personal needs or whether they more along the lines of “e-democracy,” communicating opinions to policymakers, or “e-commerce,” conducting transactions with government. There are also questions about who makes these connections and who does not. Of particular interest, might involvement with e-governance represent a new form of political behavior where those who engage in other kinds of political behavior will be more active in e-governance, too?

The intent of this paper is to seek preliminary answers to those questions, in the process sketching the current meaning of e-governance for the citizens it serves. To do so, we will first draw on prior research to define researchable questions about why and how citizens might connect with government via the Internet. We will then seek to answer these questions using data from a recent survey of a random sample of Georgia residents on whether and for what reasons they have visited government Web sites recently. We will conclude by discussing the implications of the findings for the roles of the Internet in connecting citizens with their governments and of government in facilitating those connections.

Citizen Usage of E-Governance: The State of Our Knowledge

Citizen engagement in e-governance has spawned enough research to sketch tentative patterns in two general areas of interest: (1) the reasons why citizens visit government Web

sites and (2) the characteristics of the citizens who make those visits. We examine each of the areas in turn below.

The Composition of Citizen Engagement with E-Governance

Research points first to three broad, sometimes overlapping, kinds of reasons for citizen visits to government Web sites. The three reasons are, with thanks to The Markle Foundation (2001) and online strategist Steven Clift (2002) for colorful synonyms for each: (1) e-commerce, the Internet as “shopping mall,” (2) e-democracy, the Internet as “town square,” and (3) e-research, the Internet as “big library.” Each of the three warrants additional definition.

E-commerce, as we and others (Stowers, 2001) define the concept, refers to online transactions with government that involve, or may involve, an exchange of money—citizens paying governments or governments paying citizens. Two common examples of e-commerce are online licensing or permitting (e.g., automobile license tag renewals) and downloading and filing of tax forms. A typical list for state governments also includes applying for fishing or hunting licenses, renewing professional licenses, and requesting a government loan (Brannen, 2001).

E-democracy, in turn, refers to citizens going online to communicate opinions or complaints to government related to a public issue, independent of any commercial transaction. Citizens who engage in these online activities join in the democratic process by seeking to shape the development or implementation of public policies. By this definition, e-democracy includes such activities as advising elected officials about preferences on policy questions and voicing of complaints about governmental services (e.g., potholes) since both entail efforts to influence government policies or programs. This is an active participation in

the democratic process, too, extending beyond simple information seeking on policy questions.¹

Most commentary on e-governance focuses on these two dimensions, with e-commerce probably receiving the most attention. A 2000 study on “Benchmarking the eGovernment Revolution,” for example, reported patterns of government Web site visits that appeared to emphasize e-commerce, although the study did not distinguish dimensions of e-governance (Momentum Research Group, 2000). Similarly, an earlier study of state and municipal government Web sites documented an emphasis on “business and economic development,” a subset of e-commerce, with only eight percent of states and one percent of cities using their Web sites for the discussion of policies and policy proposals that would qualify as e-democracy (Stowers, 2001). A more recent study suggests that local governments have made little progress on this score (Moon, 2002). Still, anecdotal reports attest to at least the occasional use of Web sites for discussion of policy issues, as in one case for difficult hazardous waste questions (American City and County, 1998).

Other evidence points to a third dimension of e-governance, what we term “e-research.” E-research refers to government Web site visits where the individual seeks information ostensibly independent of either e-commerce or e-democracy. Students who are seeking information on the Hubble Telescope are engaging in e-research, as are parents who are looking for information on schools for their children. Judging from a recent Markle Foundation survey (The Markle Foundation, 2001), e-research could be the largest component of e-governance:

By far, the leading metaphor for the Internet, in the public’s mind, is not “a shopping mall” or “banking and investment office,” but rather “a library.” Despite the popular

depiction of the Internet as a channel for commerce, the public mostly views it as a source of information, and these uses appear to explain its popularity much more than its utility as a way to shop, bank, or invest.

Within these broad categories, some specific functional reasons seem likely to be most prominent, judging from prior research. Most of the known reasons fall in the realm of e-commerce, including taxes, real estate records, motor vehicles, licensing or permitting, and job applications. E-democracy uses of the Web entail two principal components: (1) offering opinions on public issues and policy questions and (2) voicing complaints about government programs and services. E-research, as the residual category, encompasses any information searches other than those for e-commerce or e-democracy.

These various components also include both personal and job-related dimensions in that people visit government Web sites both as part of their work and for personal reasons unrelated to work. Not much has been documented about these aspects of e-governance, even on the most basic question of which of the two is more common. Within the dichotomy, one might guess that e-democracy would be more prominent among personal than job-related reasons because democratic involvement is presumably more personal than job-related. A similar logic could predict that e-commerce would be more prominent among job-related reasons, but that logic runs up against the common impression that many aspects of governmental e-commerce (e.g., taxes, driver's licenses) are frequently pursued for personal reasons. In the end, the differential composition of personal versus job-related engagement in e-governance appears an area more appropriate for exploration than for prediction.

