

2007

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Schlosberg, David; Zavestoski, Stephen; and Shulman, Stuart W., "Democracy and E-Rulemaking: Web-Based Technologies, Participation, and the Potential for Deliberation" (2007). *eRulemaking Research Group*. 1.

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Democracy and E-Rulemaking: Web-Based Technologies, Participation, and the Potential for Deliberation

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ABSTRACT. Deliberative democratic theorists and public participation scholars have become increasingly interested in institutionalized forms of citizen discourse with the state, including those facilitated by information technology. However, there have been very few empirical studies of the claims that the Internet will make public participation more inclusive and deliberative. We report the results of an exploratory survey of 1,556 citizen participants in regulatory public comment processes in the United States. Our analysis focuses on the differences in deliberative indicators between those who submitted their comments using newly available electronic tools and those who postal mailed or faxed letters on paper. We also examine differences between those who submitted an original letter and those who submitted a version of a mass-mailed form letter. Overall, the data found modest evidence of the presence of deliberative democratic practices. More interesting are the apparently fundamental differences between citizens who submit original comments and those who submit form letters. We discuss the implications of these findings as they relate to the use of information technology to increase government-citizen deliberation. doi:10.1300/J516v04n01_04

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Journal of Information Technology & Politics, Vol. 4(1) 2007

Available online at <http://jitp.haworthpress.com>

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doi:10.1300/J516v04n01_04

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KEYWORDS. Deliberative democracy, e-rulemaking, Internet, public participation

**INTRODUCTION:
CITIZEN PARTICIPATION
AND THE WEB**

Public participation and citizen deliberation are hallmarks of democratic theory. Over the past two decades, there has been expanded interest in participation, engagement, and deliberation as crucial aspects of democratic practice. As Dryzek (2000, p. 1) notes, "the essence of democracy itself is now widely taken to be deliberation." While some deliberative democrats argue that deliberation already occurs in current liberal democratic governments, legislatures, and/or courts (e.g., Bessette, 1994; Rawls, 1996), most in the field call for expanding public participation and deliberation on policy issues in various ways: from citizen juries, to a national expansion of town hall-style meetings, and further to transnational discourse in civil society (Barber, 1984; Bohman, 1996; Dryzek, 2006; Habermas, 1996; Young, 2000).

Given this call for an extension of deliberative opportunities, a number of democratic theorists and practitioners have begun to examine the implementation of democratic engagement. One area ripe with potential to increase citizen participation is the use of the Internet (Grossman, 1995; Hill & Hughes, 1998). Web-based participation and deliberation range from online consultations with MPs (Coleman, 2004), to online policy dialogues and deliberative polling² at the national and international levels (Beierle, 2004; Janssen & Kies, 2004; Fishkin, 2000), to coordinated Web-based networking among groups in civil society (Dryzek, 2000). Some authors have gone so far as to argue that these types of Web-based participation could be the answer to the decline in social capital and in general interest in citizenship (Blumler & Coleman, 2001; Coleman & Gotze, 2001; numerous essays in Shane, 2004). Others, however, see the Internet

as a place that limits democratic engagement by fostering the practice of communicating only with like-minded citizens (Sunstein, 2001, 2002). It seems there is agreement on only one thing: The Web has potential. Whether that potential is for improving or diminishing deliberation is an open question.

As a result of these trends, and of the open question of the potential of online democratic engagement, a growing research community is looking closely at the possibilities for online political deliberation. This new scholarship has begun to more systematically articulate and test theories about the role of deliberation (Beierle, 2004; Berkman Center, 2005; Schlosberg & Dryzek, 2002; Sunstein, 2001), information (Bimber, 2000, 2003), communications technology (Coleman & Götze, 2001; Froomkin, 2003), design (Noveck, 2004), as well as other factors linked to theories of democratic governance. This research community, however, is generally long on theory, hopes, and predictions, while too often short on empirical data.

Responding to the interest in online deliberation, and to the lack of data in online deliberative studies, we examine how deliberative one form of institutionalized discourse actually is. Contrary to much research and development in this field, in this study we did not seek to develop new forms of online interaction that optimize deliberative behavior; rather, we set out to evaluate the deliberative nature of one new form of citizen participation in the US: that of participation in online rulemaking, commonly known as e-rulemaking.³ Our goal here is to examine the longstanding, but as yet unsubstantiated, optimistic claims in the literature that the convenience of use, the non-hierarchical nature, the egalitarian potential, and the interactive character of the Internet could lead to richer and deeper communication. Our central aim is to evaluate the move to Web-based public participation in rulemaking against various criteria established by theorists of deliberative democ-

racy. The key question is whether or not an online forum produces higher indicators of deliberation than more traditional forums of public input on rulemaking.

E-RULEMAKING AND PARTICIPATION IN THE US

There is a growing body of literature focusing on the importance of public participation in public administration (Bingham, Nabatchi, & O'Leary, 2005; Goodsell, 2006; Roberts, 2004; Thomas & Strieb, 2003; Yang, 2005), as well as in rulemaking in particular (Furlong, 2004; Golden, 1998; Langbein & Freeman, 2000; Lubbers, 2006; Shulman, 2005; West, 2005). Issues of inclusion, deliberation, trust, and interest group influence are central to these studies.

Scholars who have begun to research the potential of e-rulemaking in particular (Coglianese, 2004; Lubbers, 2002; Noveck, 2004; Shulman, 2003, 2004a, 2004b; Zavestoski, Shulman, & Schlosberg, 2006) are fundamentally concerned with the aspects and quality of public participation, as well as its impact on the process and outcomes. As Lubbers (2006, p. 221) observes, the "main touted benefits from e-rulemaking, of course, are increased opportunity for information dissemination, public participation, and governmental transparency, along with better outcomes and greater trust in government." Such claims, however, have very little empirical support (see Benjamin, 2006). Our focus is specifically on the potential of electronic avenues for comment to expand deliberation in the traditional rulemaking setting. In addition to contributing to the discussions of the potential of the Internet in expanding democratic deliberation generally, this study's survey of actual citizen participants in the e-rulemaking process offers an initial, if exploratory, empirical contribution to these discussions of citizen participation in governmental decisions.

