

**The Effects of Internet Use on Political Participation:
Evidence From an Agency Online Discussion Forum**

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Abstract

This paper seeks to clarify the relationship between Internet use and political participation. While early theorists touted the potential mobilizing effects of the Internet, empirical studies, to date, have failed to offer compelling evidence of such a relationship. This paper challenges these findings through the analysis of an experimental use of an online discussion forum during an agency strategic planning exercise. The web-based discussion run in parallel to the traditional docket attracted new individuals to participate in the decision-making process and influenced the range of topics discussed. These results suggest that extending opportunities for participation can attract new voices, thereby changing decision-makers' information environment.

I. Introduction

Governments have moved strongly to adopt Internet-based e-government applications. In the United States federal, state, and local governments have developed portal sites to provide clients and citizens with access to information and on-line services (Musso, Weare et al. 1999; Gant and Burley-Gant 2002; West 2002). Recently, the federal government has embarked on a major expansion of these efforts by, among other actions, creating a centralized portal, regulations.gov, to facilitate participation in all federal agency rulemakings (Brandon and Carlitz 2003). Similarly, government agencies throughout the world have developed on-line presences (Norris 2000; La Porte, Demchak et al. 2002).

This embrace of technology suggests that elected officials and high-level government managers have been influenced by the predictions of techno-optimists who have touted the ability of technology to make government more efficient and responsive and to strengthen citizen participation by making political information more compelling, lowering the costs of participation, and creating new opportunities for involvement (Grossman 1995; Negroponte 1995; Council 2002). Nonetheless, the bulk of the evidence gathered to date concerning the affects of Internet-based communications has painted a less promising scenario. Numerous studies have concluded that politics on the Internet is simply politics as usual. It has failed to alter the conduct of political campaigns (Harpham 1999; Sadow and James 1999; Margolis and Resnick 2000). It is used predominantly by individuals and organizations already active in politics, and easier access to information does not appear to lead to greater participation (Davis 1999;

Bimber 2001). In the case of internal governmental operations, Fountain (2001) finds that bureaucratic and political rigidities have hampered efforts to employ Internet applications to facilitate cross-agency collaboration. Overall, this line of research indicates that existing centers of power are best able to control the technology to further their ends. Information availability and cheap communications by themselves do not have significant impacts on individual choices for political participation.

This paper challenges these negative findings through analysis of a Federal Motor Carrier Safety Administration (FMCSA) experiment. In the development of a Congressionally mandated strategic plan, the FMSCA solicited public input through a web-based discussion run in parallel to a traditional docket for written comments.¹ This unusual natural experiment provides a useful avenue for directly comparing the use of two alternative communication media.² Comparison of the comments received in the docket with those made through the web-based discussion indicate that the Internet did expand the breadth of voices in the agency strategic planning process and potentially mobilized some politically inactive individuals to participate.

These results, in the context of survey research that finds little participatory effects from Internet use, paint a more nuanced portrait of political participation in the electronic age. First, it highlights how new communication technologies affect politics by creating new participatory opportunities. While Internet use remains concentrated among the politically active, the Internet can open up policy networks to mid-level elites, politically active individuals who mediate between distinct social interests and decision-making forums. While this effect does not necessarily influence the proportion of citizens who are politically active, it, nevertheless, upsets the prevailing relationships

within policy networks and introduces new voices in policy-making discussions. Second, close examination of participants in a specific decision-making forum suggests that some are political neophytes, newly mobilized by the opportunity to voice their views. From a macro perspective, however, these numbers are so small they are unlikely to be measurable in standard cross-sectional surveys. Nevertheless, from the perspective of agency managers, these marginal changes in participation can still be politically significant.

The paper proceeds as follows. The first section reviews the literature, focusing on the theoretical and empirical challenges to identifying Internet effects on political participation. The next section describes the FMSCA strategic planning process and the data collected from this experiment. The third section compares the breadth and form of participation in the traditional docket with the participation in the web-based discussion. In addition, we compare our results to evidence from national surveys that indicate the lack of significant Internet effects to probe more nuanced relationships between Internet use and political participation. We conclude with a discussion of the implications of these findings and suggestions for further research.