The Characteristics of Government Web Site Visitors

When the questions turn to who participates in e-governance, a first part of the answer is very clear. That involvement will likely reflect the so-called “digital divide,” the well-documented tendency for the economically advantaged and the young to have more access to and usage of computers. That access should also influence who can entertain the possibility of joining in e-governance.

Answers become scarce, though, once the digital divide is crossed and the questions ask who will join in e-governance among those who have computer access and go online regularly. Perhaps the most interesting issues here focus on the possible roles of three characteristics: (1) education, (2) age, and (3) interest in politics and government.

Education could prove an important factor in explaining which Internet users visit government Web sites. Given that government Web sites are arguably more esoteric than Web sites in general, those who visit government Web sites might be expected to be more knowledgeable, as perhaps most easily measured by education.

Age, especially youth, represents an intriguing factor because prior research suggests that it could either encourage *or* discourage involvement in e-governance. On the one hand, the young clearly use computers more than other age groups, suggesting that they might also join more in e-governance. On the other hand, a vast body of research documents how interest in government and politics increases as people age, implying that the young might engage less in e-governance. In the face of these competing arguments, we view age as an important factor to investigate, but profess agnosticism on its likely effect on involvement in e-governance.

Perhaps the most interesting question asks whether involvement in e-governance might be motivated in part by a general interest in politics and government. If so, that involvement would parallel much political behavior (e.g., voting, campaigning), which is driven in part by interest in politics, and could constitute a new form of political behavior. Engagement in e-governance in fact bears at least a surface resemblance to the political behavior of citizen-initiated contacts with government, where “individual citizens contact government personnel with requests for services or complaints” (Melkers & Thomas, 1999). Engaging in e-governance could conceivably represent initiation of such contacts by a new means, and so might be a function in part of the same political motivators that underlie traditional citizen contacts, especially, psychological and/or behavioral involvement with politics and government (Emmert & Traut, 1993; Sharp, 1986).

Prior research counsels skepticism about this possible parallel. In particular, Bimber (2000) found indicators of political interest were not helpful in explaining involvement with government via the Web. He concluded that involvement with e-governance is less a political act than are other traditional involvements with government.

We suspect that this conclusion may be accurate as a broad-brush description of involvement in e-governance. That is, involvement in e-governance via the Web may as a whole be less like political behavior than is citizen-initiated contacting or, for that matter, voting. At the same time, if the focus can be narrowed to the finer detail of e-governance involvement, parallels to other kinds of political behavior may emerge.

Focusing on the finer detail requires differentiating the components of this involvement governance—e-commerce, e-research, and e-democracy as well as personal versus job-related usage. These different dimensions appear to constitute very different

behaviors, as different as the contrast in the non-Web world between, for example, getting a driver's license and advising an elected official how to vote on an issue. In our judgment, neither e-commerce nor e-research nor most job-related Web usage bears much resemblance to political behavior. As a consequence, the factors that typically motivate political behavior may exert no influence over either kind of involvement in e-governance.

By contrast, involvement in e-democracy does resemble other political behavior, perhaps especially citizen-initiated contacts, and so might be influenced by general political interest. That linkage may most likely obtain with personal as opposed to job-related involvement with e-democracy since job-related involvement might be expected to be a function more of aspects of the job than of an individual's personal characteristics. In other words, of all the various aspects of e-governance involvement, only involvement in e-democracy for personal reasons may be a function in part of political interest.

The Data

The findings presented in this analysis are from a January 2001 phone survey of a random sample of Georgia residents. The cooperation rate for the survey was 56 percent and a total of 827 Georgians of age 18 and older participated. The questions asked about use of the Internet in general, use of the government Web sites on the Internet, evaluation of those Web sites, as well as basic personal demographic information. The results were weighted using the most recent U.S. Census data on the State of Georgia. The survey findings are expected to have some error. Ninety-five percent of the time, error due to the random selection process will be no more than 3.4 percentage points plus or minus the reported percentage.

The survey asked first if the individual went online to use the Internet. Respondents doing this at least every few weeks were then asked if they had visited a government Web site within the last 12 months. Respondents who visited government Web sites were then asked questions about visits that had been for “job-related” reasons and/or “personal” reasons.” In each case respondents were asked separately about eleven specific reasons for visiting these Web sites.

- To obtain tax information or pay taxes
- To review real estate records
- To access motor vehicle information or services
- To access licensing or permit information
- To apply for a government job
- To make a reservation for a public park
- To obtain some other kind of information on a governmental program or agency
- To request some other service (please specify)
- To register a complaint
- To express an opinion on an issue
- By accident
- Other please specify

With no specific question in the survey about the respondent’s

level of interest in politics and government, we looked for surrogate measures, and found two:

- Voter registration: Respondents were asked if they were registered to vote. We infer that those who are registered have by that registration shown more interest in the work of government.
- Partisan ideological consistency: This variable combined answers to separate questions on party identification and ideological self-labeling. Although neither variable by itself might tap political interest, the combination of the two might. Those respondents whose partisan and ideological identifications are consistent—as either (a) liberal Democratic (Democratic Party identification and liberal or “extremely liberal” ideological identification) or (b) conservative Republican (Republican Party identification and conservative or “extremely conservative” ideological

identification)—might be viewed as having both greater political sophistication and greater political interest.