Our case begins with the fact that the United States federal government is, by design, facilitating the electronic submission of citizen comments during federal regulatory rulemaking comment periods.⁴ Rules are available for viewing on the Web, and many agency docket

systems have been designed so citizens can search for broad topics or specific rules and then simply type a comment that goes directly into the rulemaking comment docket. In response, citizens and interest groups are taking advantage of newly developed, Web-based tools and services for generating large numbers of public comments. The confluence of these two trends—the pull of an email or Web accessible federal system for collecting public comments and the push of advocacy coalitions and their newly ubiquitous electronic tools—has altered the rulemaking environment. As Lubbers (2006, p. 218) notes, the "age of e-rulemaking is upon us."

E-rulemaking is a unique addition to the participatory and deliberative realm, and so it is of interest to us for this study for that and a variety of additional reasons. First, the development of new rulemaking technology has embodied a democratic direction (Carlitz & Gunn, 2002). Many agencies now use open electronic dockets, which allow citizens to see and comment on the rules proposed by agencies, the supporting documentation, and the comments of other citizens.⁵ Second, electronic rulemaking systems are highly structured, hence quite different from other Web-based discourse that is one-way or homogenous. Sunstein (2001, 2002) argues that the Web enables people to pay attention to other, like-minded people, and ignore those who are unlike them or who disagree with their positions on issues. The Web, according to this view, diminishes exposure to heterogeneity and is far from the ideal of a real public forum. Yet the argument here is that the structure of e-rulemaking may enable citizens to engage the positions of others, including those with whom they disagree. The open docket architecture of e-rulemaking has at least the architectural potential to mitigate some of the anti-deliberative dangers lurking elsewhere on the Web.

Third, rulemaking goes somewhere: simply put, the process frequently leads to actual changes of agency-enforced rules, though it remains a matter of some debate whether public comments actually play a role, either directly or indirectly through Congress. In this article, a focus on e-rulemaking differs from other examinations of Web-based discourse, such as online deliberative polling, cyberjuries,

or Web-based policy discussions. Rulemaking requires agencies to respond to, and to incorporate, substantive public comments. It may be the only form of online deliberation that regularly ends in some form of actual implementation by the state. Finally, the design of the 1946 Administrative Procedure Act, which is the basis for *notice and comment* rulemaking, was to increase the gathering of substantive information; hence it is a valid area of study for deliberative democratic practice.⁶

OVERVIEW

We offer baseline data on indicators of deliberation in e-rulemaking collected through a survey of 1,556 participants in regulatory public comment processes. Our analysis focuses on the differences between those who used newly available electronic tools and those who mailed or faxed letters on paper. We also examine differences between those who submitted an original letter and those who submitted a mass-mailed form letter.⁷ The point of examining the type of submission was to get information not only about the *use* of electronic comment opportunities, but also about the *way* that citizens conceive of their role in the public participation process.

In what follows, we first outline our approach to choosing the particular rulemakings from which our sample of survey respondents was drawn, and we lay out our approach to measuring deliberative indicators. After describing the survey methodology, we focus on three findings: (a) the presence of high levels of deliberative engagement across all survey respondents, (b) the absence of a significant difference in self-reported practices between electronic and paper commenters, and (c) the significant differences between respondents who submitted original comments and those who submitted form letters. Finally, we conclude with the implications of our findings for those interested in public participation in rulemaking, citizen deliberation, and the potential of the Web for increasing both.

THE APPROACH AND CASES

The choice to focus the study on large comment-receiving regulatory actions was based

on several factors. One of the central challenges for research in this field is that most cases are exceptional (Golden, 1998; Yackee, 2005). The rulemaking process varies widely within and across agencies, and the architecture of electronic interfaces is often novel, experimental, or entirely idiosyncratic; we understand the limitations of the case-based approach. However, we selected three regulatory actions where we predicted deliberation by citizens should be more likely to occur. We look only at those cases where the architecture of the online notice and comment process permitted commenters to view other comments before writing their own, and where the total number of public comments received numbered in the tens or hundreds of thousands. Our survey respondents are therefore consciously and strategically drawn from exceptional rather than ordinary rulemakings.⁸ If the deliberation enhancement predictions of the cyber-optimists are to be borne out anywhere, we expected that this would have been more likely around controversial policy issues with open dockets. That we did not find evidence of greater deliberation by participants in the online comment process is more striking in light of this case selection bias. However, as our selection of cases was not random, and instead focused on controversial rules in agencies with open docket systems, we cannot claim broad application of our findings. This is an exploratory study focused specifically on questions of deliberation in the chosen atypical rules and systems. Nonetheless it is interesting baseline data that provides an empirical and theoretical basis for talking about the role of deliberation in the context of mass public comment periods.

Given our interest in controversial regulations that elicited large numbers of public comments, we settled on the three following cases. First was the EPA's advanced notice of proposed rulemaking (ANPR) on the Clean Water Act regulatory definition of the *Waters of the United States* (Waters).⁹ The ANPR inviting input was published in the *Federal Register* on January 15, 2003 with a deadline for comments of March 3, 2003. The central question was whether or not the EPA would issue a new rule changing the extent of the federal jurisdiction over so-called *isolated* wetlands. Whereas development lobbies saw the prospect of a Bush

administration rulemaking as an opportunity to free up land that had been protected for 30 years, environmentalists feared the change would undermine core principles of the landmark 1972 Clean Water Act.

The second rule selected was the EPA's proposed National Emissions Standards for Hazardous Air Pollutants (Mercury).¹⁰ The proposed mercury rule was published January 30, 2004, with a deadline for public comments of March 30, 2004. Our dataset contains comments submitted as late as the end of June 2004. While an EPA press release claimed the proposed actions represented "the largest air pollution reductions of any kind not specifically mandated by Congress,"¹¹ environmental and public interest groups countered that the rule would undermine the intentions of the Clean Air Act and increase mercury in the environment.

Finally, we chose to examine a Department of Transportation (DOT) ANPR on the Corporate Average Fuel Economy Standards (CAFE).¹² The CAFE ANPR inviting public input was published in the *Federal Register* on December 29, 2003, with a deadline for comments of April 27, 2004. This proposal sought public comments on revising the CAFE program's structure to address continuing criticisms of the program related to energy security, traffic safety, economic practicability, and the definition of the separate category for light trucks.

SURVEYING FOR E-DELIBERATION

Much research on deliberative democracy aims to identify deliberative attributes, such as autonomy from power, reflexivity, heterogeneity, inclusion, equality, etc., that are conducive to better decisions and democratic legitimacy (Dahlberg, 2001; Froomkin, 2004; Janssen & Kies, 2004; Witschge, 2004). Yet major differences exist across theories of deliberative democracy: research ranges from the specific aspects of speech to the effect of discursive processes on the public sphere.