II. Literature Review

The debate over the effects of the Internet, and other information and communication technologies (ICTs), on political participation has been broadly cast as a competition between reinforcement and mobilization hypotheses (Danziger, Dutton et al. 1982; Norris 1999). The reinforcement hypothesis holds that ICTs support the existing distribution of political power because influential individuals and organizations already active in the political process are able to control the diffusion, design, and use of new

technologies to support their entrenched interests. In contrast, the mobilization hypothesis contends that despite the efforts of elites, new communication technologies will decrease the costs of communication and information acquisition and create new, more compelling opportunities for participation thereby empowering new groups, increasing democratic participation, and opening up otherwise difficult to penetrate policy networks.

Research on previous ICT innovations such as computers, broadcast and cable television has for the most part supported the reinforcement hypothesis (Danziger, Dutton et al. 1982; Dutton, Blumler et al. 1987; Abramson, Arterton et al. 1988; Streeter 1997). The bulk of empirical research on the Internet and politics arrives at similar conclusions, finding no indication of an impending revolution in democratic participation and political openness. For example, Davis' (1999) broad survey of the use of the Internet in campaigns, interest group activities, and contacting of government officials concludes that the technology principally benefits existing power structures.

While contrasting the mobilization and reinforcement hypotheses was a useful framework for early analysis of the Internet, it masks the complex relationship between technology and participation, thus impeding theoretical and empirical advances. Most importantly, the two hypotheses pose a false dichotomy. Reinforcement effects and mobilizing effects are not mutually exclusive. Internet access could mobilize some individuals to take part in new participatory acts in certain political areas, such as organizing protests. At the same time, in other domains existing political elites may strategically use the Internet to maintain and strengthen their political positions.

When one considers that both the Internet and political participation are multidimensional concepts, it becomes evident that technology can lead to a mixture of potentially countervailing effects on participation. The Internet is a generic communications platform that supports a variety of applications, which potentially compete with traditional broadcast media such as television, point-to-point technologies such as telephony, group communications such as videoconferencing, and information aggregation technologies such as telephone polling (Weare 2002). At the same time democratic participation encompasses a variety of types of mediating organizations (e.g., political parties, interest groups), participatory acts (e.g., voting, campaign work, contacting officials), and targets to be influenced (e.g., political representatives and agency officials at the local and national levels) (Norris 2002).

Consequently, normative evaluation of technology-based participation requires a broader research program to investigate numerous causal links and a careful balancing of the positive and negative effects of technology in differing contexts (Weare 2002).

Verba, Schlozman, and Brady (1995), for example, propose three key reasons individuals do not participate: a lack of motivation, a lack of capacity to do so, or a lack of opportunities. Empirical studies of these distinct components of participation decisions offer a more varied picture of technology impacts.

Motivation. The informational and communicative impacts of the Internet appear least likely to affect individual motivations given that the consistent and strong findings of the central role that socio-economic status plays in explaining participation (Verba and Nie 1972; Verba, Schlozman et al. 1995). Using historical trends and national election study data, Bimber (2001) argues against a rational-actor model of information

acquisition in which greater information availability elicits more search and use of that information for political purposes. In contrast, he suggests that the information availability could be having more qualitative effects on psychological perceptions of political information which may have longer run affects on motivations.

Capacity. The Internet can affect individual capacity to participate through several avenues. The costs of communication are a constraint, and studies have shown that e-mail has led to a barrage of message being sent to Congress (Davis 1999; Goldschmidt 2001). Yet, it remains uncertain the degree to which these e-mails are sent by those who already have made such contacts through other media and how many of them are from previously inactive individuals. More fundamental is the question whether the Internet provides a forum in which individuals can acquire civic skills necessary for participation (Brady, Verba et al. 1995). Usenet groups, a recently popular venue for political debate, could be a venue for such skill building, though earlier findings are mixed. Some argue that online discussions are frequently dominated by a few individuals and do not support real deliberation (Wilhelm 1998). In contrast, Dahlberg (2001) found online discourse in the Minnesota E-Democracy initiative to encourage respectful listening, facilitate an open and honest exchange, and provide equality of opportunity to all participants. More generally, others point out that individuals' ability to screen and interpret new information depends on past attitudes and habits. Consequently, the already information rich may be best situated to increases their capacity leading to even an larger inequalities in information access (Bimber 2001).