Findings

Respondents were first asked, “How often, if at all, do you go online to use the Internet?” Slightly more than 55 percent of the respondents reported going online at least every week, with slightly less than a third of the respondents reporting never having gone online. Those who said they had gone online were then asked whether they had visited any government web sites during the past twelve months, and 43 percent responded in the affirmative. Stated slightly differently, 26 percent of the full sample had visited government Web sites; 41 percent had gone online but had not visited government Web sites.

Reasons for Visiting Government Web Sites

Those respondents who reported having visited a government Web site in the past year were then asked parallel sets of questions about (1) visits for job-related reasons and (2) visits for personal reasons. As the numbers in Table 1 show, the latter are more frequent than the former, with half again as many personal visits as job-related visits. Figure 1 underscores the broader personal appeal of government Web sites by showing that the proportion of respondents who visited government Web sites for personal reasons but *not* job-related reasons is almost twice that of those who visited for job-related reasons but *not* personal reasons.

Table 1 About Here

Figure 1 About Here

For both types of visits, respondents were also asked whether they had visited for any of a number of specific purposes. As the results in Table 1 show, there are several common

reasons why people visit government Web sites. Taxes were mentioned most often, but each of five other reasons was mentioned by 20 percent or more of the respondents under either or both job-related or personal reasons.

Despite these numerous questions about possible specific reasons for government Web site visits, “other information” was the reason most frequently cited for these visits—by 52 percent of those who visited for personal reasons and by 71 percent of those who visited for job-related reasons. Clearly, our best efforts to cover the full range of reasons for visiting government Web sites still overlooked many reasons. That finding underscores the extraordinary breadth of concerns that prompt citizens to connect with the governments via the Web.

To our surprise, as displayed in the bottom row of Table 1, work-related and personal reasons for visiting government Web sites do not differ greatly. For one thing, contrary to our expectations, e-democracy does not constitute a substantially higher proportion of personal as opposed to job-related reasons for visiting government Web sites.

To gain a sense of what reasons the specific questions missed, respondents who mentioned “other information” as a reason for government Web site visits were asked an open-ended question about what kinds of information they were seeking. In data not shown, education/schools and legal/regulatory prove to be the common types of information sought, with each among the top five reasons for both personal and job-related Web site visits, but several other reasons were also frequently mentioned. These reasons, too, do not differ greatly or in any readily explicable manner depending on whether the visit was for a job-related as opposed to a personal reason.

Stepping back from the detail of the data, a broader question asks about the relative importance of the three principal dimensions of e-governance—e-commerce, e-democracy, and e-research. As a first estimate of these magnitudes, cumulative counts were made of the number of respondents who reported using government Web sites for one or more of the specific reasons in each of the three categories. (The headings in Table 2 indicate the reasons that are included in each of the e-governance dimensions.) As noted earlier, these are admittedly imprecise estimates. For one thing, given the many reasons the survey overlooked, these specific questions are unlikely to cover all of the actual reasons on any of the dimensions. Still, the results in Figure 2 provide initial ballpark estimates of the relative magnitude of the several components of e-governance.

Figure 2 About Here

As expected, e-commerce and e-research prove to be the most common uses of e-governance for both personal and job-related reasons. Majorities—frequently substantial majorities—of respondents report these involvements for both personal and job-related reasons. The extensive interest in e-research is especially impressive since (1) the measure is based on only one question and (2) respondents were asked that question only after a number of other questions that could also have tapped informational interests. By comparison, involvement in e-democracy through government Web sites is relatively limited, confined to less than a fourth of those who access government Web sites for either personal reasons (22.5 percent) or job-related reasons (24.1 percent).

The differences here between personal and job-related visits are less notable. The only striking difference is on the e-research dimension where involvement for job-related

reasons is much higher than for personal reasons. There is no tendency, as might have been expected, for involvement in e-democracy to be higher for personal than for job-related reasons.

One might object that these estimates are unbalanced because they include more questions about e-commerce (four) than about either e-democracy (two) or e-research (one). To address this objection, we developed an alternative measure: the *mean* percentage of respondents responding “yes” across all of the questions on each of e-governance dimensions. Using this measure, the e-research percentages do not change since each was based on only one question, but, for e-commerce, the mean percentages are 24.7 percent and 25.1 percent for job-related and personal reasons, respectively, as compared to 14.4 percent and 17.3 percent for e-democracy. Thus, if this measure were used instead (and it is not necessarily a superior measure), e-commerce would become a somewhat smaller part of e-governance, but the relative importance of the three e-governance dimensions would remain unchanged: e-research first, e-commerce second, and e-democracy third in usage.