In this study, we focus on a just few key attributes of deliberative democracy (from, for example, theorists such as Bohman, 1996; Dryzek, 2000, 2006; Young, 2000). One of the basic concepts in the field is that deliberation is

reflective rather than simply reactive. We assume reflection is based on collecting diverse information and forming an understanding of various positions on an issue. A second central concept is that such engagement with other positions will bring recognition of others in the process. Participants in democratic deliberation ideally listen to others, treat them with respect, and make an effort to understand them. Third, deliberative theory examines the relation between discourse and the transformation of individual preferences. The ideal of deliberation is that of communication that actually changes the preferences of participants as they engage the positions of others. The perceived authenticity of the process and of citizen efficacy are also central to deliberative democracy, as deliberation is offered as a more authentic form of political participation.

Our questionnaire included a bank of items intended to measure these dimensions of deliberation. While we do not claim to cover the full range of concerns of every deliberative theorist, taken together our measures capture a key subset of the concepts central to recent developments in democratic theory, and they give a reasonable proxy indication of the level of deliberative activity present in the rulemaking process.

We posit that one straightforward way to measure the optimistic expectations of improved deliberation is to compare the practices of those submitted in a traditional manner, through paper or fax submission of comments, with the practices of those who participated using email or Web-based opportunities. Examining the widely cited potential of the technology and the actual landscape of public comment a bit further, we also posited that those who take the time and effort to write original comments will display higher indicators of deliberation than those who send copies or variants of mass emails. Our aim was to acknowledge and explore claims that two-way electronic communication channels and mass submission campaigns can either enhance or decrease deliberation.

SAMPLING FRAME CONSTRUCTION

We constructed a sampling frame that would be used to complete the telephone survey. Sub-

mited comments become part of the public record, so we were able to rely on relatively open access to the comment sets on each rule.¹³ The goal was to complete 375 surveys for each of the following four types of commenters: (a) electronic submission of form letters, (b) electronic submission of originals, (c) paper submission of form letters, and (d) paper submission of originals. Table 1 lists the number of completed surveys for each of the four types of commenters in the three different rules. Table 2 describes the total number of comments on each rule, the number of comments to which we had access, the limitations with respect to the way in which the accessible comments had been selected by the agencies, and the approach we took to sampling for each rule.

As Table 2 illustrates, we had to employ a number of different approaches to reach our sample size goals.¹⁴ In each case, graduate research assistants trained as sample collectors located the comments on the Federal agency Web-based docket systems (EPA's *EDOCKET* or DOT's *Docket Management System*).¹⁵ Comments were available from these Web sites as either Adobe Acrobat (.pdf) or text (.txt) files. In the case of the mercury rule, EPA also provided us with a large number of .txt files containing just over 536,000 emailed comments.¹⁶ Determination of submission type was based on the content and/or appearance of the submitted comment. Paper submissions to the DOT (traditional letters and faxes, for exam-

ple), were stamped with receipt dates before they were scanned into the docket; electronic submissions often have telltale information headers, and lack such a date stamp. Form letters include identical content and were submitted by multiple participants. Determination of an original comment was based on whether the letter contained text that differed from identified form letters or petitions. Once the main form letter variations were identified and coders became familiar with their rhetoric, original letters were easily identified. Occasionally a form letter had been modified enough by a commenter so that it blurred the difference between original and form. In these instances, we used as a standard the inclusion of at least one substantive argument or viewpoint not found in the baseline version of the form letter.¹⁷

As sampling progressed, it became apparent that we lacked access to a sufficient number of form comments on the EPA rules to ensure a balance of comment types across all three rules. This was due to the EPA's practice of putting one example of each form letter, rather than every single submission, into the *EDOCKET* system. In response, we relied on access to a greater number of form submissions in the *CAFE* comments to complete the sample.

Since potential respondents were to be contacted by telephone, we obtained telephone numbers either from the actual comment or by looking them up using a Web-based phone number database.¹⁸ The use of a systematic,

TABLE 1. Summary of Completed Surveys

<i>Electronic Submissions</i>				
	Waters	Mercury	CAFE	Total
<i>Form</i>	32	125	220	377
<i>Original</i>	131	125	126	382
<i>Paper Submissions</i>				
<i>Form</i>	8	5	409	422
<i>Original</i>	151	148	76	375
Total	322	403	831	1556

TABLE 2. Case Characteristics and Data Access

	Waters	Mercury	CAFE
Estimated total number of comments	~135,000	~495,000	66,786
Comments in sampling frame	3,223	4,264; +~490,000 emails	66,786
Access to comments	EPA's "eDocket" Web-based docket management system	EPA's "eDocket" Web-based docket management system; EPA also supplied .txt files containing ~490,000 emails	DOT's Web-based "Docket Management System" (DMS)
Limitations	EPA places only unique original comments in the eDocket system, plus one example of each type of form letter received, therefore our ability to include submitters of form letters on this rule was limited; EPA reports having deleted over 125,000 emails.	Access to limited form letters in the eDocket system was off-set by .txt files containing all ~490,000 emails submitted, the vast majority of which were form submissions.	DOT did not enumerate all 66,786 comments in the DMS, but rather created "records" of form comments containing anywhere from 2 to 25,432 versions of a form letter.
Sampling approach	We collected contact info from every electronic and paper form letter in the eDocket (therefore no sampling actually took place); for original letters, we collected info from eDocket using systematic random sampling until the sampling targets were reached.	Original commenters were selected using the same procedure as with the "waters" data. Form commenters were selected using a word-processing text search tool to search text files containing the email form letter comments. Systematic random sampling was used to hit the sampling targets.	Systematic random sampling was used to select records from DMS; when a record contained no contact info, the next record was selected; when a record contained multiple versions of a form letter, systematic random sampling was used within the batch of form letters.

random sampling method meant that when we could not locate a phone number, we moved to the next *n*th comment. Due to the range of difficulties faced—from agencies failing to provide access to the entire set of submitted comments, to over-sampling one case, to obtaining phone numbers for individuals—the results of the survey are not generalizable to the whole population of citizen commenters on these regulatory actions and should be understood as the results of an exploratory project. While these issues should be addressed in any future survey of citizen commenters and in the management by agencies of future public comment datasets, the

data that follow represent the only major survey of the practices of citizen commenters that we have seen, and they offer important insights on the ways that citizens participate in the rulemaking process.¹⁹

THE SURVEY

A telephone survey was administered using a computer-assisted telephone interviewing (CATI) system. It was completed by 1556 respondents between the dates of August 30 and November 24, 2004: a cooperation rate of 48%,

with a margin of error of plus or minus 2.5%.²⁰ The survey asked questions regarding the respondents' general commenting practices, such as the number of times that they had commented, how much information they obtained before commenting, how they typically submit a comment, whether they refer to other citizens' comments and, if so, the effect this has on their comments, and the reasons that they commented. Respondents were also asked whether they thought their comments were reviewed by a government employee, whether they heard about the final agency decision, and if so, whether they were satisfied with the final decision. In addition, respondents were asked questions about agency Web sites, including the frequency of visits, the type of information they accessed, whether they used these Web sites to submit a comment, and if they would be likely to submit a comment on an agency rule in the future.