The Internet may also increase capacity by facilitating collective action (Olson 1971). The literature on collective action indicates that communication between

individuals concerning their contributions toward group goals is essential for overcoming the problem of free-riding (Macy 1991; Sell and Wilson 1991; Cason and Khan 1999). Evidence from new forms of advocacy and protest organizations supported by Internet communications suggests that the Internet does facilitate these intra-organizational communicative needs (Brainard and Siplon 2002; Norris 2002).

Opportunities. The effect of the Internet on opportunities for participation remains less clear. While the rise of new forms of protest and advocacy politics has created new opportunities, government sanctioned participatory opportunities remain scarce. The design of Internet portals have focused more on informational and transactional e-government applications that view constituents more as customers than active participants in democratic decision-making (Musso, Weare et al. 1999; Moon 2002). The creation of the regulations.gov portal and similar initiatives at the federal and state levels could reverse these early results. The literature on the policy making process, however, does not provide firm guidance on the likely magnitude and direction of the effects of increasing opportunities through Internet technologies.

Issue networks, the nexus of major interest groups, elected officials, and administrators who dominate particular policy arenas, have been historically closed and hostile to outsiders (Kingdon 1984; Marsh 1998). Efforts to reach out to new constituencies through the Internet may pry open these issue networks. Past legislative changes that have mandated accountability to outside groups did successfully open up environmental policymaking to environmental groups, leading to shifts in political outcomes (Noll, McCubbins et al. 1984; Spyke 1999). Yet, other efforts to open closed policymaking networks, such as through open meeting acts, have met with less success as

officials routinely circumvent openness requirements (Cawley 1992; O'Looney 1992; Thomas 1995). Public participation can also be undermined by unreceptive administrators. Practices that encourage greater participation may redefine or reduce the role of public administrators, a notion of power sharing that many find uncomfortable (Walters, Aydelotte et al. 2000). In addition, administrators often view other potential participants to be either uninterested or narrowly interested in their self-interests, rather than the public good.

Empirical assessment of Internet effects is further complicated due to the small magnitude of the social effects researchers seek to measure. The socio-economic status model of political participation has been one of the most robust findings in the political science literature, suggesting that use of communication technologies can have at best limited additional explanatory value (Verba and Nie 1972; Verba, Schlozman et al. 1995). National Election Survey (NES) data collected every two years since 1948 indicate no significant historical trends in campaign related participation as measured by engaging in one of five participatory acts.³ Despite the rise of television, cable television, faxes, and other new communication technologies, campaign related participation has hovered around a mean of 32.5% once one controls for peaks in presidential election years.⁴

Putnam (2000) assembles a persuasive counter argument. Based on Roper survey data, he argues that we have witnessed a significant historical decline in political participation activities including voting, contacting officials, and membership in community organizations. In the case of contacting political representatives, the rate of participation declined 23 percent from 1973 to 1993 (Putnam, 2000, p. 45). He argues

that up to 15 percent of this decline can be attributed to increased television viewing (Putnam, 2000, p. 229).⁵ With about 17% of survey respondents contacting political officials in 1973, this effect translates to a drop in the overall rate over a twenty-year period of less than 1 percent. Given that the Internet is currently a much less mature technology than television was in the 1970s and that its effects have had much less time to accumulate, we should expect even smaller measurable effects.

This paper contributes to the research literature on Internet and participation in two ways. First, it moves beyond examining the more diffuse Internet effects mediated through changes in individuals' motivations or capabilities and examines the Internet's impacts through the creation of specific opportunities for participation. Understanding these technological impacts will become increasingly important as governments continue to experiment with Internet-based participation forums. Second, focusing on a decision-making forum facilitates more refined analysis of individuals who participate, thereby increasing the probability of identifying small Internet effects.