Participation in E-Governance: Who Does What?

The question of who engages in e-governance consists of a series of questions about progressively smaller segments of the sample. The first most general question asks simply who goes online. Here, as in previous research, that question can be best answered by reference to the digital divide. As the crosstabulations in Table 2 illustrate, those who go online are more likely to be young, white, better educated, and with higher incomes.

| |
|---------------------------|
| Table 2 About Here |
|---------------------------|

But what happens when we narrow our focus to government Web site visitors only, asking how they differ from other Internet visitors? To recall, we predicted that education might discriminate best between these two groups, with government Web site visitors more educated than other Web users.

The logistic regression results in Table 3 support the prediction as education emerges as the only significant discriminator between government Web site visitors and other Internet users. Respondents with college degrees were nearly twice as likely to visit government Web sites as were other Internet users.

| |
|---------------------------|
| Table 3 About Here |
|---------------------------|

Notably, neither age nor any indicator of political/governmental interest proved a significant predictor of government Web site visits. In the case of age, the fact that the young in this sample are not less inclined to visit government Web sites offers some encouragement by suggesting that their well-reported political disenchantment may not be keeping the young away from government Web sites. As for the indicators of political/governmental interest, their absence as significant predictors implies, as predicted, that visits to government Web sites do not parallel political behavior.

The remaining questions ask about differences among those who reported visiting government Web sites. First, having seen earlier that personal and job-related visits to government Web sites cannot be differentiated in terms of *why* they occur, might they differ in *who* makes one versus the other? To assess that possibility, these different types of visitors are compared on various demographic and political interest dimensions in Table 4.

Table 4 About Here

Two factors emerge as significant discriminators. The first is age: Visitors for personal reasons tend to be younger, visitors for job-related reasons tend to be older, and those who visit for both types of reasons fall in between. For example, almost half—or 49.5 percent—of those who visited government Web sites for personal reasons are under 35 years old, as compared to less than a third—or 32.7 percent—of those who visited only for job-related reasons. By contrast, older respondents, especially those in the 35 to 55 age range, may be more likely to visit the Web mostly when their jobs require.

Combining this finding with earlier findings suggests an answer to the question about the role of age in e-governance involvement. Age does not appear to affect—either positively or negatively—whether Web users visit government sites, but it does discriminate between visits for personal as opposed to job-related reasons. This pattern may reflect that the greater computer interests and facility of the young incline them more to visit the Web on their own, unrelated to jobs, and, while there, often to visit government Web sites.

The second factor is income, where those who visited government Web sites only for personal reasons had lower incomes than other visitors to these sites. Although the explanation for this pattern is not obvious, the pattern offers some encouragement relative to the digital divide. Since there is less socioeconomic bias to the use of government Web sites for personal reasons, the likely continued growth in those visits in the future could erode that divide for the use of government Web sites.

Finally, there is the question of whether interest in politics and government affects involvement in any aspect of e-governance. We predicted that this interest, as operationalized

in voter registration and partisan ideological consistency, would influence only involvement in e-democracy involvement for personal reasons, the only e-governance involvement we view as similar to traditional political behavior.

Table 5 About Here

The logistic results in the first part of Table 5 show the expected resemblance. In particular, respondents who could be described as partisan ideologues—conservative Republicans and liberal Democrats—prove significantly more likely to engage in e-democracy for personal reasons. They were nearly six times more likely than other visitors for personal reasons to visit a government Web site to register a complaint or an opinion. Interest in politics and government does appear to influence engaging in e-democracy for personal reasons, suggesting a parallel between that engagement and other political behavior. As the second part of the table shows, the same pattern does not obtain for e-democracy involvement for job-related reasons. Nor did either measure of political/governmental interest emerge as a significant predictor of any other kind of e-governance involvement. In fact, in logistic regressions not shown, no variable emerged as a significant predictor of involvement in e-commerce or e-research for either personal or job-related reasons. E-commerce and e-research usage of government Web sites appears to be fairly typical of government Web site usage in general.

Conclusions and Implications

The unfolding era of “e-governance” raises many questions about how the relationship between citizens and their governments may change. The findings of this research on Georgia

residents suggest some initial conclusions and potential implications for both citizen engagement with e-governance and the role of government in facilitating that engagement.

A prior question, though, is whether these findings can be generalized beyond Georgia. We believe they can for two reasons. First, Georgia's demographic mix is similar to that of the U.S. as a whole, with the state containing a mix of whites and African-Americans, plus newly-growing Hispanic and Asian-American populations, and both a highly-wired Atlanta metropolitan area and the less-wired out-state. Second, national studies show similar findings on some of the core questions, such as extent of computer and government Web site usage (Momentum Research Group, 2000; Pew, 2002).