Finally, respondents were asked if they believe submitting comments has the ability to change the outcome of the final rule. Demographic information collected include age, gender, education, income, political ideology, voting behavior, race, ethnicity, and Internet use; we note differences along demographic lines below only when statistically significant.²¹

SURVEY FINDINGS

We organize the discussion of our findings around three important discoveries. First, we observed high levels of self-reported deliberative activity across all types of commenters. Second, we found that electronic commenters do not appear to be any more deliberatively engaged than paper commenters. Third, rather than finding significant differences between electronic and paper commenters, the differences we found were between individuals who submitted original comments and those who posted form letters.

The Prevalence of Deliberative Indicators

There are indicators that all types of commenters practice certain types of deliberative activity. In this section we report on four

indicators of deliberative discourse: the frequency with which commenters seek out information, the tendency to review other citizens' comments, the propensity to gain an understanding of the positions of others, and the predilection for changing one's own position after being exposed to the arguments of others. The findings are summarized in Tables 3 and 4.

Commenters Are Information-Seekers

The use of information is high for all types of commenters. When asked how much information they receive on rules before submitting a comment, 45.2% said they get a lot of information, and a full 90% say they get a lot or some information. Those that write original paper comments claim the most: nearly 51% say they get a lot of information before submitting a comment. Over 71% of those surveyed said that they referred to the arguments, studies, statements, or positions of agencies or independent organizations before submitting a comment; men were slightly more likely than women to refer to outside arguments. Again, those that submitted original paper comments were at the top with 76.7%. Agency Web sites are important sources of information for commenters: a full 50% surveyed said they used these sites in developing their comment. Women, along with people with lower incomes and people aged 60 and over, were significantly less likely to get information on a proposed rule from a federal agency's Web site. Overall, a large majority of commenters claim they are seeking out information, even those who submit form letters. Few commenters, at least from what they report, simply submit comments without trying to understand the issue.

Commenters Review Others' Comments

Over 70% of those surveyed said that they had read the comments of others at some point. As these comments are only available either in the agency docket rooms in DC or on the newly developed agency Web sites, it may be that all types of commenters are using the agency Web sites to examine the docket, when such comments are available.²² Demographic differences are insignificant on this general question

TABLE 3. Summary of Paper vs. Electronic Deliberation Measures

		Paper %/(N)	Electronic %/(N)	Total %/(N)	Chi-Squared Significance
<i>Information-Seeking</i>					
In general, how much information do you receive on rules before submitting a comment?	A lot	46.9/(372)	43.4/(328)	45.2/(700)	.33
	Some	44.2/(351)	45.8/(346)	45.0/(697)	(df=4)
	A little	6.5/(52)	8.7/(66)	7.6/(118)	
	None at all	1.5/(12)	1.1/(8)	1.3/(20)	
	Don't Know	0.9/(7)	1.0/(7)	.9/(14)	
	Total (N)	794	755	1549	
When preparing your comments, do you refer to arguments, studies, statements or positions made by agencies or independent organizations?	YES	74.6/(592)	67.1/(507)	70.9/(1099)	.002
	NO	9.3/(74)	14.4/(109)	11.8/(183)	(df=2)
	OTHER	16.1/(128)	18.5/(140)	17.3/(268)	
	Total (N)	794	756	1550	
Have you ever used a federal agency's website to read information on a proposed rule?	YES	46.1/(367)	52.2/(396)	49.1/(763)	.03
	NO	52.1/(415)	45.4/(345)	48.9/(760)	(df=2)
	OTHER	1.8/(14)	2.4/(18)	2.1/(32)	
	Total (N)	796	759	1555	
<i>Viewing Others' Comments</i>					
Have you ever read other citizen's comments before sending in a comment?	YES	71.5/(410)	69.7/(396)	70.6/(806)	.82
	NO	25.4/(146)	26.9/(153)	26.2/(299)	(df=2)
	OTHER	3.1/(18)	3.3/(19)	3.2/(37)	
	Total (N)	574	568	1142	
<i>Understanding Other Positions</i>					
<i>Among those who reported reading others' comments:</i>					
Do you gain a greater understanding of the positions or arguments of other citizens by reading their comments?	YES	74.1/(417)	72.4/(407)	73.2/(824)	.38
	NO	11.5/(65)	10.3/(58)	10.9/(123)	(df=2)
	OTHER	14.4/(81)	17.3/(97)	15.8/(178)	
	Total (N)	563	562	1125	
Have you found that other citizen's comments are persuasive?	YES	41.0/(229)	41.9/(230)	41.5/(459)	.63
	NO	23.1/(129)	20.8/(114)	22.0/(243)	(df=2)
	OTHER	35.8/(200)	37.3/(205)	36.6/(405)	
	Total (N)	558	549	1107	
<i>Changing Positions</i>					
Has your own position on issues EVER changed at all as a result of reading other citizens' comments?	YES	37.1/(208)	35.5/(200)	36.3/(408)	.70
	NO	46.0/(258)	48.5/(273)	47.2/(531)	(df=2)
	OTHER	16.9/(95)	16.0/(90)	16.5/(185)	
	Total (N)	561	563	1124	

* Totals may not equal 100% due to rounding errors.

of reading others' comments. For those that specifically reported using the agency Web sites in the comment process, 69.4% said that the site helped them review other citizens' comments. Here, men, those with higher incomes

(over \$70K/yr), and people under age 60 were significantly more likely to use agency websites than women, those with incomes under \$70K, and people over age 60.²³ Counter to our original hypotheses, such Web access was

TABLE 4. Summary of Form vs. Original Differences in Deliberation Measures

		Originals %/(N)	Forms %/(N)	Total %/(N)	Chi-Squared Significance
<i>Information Seeking</i>					
In general, how much information do you receive on rules before submitting a comment?	A lot	48.0/(363)	42.4/(337)	45.2/(700)	.225
	Some	42.4/(320)	47.5/(377)	45.0/(697)	(df=4)
	A little	7.3/(55)	7.9/(63)	7.6/(118)	
	None at all	1.2/(9)	1.4/(11)	1.3/(20)	
	Don't Know	1.1/(8)	.8/(6)	.9/(14)	
	Total (N)	755	794	1549	
When preparing your comments, do you refer to arguments, studies, statements or positions made by agencies or independent organizations?	YES	72.1/(544)	69.8/(555)	70.9/(1099)	.052
	NO	9.8/(74)	13.7/(109)	11.8/(183)	(df=2)
	OTHER	18.1/(137)	16.5/(131)	17.3/(268)	
	Total (N)	755	795	1550	
Have you ever used a federal agency's website to read information on a proposed rule?	YES	54.2/(410)	44.2/(353)	49.1/(763)	.000
	NO	44.2/(334)	53.3/(426)	48.9/(760)	(df=2)
	OTHER	1.6/(12)	2.5/(20)	2.1/(32)	
	Total (N)	756	799	1555	
<i>Viewing Others' Comments</i>					
Have you ever read other citizen's comments before sending in a comment?	YES	69.0/(394)	72.1/(412)	70.6/(806)	.497
	NO	27.5/(157)	24.9/(142)	26.2/(299)	(df=2)
	OTHER	3.5/(20)	3.0/(17)	3.2/(37)	
	Total (N)	571	571	1142	
<i>Among those who reported reading others' comments:</i>					
Do you gain a greater understanding of the positions or arguments of other citizens by reading their comments?	YES	76.7/(432)	69.7/(392)	73.2/(824)	.03
	NO	9.6/(54)	12.3/(69)	10.9/(123)	(df=2)
	OTHER	13.7/(77)	18.0/(101)	15.8 (178)	
	Total (N)	563	562	1125	

* Totals may not equal 100% due to rounding errors.

reported highest (75.5%) by those who submitted original paper comments. Still, overall reporting of the review of others' comments is high regardless of submission type or demographic, illustrating attention to the positions of others in the rulemaking process.

Commenters Gain an Understanding of Other Positions

Reading of other citizens' comments is not just for information: Commenters report that they gain an understanding of the positions of

others as well. Overall, nearly three quarters (73.2%) say they get a better understanding of the positions of other citizens by reading their comments; people with higher incomes are more likely to report better understanding than those with lower incomes. In addition, 41.5% of the respondents report that they found other citizens' comments to be persuasive. As the difference across types of commenters is insignificant, these findings suggest that commenters in general are gaining an understanding of the positions of other citizens commenting on a rule.

Commenters Change Their Own Positions

Finally, over one third (36.3%) of those surveyed report that their position on an issue actually changed after reading others' comments. That is less than the 47% who report no change in their position, but the percentage that acknowledges such change is significant and suggests that the limited discourse made possible by access to others' comments is having an impact on the reasoning of citizen commenters.

A great disparity exists between what respondents identified as their deliberative practices in the survey and what we observed in terms of deliberative practices in a separate analysis of the actual comments submitted. Though for purposes of maintaining confidentiality we could not match up specific survey respondents with the respondent's actual comment, we were able to review a random sample of 501 comments submitted on the EPA's Waters rule. All 501 commenters became part of our sampling frame for the survey, which suggests that the comments reviewed are representative of comments made by all participants in the survey.

In performing our content analysis of the comments, we employed three different measures of *deliberativeness*. First we looked to see if commenters were referencing other comments in their submissions, which would suggest that they had read other comments. Second, we measured the frequency with which commenters referenced viewpoints other than their own. While this may not be evidence that they read other comments, it does suggest a certain degree of deliberativeness. Finally, we wondered whether commenters were making

specific reference to the documents in the docket (e.g., the Federal Register notice or other documents EPA included in the docket). We found that a mere 1.4% of the comments (7/501) made specific reference to another comment. A scant 5.6% of comments (28/501) made reference to viewpoints other than their own. Roughly the same, 5.8% (29/501), made specific reference to official documents in the docket.

We suspect that the disparity between self-reports of deliberative behavior and observable indicators of deliberation in the comments themselves has to do with two factors. First, there is a known bias toward socially desirable survey responses indicating greater levels of deliberation. Second is the likelihood that commenters actually did engage in deliberative acts like reviewing other comments or documents in the docket, but that such actions are difficult to observe in the written text of public comments.

Differences Between Paper and Electronic Commenters

One main goal of the survey was to look for differences between those who submitted comments on paper, either through postal mail or fax, and those who used agency Web-based forms, interest group Web sites, or email to comment. The survey suggests that those differences simply do not exist. There was a significant difference between electronic and paper commenters on only two questions and in opposite directions. Paper commenters, by 74.6% to 67.1% ($df = 2$; $p < .01$) over Web-based commenters, were more likely to refer to the "arguments, studies, statements, or positions made by agencies or individual organizations." Since paper submitters are more likely to say that they reference other people's work, an essential practice for creating quality discourse, our hypothesis that electronic commenters would demonstrate greater deliberative activity than paper commenters is not supported.

We suspect this finding is due to the fact that many submitters of original paper comments also use the Internet and Web-based agency dockets in collecting information for their com-

ments. While there is a distinction between paper and electronic submission of comments, all types of commenters used electronic means to gather information. For example, the survey indicates that of those who submit comments in any format, nearly half (49.1%) gathered information from agency Web sites. But there is only a modestly significant ($p < .05$; $df = 2$) greater number of electronic commenters (51.9%) than paper commenters (48.1%) who report having used an agency Web site. As for the overall lack of discursive indicators by electronic commenters, it may be that the technology, which makes commenting quite simple, encourages the rapid submission of comments, which is antithetical to more thoughtful and carefully reasoned arguments.²⁴ Also, many form comments are generated via Web services that offer commenters no chance to review the comments already submitted by others.

Differences Between Original and Form Commenters

By far, the most significant differences in this study are between those who submit original comments and those who submit form comments (see Tables 4 and 5). These differences start with demographics. Men, commenters with higher levels of education, and those with higher incomes are significantly more likely to submit an original comment, while women, commenters with less education, and those with lower incomes are significantly more likely to submit a form comment. Contrast that with the fact that we found no significant demographic differences between those who submit paper comments and those who use electronic means. As with all political participation, sex, income, and education seem to play an important part in the overall composition of e-rulemaking input. This finding supports that of past examiners of rulemaking participants, such as Golden (1998).