The most obvious conclusion of this research almost certainly generalizes: Growing numbers of citizens are choosing to connect with their governments via the Internet. As of January 2001, roughly a fourth of these Georgia respondents—or 43 percent of Internet users—reported visiting a government Web site in the past twelve months. Those proportions have undoubtedly continued to expand since.

Those visits occurred for all manner of specific reasons, more than could be fully documented here. The reasons fall principally into the two broad categories of (1) e-research, getting information from government via the Web, and (2) e-commerce, doing business with government via the Web, as in filing taxes and buying licenses. Smaller proportions of respondents engaged in e-democracy, using the Internet to join in governmental decision-making. Thus, citizen involvement in e-governance has so far taken the form more of government as “shopping mall” or “library” than “town square.” In addition, visits for personal reasons predominated over visits for job-related reasons.

On the question of who joins in e-governance, the data suggest a several-part answer. As the strongest pattern, a “digital divide” still best differentiates Web visitors from non-visitors. That divide embodies a distinct socioeconomic bias, with whites, the young, the wealthier, and the more educated all having better computer access. Since that access is a prerequisite for involvement in e-governance, this socioeconomic bias also differentiates government Web site visitors from the rest of the population.

When the focus narrows to differences between government Web site visitors and other online visitors, education alone proved a significant predictor. Government Web sites are perhaps more esoteric than Web sites in general, resulting in greater use by the better educated. This difference is, however, much less pronounced than the digital divide.

Two other variables emerged as significant in distinguishing among government Web visitors alone. First, age, which did not discriminate between government Web users and other Internet users, achieved statistical significance in differentiating between those who visited government Web sites for personal as opposed to job-related reasons. The young appear no less inclined than other Internet users to visit government Web sites, but are more likely to make those visits for personal reasons.

Second, partisan ideological consistency, an indicator of interest in politics and government, proved a significant predictor of one aspect of government Web site visits—visits linked to e-democracy. Of all the aspects of e-governance, only engagement with e-democracy appears to parallel traditional political behavior. Put differently, only e-democracy may involve individuals as *citizens*; all other aspects of e-governance appear to involve individuals as *customers* instead.

Implications for Society and Governance

The findings demonstrate unequivocally that the Internet now serves as a major new linkage between society and government. The strengths of this new citizen linkage with government lie, to date anyway, in information acquisition and routine transactions—government Web sites as “big library” and “shopping mall.” Those could prove to be the enduring strengths of e-governance if people who want more than information or a routine transaction continue to seek a live voice and real-time response, qualities more easily obtained in-person or by telephone than online.

But it is much too early to reach that conclusion. Governments have lagged so badly in building interactive capabilities into their Web sites (Moon, 2002; Fletcher, Holden, and Norris, 2003) that the likely utilization of those capabilities, if they were available, is impossible to guess. Enhancing online interactive capabilities could expand e-governance well beyond its current strengths.

For probably the same reasons, e-democracy represents both the smallest part of e-governance to date and the part whose eventual magnitude seems the most difficult to predict. People who voice a complaint or an opinion on an issue, the components of e-democracy, may often want a personal response. The eventual potential for e-democracy thus cannot be assessed until governments offer an integrated combination of Internet and personal capabilities, where an initial online registration of a complaint or opinion may receive a follow-up personal contact. Such systems might well result in most citizens resolving their issues in a “self-service” manner, requiring no personal assistance, but with the option available to request a personal response if desired.

The findings imply at least two other recommendations for how governments should further develop their Web presence. First, the goal of developing more sophisticated interactive capabilities should not blind governments to the value of simply making more and better information available online. The importance of the Web as “big library,” as documented by this and other research, points to people having an almost insatiable hunger for online information about government, information often involving public policy (Pew, 2002). Democracy will likely be enhanced to the extent that government can meet this need.

Second, even as these efforts proceed, governments must also recognize that the Internet is not yet for everyone, and government Web sites are for even fewer than the Internet in general. The digital divide may turn out to be only a “transition effect” (Bimber, 2000), disappearing if computer and Web access becomes as universal as telephones, radio, and television have become. At the moment, though, the divide is very real, and poses a difficult dilemma for governments. The many citizens who now use government Web sites and the many others soon to join them justify devoting substantial resources to these sites, but the many who do *not* yet access the sites necessitate maintaining traditional means of accessing government, as well. Further complicating matters, both must be accomplished at a time when new money is hard to find for any government function. That suggests a difficult agenda for government, but success in addressing the agenda could greatly enhance relationships between citizens, society, and government.

Endnote

¹ Involvement in e-democracy would be much larger if the concept were defined to encompass policy-related seeking of information, too (see, for example, Pew Internet & American Life Project, 2002), but we prefer a more limited definition restricted to active involvement in the democratic process through the voicing of opinions and complaints.