Form versus original: Differences in information-seeking. The differences between original and form commenters move beyond demographics and include the basic use of information. Over half (54.2%) of original commenters report having used an agency Web

site to read information on a proposed rule. This compares to only 44.2% of the form commenters, a significant difference ($df = 2$; $p < .01$). Both form and original submitters, however, claim they gather information on rules before submitting a comment: 48.0% of original submitters claim to receive “a lot” of information, compared to 42.4% of form submitters ($df = 4$; ns). Similarly, there is not a great difference in the rate at which the two types of commenters report referring to other arguments in their comments. Nevertheless, the nature of a comment—original or form—is a better predictor of the use of information before commenting than is the method of submission.

Form versus original: Differences in viewing of others' comments. While there is no significant difference between original and form commenters on their reading of others' comments, their perceptions of others' comments as persuasive, or their having changed their mind as a result of reading another comment, original commenters are significantly more likely to report (76.7% vs. 69.7%) gaining “a greater understanding of the positions or arguments of other citizens by reading their comments” ($df = 2$; $p < .05$). While both sets of commenters read the positions of others, original submitters are more likely to report having a better understanding of those positions. The differences, as well as some similarities, are summarized in Table 4.

Form versus original: Differences in trust. In addition to the modest differences between original and form commenters on the deliberation indicators described above, there are significant differences between the two on a number of indicators of trust in the process and of the agency involved. For example, 56.6% of original commenters (both paper and electronic) believe their comments were actually read by a government employee, compared to only 43.4% of form commenters ($df = 2$; $p < .01$). This is one of the most significant differences we found between form and original commenters. Electronic form commenters also appear to be the most cynical in terms of feeling that their participation will have an impact on their satisfaction with the final rule. Conversely, those that sent paper original comments are the most satisfied with their participation and the outcome. Form submitters

TABLE 5. Original vs. Form Differences in Trust and Satisfaction

		Originals %/(N)	Forms %/(N)	Total %/(N)*	Chi-Squared Significance
Do you think the comments you have submitted were viewed by a government employee?	YES	62.7/(474)	45.6/(363)	53.9/(837)	.000
	NO	11.0/(83)	17.8/(142)	14.5/(225)	(df=2)
	OTHER	26.3/(199)	36.6/(291)	31.6/(490)	
	Total (N)	756	796	1552	
Does your participation generally lead you to have a positive or negative view of the agency involved?	POSITIVE	19.7/(101)	13.4/(72)	16.5/(173)	.002
	NEGATIVE	35.9/(184)	45.3/(243)	40.7/(427)	(df=2)
	OTHER	44.3/(227)	41.2/(221)	42.7/(448)	
	Total (N)	512	536	1048	
Have you been satisfied with the agencies' decisions on issues that you have commented on?	YES	13.7/(88)	10.9/(74)	12.3/(162)	.011
	NO	57.7/(371)	65.7/(445)	61.8/(816)	(df=2)
	OTHER	28.6/(184)	23.3/(158)	25.9/(342)	
	Total (N)	643	677	1320	
How often do you trust the federal government to do what is right?	All or some of the time	66.0/(489)	49.0/(383)	57.3/(872)	.000
	Rarely or Never	32.6/(241)	49.4/(386)	41.2/(627)	(df=2)
	Don't Know	1.4/(10)	1.5/(12)	1.4/(22)	
	Total (N)	740	781	1521	

* Totals may not equal 100% due to rounding errors.

are also more likely to say that their participation led to a negative view of the agency running the rulemaking (56.9% for form commenters, vs. 43.1% of original commenters). Original commenters are almost 17% more likely (58.4% to 41.6%) to report a positive view of the agency (df = 2; p < .01). Original commenters report being slightly more satisfied than form commenters with agency decisions on issues they have commented on (54.3% of originals are satisfied vs. 45.7% of form submitters) (df = 2; p < .05).

Finally, users of form letters are simply more negative about the government in general. By 61.6% to 38.4% compared to original commenters they “rarely” or “never” trust the government to do what is right (df = 2; p < .01). Simply put, original submitters have significantly higher levels of trust in the government.²⁵ These differences are reported above in Table 5.²⁶

On the Value of Electronic Comment and Mass Email Campaigns

There is one other key finding regarding the difference between form and original commenters. Though it contradicts the lack of trust in government noted above, form commenters are more likely than original commenters to think that groups that organize mass mail campaigns have the ability to change proposed rules (86.7% to 81.7%). This may partly explain why form commenters are much more likely to submit comments more often than original commenters. Sixty-two percent of form commenters report submitting comments more than ten times, while only 44% of original commenters report that level of participation. This difference, however, can also be explained by the expertise and time involved in many original comments.

This faith that mass email campaigns have an impact may explain the increase in the popular-

ity of the tactic. Nearly 50% of those surveyed said they submitted their last comment through an interest group Web site, and almost 40% reported that this method will also be how they comment next time. Only those that had submitted paper original comments said that they would continue that route over all others. While agencies such as the EPA and DOT have worked to improve the information on their Web-based docket systems, and although the federal government continues to develop a Federal Docket Management System with a single Web-based public comment portal (Regulations.Gov), very few commenters plan to use such systems: only 12% versus the nearly 40% who plan to use interest group Web sites. These results indicate that the practice of mass-mailed form letter comments originating from various interest groups will continue for the near future.

Yet electronic form commenters show the lowest scores on many deliberative indicators. Commenters who submitted using form emails via interest group Web sites were the least likely to look at other information and the least likely to report that their positions have changed as a result of reading others' comments. A better understanding of these differences may impact how agencies respond to public comment and how interest groups refine their campaigns. Many interest groups, in addition to drawing on their legal and scientific staff to draft detailed comments, respond to the rulemaking process with an aggregative approach, soliciting mass numbers of identical or near-duplicate comments from their members and other interested citizens. A key question is whether or not this technology improves or degrades the overall efficacy of citizen discourse (Shulman, 2006).

CONCLUSION: THE POTENTIAL OF E-PARTICIPATION

The distinction between paper and electronic commenters, which was the basis of our original set of hypotheses, simply does not exist as we imagined. A majority of commenters, regardless of the medium of submission, are using electronic means of researching an issue, with paper commenters reporting a greater use

of Web-based agency docket systems. Comparing paper and electronic commenters on recent rules does not help us understand whether the new electronic systems are more deliberative than past paper-based notice and comment processes.²⁷ Still, it is crucial to note the high levels of deliberative indicators across the board; nearly three quarters of the respondents said they had read the comments of others and got a better understanding of them, and over a third changed their own positions after reading those comments. This indicates that taking the rulemaking process online probably did make the process more deliberative, though it became more deliberative in equal measure for those that submitted comments online and those that did so through traditional means.