References

- American City and County. (November 1, 1998). *Web Site Intended to Replace Diatribe with Dialogue*. Retrieved February 4, 2004, from the World Wide Web:
http://americancityandcounty.com/ar/government_web_site_intended/index.htm
- American Society for Public Administration & United Nations Division for Public Economics and Public Administration. (2002). *Benchmarking E-Government: A Global Perspective - Assessing the Progress of the U.N. Member States*. Retrieved February 4, 2004, from the World Wide Web: <http://www.unpan.org/egovernment2.asp#survey>
- Bimber, B. (2000). The Study of Information Technology and Civic Engagement. *Political Communication*, 17(3), 329-333.
- Brannen, A. (2001). E-Government in California: Providing Services to Citizens Through the Internet. *Spectrum: The Council of State Governments*, Spring, 6-10.
- Clift, S. (2002). *The Future of E-Democracy - The 50 Year Plan*. Retrieved February 4, 2004, from the World Wide Web: <http://www.publicus.net/articles/future.html>
- Emmert, C. F., & Traut, C.A. (1993). Citizen-Initiated Contacting: A Multivariate Analysis. *American Politics Quarterly*, 21, 239-253.
- Fletcher, P. D., Holden, S., & Norris, D.F. (2003). Electronic Government at the Local Level: Progress to Date and Future Issues. *Public Performance & Management Review*, 26(4), 325-344.
- Governing. (2000). Over at the City Web Site. *Governing*, July, 64.
- Markle Foundation, The. (2001, July). *Toward a Framework for Internet Accountability* [Online Report]. Retrieved February 4, 2004, from the World Wide Web:

<http://www.markle.org/news/AccountabilityForewordExecutive&Intro.pdf>

Momentum Research Group. (2000). *Benchmarking the eGovernment Revolution: Year 2000*

Report on Citizen and Business Demand. Retrieved February 4, 2004, from the World

Wide Web: http://www.momentumresearchgroup.com/pdf/eGov_report.pdf

Melkers, J., & Thomas, J.C. (1999). Explaining Citizen-Initiated Contacts with Municipal

Bureaucrats: Lessons from the Atlanta Experience. *Urban Affairs Review*, 34(5), 667-

690.

Moon, M. J. (2002). The Evolution of E-Government among Municipalities: Rhetoric or

Reality? *Public Administration Review*, 62(4), 424-433.

Pew Internet & American Life Project. (2002, April). *The Rise Of The E-Citizen: How People*

Use Government Agencies' Web Sites. Retrieved February 4, 2004, from the World

Wide Web: <http://www.pewinternet.org/reports/toc.asp?Report=57>

Sharp, E. B. (1986). *Citizen Demand-Making in the Urban Context*. Tuscaloosa, AL:

University of Alabama Press.

Stowers, G. N. L. (2001). Commerce Comes to Government on the Desktop: E-Commerce

Applications in the Public Sector. In M. A. A. a. G. E. Means (Ed.), *E-Government*

2001 (pp. 44-84). Lanham, MD: Rowman & Littlefield.

Thomas, J. & Streib, G. (2003). The New Face of Government: Citizen-Initiated Contacts in

the Era of E-Government. *Journal of Public Administration Research and Theory*, 13,

83-102.

Verton, D. (2000). Electronic Government. *Computerworld*, 34, 50.

West, D. M. (2000). *Assessing E-Government: The Internet, Democracy, and Service*

Delivery by State and Federal Governments: The Genesis Institute.

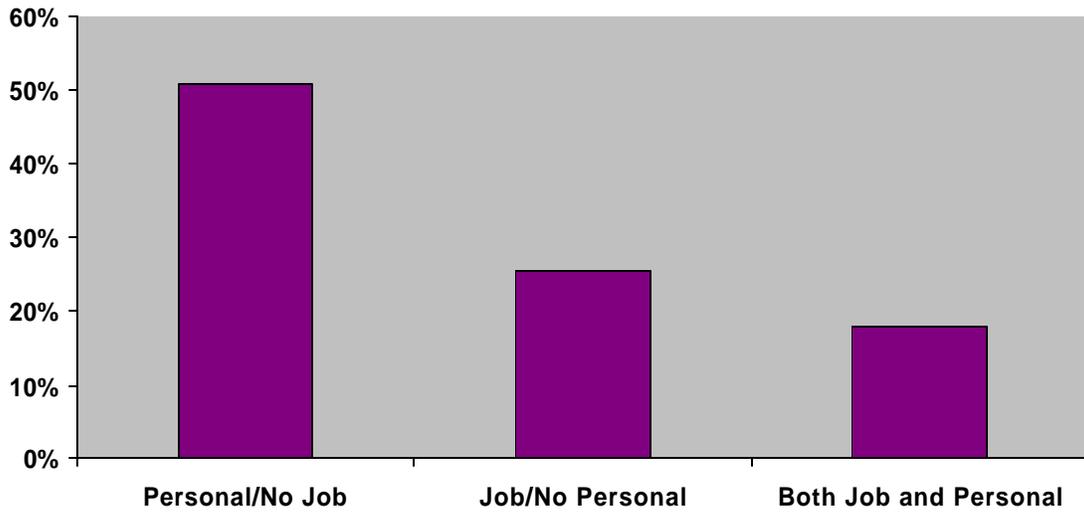


Figure 1 Reported Job and Personal Visits to Government Web Sites for Georgia Residents Using the Internet

Table 1 Reported Reasons for Visiting Government Web Sites for Georgia Residents Using the Internet

(Respondents Could Select Multiple Responses)

| Types of Visits | n | E-Commerce | | | | | Apply for a Job | Reserve Park Space | E-Research | E-Democracy | | Other |
|------------------------------|-----|-----------------------|---------------------|---------------------------|----------------------|---------------------------|-----------------|--------------------|----------------------|--------------------|-------|-------|
| | | Tax Info And Payments | Real Estate Records | Vehicle Info and Services | Licenses and Permits | General Info and Services | | | Register a Complaint | Express an Opinion | | |
| Visits Related to Job Duties | 91 | 41.0% | 13.0% | 18.0% | 33.0% | 24.2% | 19.0% | 71.4% | 8.8% | 20.0% | 36.3% | |
| Visits for Personal Reasons | 138 | 38.4 | 23.2 | 27.0 | 29.0 | 22.0 | 14.5 | 52.0 | 14.5 | 20.3 | 23.2 | |
| Difference | | +3.6 | -10.2 | -9.0 | +4.0 | +2.2 | +4.5 | +19.2 | -5.7 | +3 | +13.1 | |

Rows may not add to 100% due to rounding.

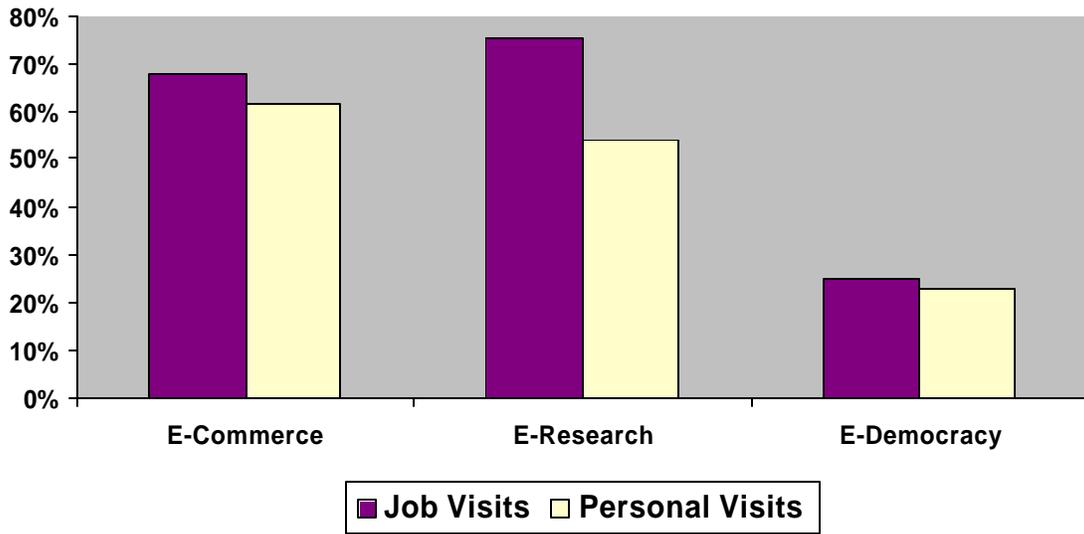


Figure 2 Reported Job and Personal Visits to Government Web Sites for E-government, E-research, and E-democracy Reasons for Georgia Residents Using the Internet (As Proportions of All Job-Related or All Personal Visits)

Table 2
Reported Internet Usage of Key Demographic Groups for Georgia Residents

| Type of Visit | Valid Respondents | Frequency of Visits | | | |
|---------------------|-------------------|---------------------|--------------------|-------------------|-------|
| | | Everyday | Every Week or More | Only Occasionally | Never |
| Race** | | | | | |
| White | 547 | 38.4% | 19.8% | 11.9% | 30.0% |
| African-American | 185 | 24.3 | 21.1 | 15.1 | 39.5 |
| Education** | | | | | |
| High School or Less | 268 | 22.4 | 18.1 | 13.8 | 47.6 |
| Some College | 234 | 34.2 | 22.2 | 14.5 | 28.9 |
| College | 254 | 46.9 | 22.9 | 10.3 | 19.8 |
| Income** | | | | | |
| Below 25,000 | 119 | 24.4 | 12.6 | 10.1 | 52.9 |
| 25,000-50,000 | 160 | 28.8 | 26.9 | 16.9 | 27.5 |
| Above 50,000 | 190 | 49.2 | 24.4 | 10.4 | 15.9 |
| Gender** | | | | | |
| Male | 370 | 41.4 | 18.9 | 10.0 | 29.7 |
| Female | 399 | 29.1 | 21.3 | 15.0 | 34.6 |

* = Significant at the .05 Level, ** = Significant at the .01 Level

Rows may not add to 100% due to rounding.