However, the difference between original and form-based participation is central to understanding potential deliberative activity in the rulemaking process. Original commenters embody significantly more of the deliberative qualities we hypothesized given the move to an accessible open-docket system. The range of significant differences between original letter writers and form letter submitters might be partially explained by the ease with which interest groups can spread information to constituents about proposed rules open for public comment and the sophistication of email action alert systems that allow individuals to *participate* by doing little more than clicking the *send* button on an interest group's Web site. Though many of these participants, even electronic form submitters, reported to us that they seek out information before sending in their comments, form submitters are nevertheless much more cynical about the process and much less deliberative in their engagement. One way of understanding this is that simply making the comment process available on the Web does not necessarily make it more deliberative. Current systems enable mass email campaigns and sow the potential for much less deliberative input. This offers evidence for the cyber-pessimists, who believe that the Internet may actually decrease deliberation in rulemaking.²⁸

So why don't interest groups solicit more original, substantive, and deliberative comments? The weakness could be in movement strategy, rather than citizen lack of interest or capability. The environmental groups involved

in these rulemakings engage their membership with an aggregative approach, soliciting mass numbers of identical or near-duplicate comments which the agencies then ignore or delete.²⁹ This aggregative approach has been used for years with regard to issues within the legislative process, yet a more substantive and deliberative approach would be more fitting for rulemaking under the APA process. And according to the survey, citizen commenters have shown an interest in more deliberative participation—reading others' comments, learning, and participating in something more substantive than mass emails.

If interest groups seek to expand citizen deliberation in rulemakings, they need to use Web technology to solicit more substantive comments. For example, they could ask members to enter postal codes, and then prompt them to report something about a local stream, mercury emitting industry, or health problems. Groups could also distribute parts of a proposed rule and ask constituents to comment substantively on a specific section of interest. As West (2005, p. 661) has argued, stakeholders need to be aware that “*effective* public comment also entails reasoned argumentation.”

If agencies seek to use the Internet to increase deliberation over rulemaking, they apparently need to do more than simply allow citizens to submit comments by email. The results here illustrate that, in order for e-rulemaking to be more deliberative, agencies need to develop ways to encourage and support original comment. They also need to address the pessimism and distrust linked to form commenters. Some have suggested better information delivery, the availability of related studies and analyses, and word-searchable notices and dockets (e.g., Lubbers, 2006, p. 222). Perhaps another way to improve the process would be to develop a better user interface in the open dockets: Noveck (2004) advocates such a design-oriented approach. Agencies could also randomly respond to comments online during the rulemaking process, or supplement the formal comment process with online dialogs in order to illustrate attention paid to citizen comments (see, e.g., Stanley & Weare, 2004). Lubbers (2006, p. 236-7) argues that the “flipside of increased public participation, of course, is increased responsibilities of agencies to digest

and react to a higher volume of comments.” Our point here is that agencies might be more proactive so that what they digest and react to might be more constructive.

The point is that the potential to increase deliberation—something valued by citizens, agencies, and the scholarship on public participation—exists in the practices of both agencies and interest groups. Certainly, we see that some citizens are interested in rules, in information surrounding various issues, and in what other citizens have to say in the comment process; many citizens are also willing to have their own positions challenged and possibly transformed in the engagement with others.

Yet we also see that technology exists not only to enhance the deliberative process (the open dockets and access to information on agency Web sites), but also to degrade discourse (the easy click-to-send Web pages on interest group Web sites). One could argue that the first generation of Internet participation in rulemaking may have actually decreased the proportionate level of deliberation in rulemaking. But we could also take the stance that the technology has allowed the raw number of substantive and deliberative comments to increase. In other words, the potential of the technology may increase *both* types of comment—deliberative and non-deliberative, substantive and non-substantive. It may be that in addition to the masses of non-deliberative form comments, the open-docket e-rulemaking forum produces a larger number of comments that reveal high indicators of deliberation. Evidence exists for both the cyber-pessimists and optimists here. More information on this issue needs to be gathered, but it is an important question for e-rulemaking—and for democratic participation in governance more generally.

So we conclude, in a way, where we started, by noting the potential of the Internet generally, and of electronic rulemaking specifically, to enhance democratic deliberation in citizen participation. Our central goal was to examine the optimistic claim that online participation would lead to richer and deeper communication between the public and government. While we found no evidence that electronic participation, per se, is any more deliberative or substantive than traditional forms of participation, we did find that citizen participants in gen-

eral exhibit numerous deliberative attributes, that those that engaged the process enough to contribute original comments embodied the highest measures of deliberative activity, and that participants expressed a desire for increased avenues for participation and influence.

Our research suggests that information technology needs to be more proactively developed and applied in order to overcome existing barriers in government-citizen interaction and deliberation. Obviously, the technology will not stand still; we only hope that research like this will push agencies and interest groups alike to develop systems that increase the amount of information, expand the exchange of views, and improve the democratic process in the development of better policy.

NOTES

1. This project was funded by a grant (SES-0322622) from the National Science Foundation, Social and Economic Sciences, Program on Social Dimensions of Engineering, Science and Technology (SDEST), Ethics and Values Studies. Any opinions, findings, conclusions, or recommendations expressed in this material are those of the authors and do not necessarily reflect those of the National Science Foundation. The authors would like to thank Cary Coglianese, David Levi-Faur, Vincent Price, and the anonymous reviewers for their insightful comments on previous versions of this paper, and Fred Solop, Jamie Bowie, Kristi Hagen, Anne Mottek-Lucas, and Sara Rinfret for their help with both the survey and the analysis of the responses. Karen Mossberger served as Editor Pro Tem for this manuscript. Dr. Mossberger selected the reviewers and made the editorial decision to accept the manuscript, pending satisfactory response to recommended changes. The data presented here are available online at: <http://erulemaking.ucsur.pitt.edu/data/sdestsurvey.zip>

2. See: <http://cdd.stanford.edu/polls/docs/2004/onlinep-release.pdf>

3. The authors are members of the larger, multi-institution eRulemaking Research Group, which has its home page at <http://www.erulemaking.ucsur.pitt.edu>

4. The federal eRulemaking Initiative (<http://www.regulations.gov/eRuleMaking.cfm>) is one of 24 E-Government efforts at the federal level (<http://www.whitehouse.gov/omb/egov/>). On the progress of the President's Management Agenda to date, see the GAO report "Electronic Government: Initiatives Sponsored by the Office of Management and Budget Have Made Mixed Progress" (GAO-04-561T) available at: <http://www.gao.gov/new.items/d04561t.pdf>

5. Open docket systems exist at the EPA and DOT, examined here, as well as the FCC and some sub-agencies in USDA and Commerce.