Table 3
Logistic Regression: Predictors for Visiting Government Web Sites
(for All Internet Users)¹

| | <i>All Government Site Visits</i> | |
|--|---|----------------|
| | B | Standard Error |
| Race | | |
| White and Other = 0, African-American = 1 | -.422 | .323 |
| Family Income | | |
| 50,000 or Less, Above 50,000 | .518 | .302 |
| Age | | |
| Under 35 | .771 | .444 |
| 35 to 55 | .732 | .429 |
| Over 55 (Reference) | | |
| Education | | |
| Less than a College Degree, College Degree or More = 1 | .610* | .269 |
| Home Owner | | |
| No=0, Yes=1 | .173 | .347 |
| Children in Home | | |
| No=0, Yes=1 | -.170 | .266 |
| Marital Status | | |
| Not Married=0, Married=1 | -.286 | .327 |
| Voter Registration | | |
| No=0, Yes=1 | .076 | .364 |
| Partisan Ideologue | | |
| Conservative Republican or Liberal Democrat No=0, Yes=1 | .409 | .305 |
| Goodness of Fit | -2 Log Likelihood = 381.155 Nagelkerke R ² = .102 Classified Correctly = 68% | |

* = Significant at the .05 Level, ** = Significant at the .01 Level

¹Consistent with the recommended procedures for data of this kind (Wooldridge, 2002: 596-597), all of the logistic analyses used unweighted data.

Table 4
Comparison of Government Web Site Visitors for Job-Related and Personal Reasons

| | <i>Personal Visits Only</i> | <i>Both Job-Related and Personal Visits</i> | <i>Job-Related Visits Only</i> |
|--|-----------------------------|---|--------------------------------|
| Race | | | |
| White and Other | 81.2% | 88.6% | 78.2% |
| African-American | 18.8% | 11.4% | 21.8% |
| Age* | | | |
| Under 35 | 49.5% | 44.4% | 32.7% |
| 35 to 55 | 34.3% | 52.8% | 59.6% |
| Over 55 | 16.2% | 2.8% | 7.7% |
| Family Income* | | | |
| 50,000 and Under | 50.8% | 19.0% | 35.3% |
| Over \$50,000 | 49.2% | 81.0% | 64.7% |
| Education | | | |
| Less than a College Degree | 51.5% | 47.2% | 43.6% |
| College Degree or More | 48.5% | 52.8% | 56.4% |
| Home Owner | | | |
| No | 35.6% | 35.1% | 23.6% |
| Yes | 64.4% | 64.9% | 76.4% |
| Children in Home | | | |
| No | 54.9% | 56.8% | 52.7% |
| Yes | 45.1% | 43.2% | 47.3% |
| Marital Status | | | |
| Not Married | 42.6% | 35.1% | 32.7% |
| Married | 57.4% | 64.9% | 67.3% |
| Voter Registration | | | |
| No | 12.7% | 10.8% | 12.7% |
| Yes | 87.3% | 89.2% | 87.3% |
| Partisan Ideologue | | | |
| <i>Conservative Republican or Liberal Democrat</i> | | | |
| No | 77.5% | 89.2% | 72.2% |
| Yes | 22.5% | 10.8% | 27.8% |

* = Significant at the .05 Level, ** = Significant at the .01 Level

Table 5
Logistic Regression: Predictors for E-Democracy Visits
(for Job-Related and Personal Reasons)

| | <i>Personal Visits</i> | | <i>Job-Related Visits</i> | |
|---|--|-------|--|----------------|
| | B | B | B | Standard Error |
| Race | | | | |
| White and Other = 0, African-American = 1 | -.900 | .637 | -.248 | .620 |
| Age | | | | |
| Under 35 | -.762 | .782 | .317 | 1.290 |
| 35 to 55 | -.620 | .701 | .504 | 1.182 |
| Over 55 (Reference) | | | | |
| Education | | | | |
| Less than a College Degree, College Degree or More = 1 | -.341 | .473 | -.069 | .502 |
| Home Owner | | | | |
| No=0, Yes=1 | .232 | .63 | -.076 | .668 |
| Children in Home | | | | |
| No=0, Yes=1 | -.156 | .510 | .639 | .534 |
| Marital Status | | | | |
| Not Married=0, Married=1 | .611 | .557 | -.190 | .583 |
| Voter Registration | | | | |
| No=0, Yes=1 | 1.582 | 1.094 | .766 | 1.201 |
| Partisan Ideologue | | | | |
| <i>Conservative Republican or Liberal Democrat</i> No=0, Yes=1 | 1.710** | .620 | -.272 | .671 |
| Goodness of Fit | -2 Log Likelihood = 121.01 Nagelkerke R ² = .251 Classified Correctly = 79.5% | | -2 Log Likelihood = 106.519 Nagelkerke R ² = .047 Classified Correctly = 71.7 | |