6. Again, our focus is not on developing new forms of deliberative democracy; it is on measuring deliberative indicators in comment systems that are now no longer simply one-way but potentially interactive.

7. Interest group-initiated mass mailed postcards, familiar from past activism, have been modestly enhanced as customizable e-form letters, often by expensive for-profit intermediaries. See, for example, the suite of services available at <http://www.convio.com/site/PageServer>

8. This goes against the methodology of others examining rulemaking, such as Golden (1998), who explicitly states the argument to choose "typical" rules to "avoid any bias that might be introduced by examining only high-profile rulemakings" (p. 251). de Figueiredo (2006) examines *all* electronic filings at the Federal Communications Commission in order to examine the events that lead to spikes in participation. Yet our point is to explicitly identify cases where deliberation would most likely be present in order to test the hypotheses of the cyber-optimists.

9. See *Federal Register*, 68, 1991-1998 (available at: <http://snipurl.com/1fl6x>).

10. See *Federal Register*, 69, 4652-4752 (available at: <http://snipurl.com/1fl8e>).

11. See <http://snipurl.com/dabh>

12. See *Federal Register*, 68, 74908-74931 (available at: <http://snipurl.com/1fl8a>).

13. We would like to acknowledge the assistance of technicians and administrators in the EPA and the DOT who made it possible to receive bulk downloads of comments in the respective dockets for the purpose of research. The complete collections are available at the eRulemaking Testbed hosted by Carnegie Mellon University (<http://erulemaking.cs.cmu.edu/data.php>). On November 11, 2004, a group of 55 scholars submitted a letter on behalf of the Section of Administrative Law and Regulatory Practice of the American Bar Association calling for more uniform standards in the preservation of rulemaking data. See the full letter online at <http://www.abanet.org/adminlaw/OMBcomments.pdf>

14. The original goal was for a sample size of 1,500, with even distributions of 125 in each of the four comment categories (electronic/form, paper/form, electronic/original, paper/original) for all three rules. Due to difficulties in meeting the targets in each category, especially with respect to form letter for the Waters rule (see Table 1), we over sampled on the CAFE rule in order to reach the overall target of 1,500.

15. Thanks go to Michael Aquino, Tina Eyraud, Meg Inokumu, Jonathan Nez, Suzuki Susumu, Paul Vaughn, and Baohua Yen.

16. After supplying the 536,000 + text files, the EPA determined that nearly 50,000 of the emails were exact duplicates, triplicates, spam, or submissions for other rulemakings, hence there is a discrepancy between the

estimated total number of comments received and the number of comments in our sample frame.

17. This practice has been confirmed in numerous interviews and focus groups with agency personnel; such a standard has been practiced because agencies are legally required by the APA to respond to substantive comments.

18. We used www.whitepages.com and found that we were able to obtain phone numbers for slightly more than 60% of the names and addresses we entered.

19. Furlong (2004) uses a survey to examine interest group participation in rulemaking but limited the survey to groups, rather than to individual commenters. Golden (1998) also used a survey, but it focused on how citizens became informed about a rule and how they knew when and where to comment. Again, we know of no other survey that examines the practices of citizen commenters on rulemakings.

20. A cooperation rate differs slightly from a response rate; cooperation rate is the proportion of people contacted on the phone who actually completed the survey. As we did not start with a fixed set of subjects, rather we sampled from a larger group until we had the number of surveys desired, it is not appropriate to assign a response rate to the project. Given the sampling issues, although we cannot generalize from this sample to the full population of commenters, we have included estimates of error and tests of significance to provide readers with benchmarks that compare the likelihood of generating our results if the sampling frame were the true universe of commenters. There are also other problems with operationalizing our questions within the methodology of survey research. Participants may understand the questions in ways different than we intended, self-reporting may exaggerate discursive indicators, and citizens may simply be mistaken about what they actually did during the rulemaking process. Still, we think it is central in an examination of these issues to get direct input from a large number of citizen participants in the rulemaking process, and we are confident that our methods meet the standards of survey research.

21. While we are discussing "citizen" commenters, we should make clear that a small percentage of our respondents were involved in the rulemaking process in roles other than as a private citizen. Of those surveyed, 86.4% reported that they generally commented as a private citizen, 7.1% as a paid employee, 3.4% as an unpaid volunteer, and 3.2% as something else (though mostly as a representative of an interest group). As we were interested in the e-rulemaking process as a whole, we did not separate out any part of the population from this study.

22. Then again, as only 50% say they visited agency Web sites, and as it seems unlikely that 20% physically visited a docket room, this number needs further explanation. Most likely, comments were viewed online. It may be that some who report reading others' comments

saw samples on interest group, as well as agency, Web sites.

23. This follows many studies, including Thomas and Streib (2003), that have found visitors to governmental Web sites more likely to be white, with higher income and education.

24. We did not collect data regarding the time citizen commenters took to prepare their comments. While it seems intuitive that original commenters would take more time, future empirical research should include such a question.

25. For a very interesting discussion of the flipside of this issue—public administrators' trust in citizens—see Yang (2005).

26. We do not report the results of comparisons between paper and electronic commenters on measures of trust and satisfaction because we found no significant differences on any of the measures reported in Table 5.

27. One could try to explore differences between current rulemaking processes and past, pre-Internet processes, but given the weakness of the human memory, a survey would be an inappropriate method.

28. See, for example, the discussions in Thomas and Streib (2003), Lubbers (2006), and Shulman (2006).

29. It is important to note that environmental groups do submit substantive comments on rules, developed with legal and/or scientific staff, at the same time that they solicit mass comment from their membership. From the standpoint of the group, this may be a rational strategy: they get to frame the substantive critiques the way they like at the same time they maintain the activity of members (and, often identify potential new members through outreach on the issue). Still, on the goal of impacting the substance of a rule, interest groups seem to ignore the potential substantive and deliberative input their members could bring to a rulemaking.

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Received: 02/15/2007
 Revised : 04/16/2007
 Accepted: 04/24/2007

doi:10.1300/J516v04n01_04