III. The 2010 Strategy Planning Process and Data

In 1999, Congress reacted to a rash of high profile motor vehicle fatalities by authorizing the U.S. Transportation Secretary to create the Federal Motor Carrier Safety Administration (FMCSA). The authorizing legislation mandated that the new agency develop a long-term strategy for improving commercial motor vehicle, operator, and carrier safety. FMCSA staff (including one of the authors) sought to design an open and inclusive planning process that would provide opportunity for early and continuous involvement by all interested parties. In August of 2000 FMCSA opened a traditional docket, announced in the Federal Register, to solicit written comments. At the same

time, to encourage discussion between participants, including its employees, Agency managers decided to experiment with running a parallel Internet-based discussion.

A new web site, titled the 2010 Strategy and Performance Planning site (2010 Strategy), was designed for this purpose. It provided access to draft plans, reports and background information, such as a summary assessment of commercial vehicle crashes. It also featured a two-way, interactive discussion. From the 2010 Strategy site home page, visitors could select from several options. The discussion option led to a set of message threads. Visitors could either post a message under a new discussion topic or reply to a message in an existing discussion thread. They also had the option to submit an electronic message to the public docket through a link posted at the Web site. In addition to the asynchronous discussion, participant interaction was encouraged through an e-mail reply feature that broadcast new messages daily to all registered visitors. At the beginning of the process, the interactive discussion was not moderated, but in response to some early comments, FMCSA posted a terms of use agreement and began to moderate the discussion, which led to the removal of some messages. Stanley (2002) provides further detail of the operational features of the 2010 Strategy web site.

The site was advertised through a mailing to agency clients and stakeholders, a press release, and internal memos to FMCSA employees.⁶ Although the web-based discussion did not have the same legal authority as submissions to the official docket, FMSCA in its announcements pledged to consider all comments submitted through the web. Both the docket and the web discussion operated from August 2000 to May 2001, through the initial comment stage, release of a draft plan, and comment period on the draft plan.

One hundred individuals and organizations submitted a total of 102 messages to the docket.⁷ One hundred and sixteen identifiable individuals contributed 339 messages to the 2010 Strategy site discussion, and another 177 messages were contributed anonymously for a total of 516 messages. Of these, 65 were removed because they violated the terms of use agreement, leaving 451 messages. Another 130 individuals registered and monitored the discussion through automatic e-mail alerts, though posted no messages. The site was also used to download information and review others' comments. Over 5,000 copies of background documents and papers, including 2,500 copies of the draft strategic plan, were downloaded. In February 2001, the month before comments on the draft plan were due, the 2010 Strategy web site received 6,750 unique visitors, an average of 241 visitors per day.

Content analysis was employed to examine the contextual features of messages, such as participant affiliation, and the themes evoked in the written communications. The unit of analysis was the entire textual record of a letter sent to the docket or message posted to the web site. Individual participants were classified by their organizational affiliation. Based on a review of the literature, we expected participation in such discussions to be biased toward traditional agency clients and interest group representatives, members of the iron triangle of sub-governments. These include industry, governments, and associations such as American Trucking Associations and American Bus Association. The industry category includes commercial motor carriers, their suppliers, and their customers, while governments include local and state governments as well as Department of Transportation (DOT) and other federal government agencies. Other participants can be considered outsiders, or at least

infrequent contributors, to such proceedings. Two groups were easily identified from the content of their comments, academics and commercial drivers writing on their own behalf. We grouped the remaining comments into an umbrella group of other non-standard participants. These include private citizens, consultants, small commercial owner-operators, and representatives of organizations not previously known to the FMCSA.⁸ Similar analysis was performed on the written correspondence received pursuant to all requests for comments issued by the FMSCA during the year beginning in February 2000.

IV. Results

To examine the extent to which Internet communications influenced participation in this strategic planning exercise and the extent to which the Internet elicited new participatory acts by previously inactive individuals, we began by comparing the submissions to the traditional docket with the messages in the web-based discussion. Overall, the data supported the notion that the inclusion of the web-based discussion did expand participation in FMCSA's planning process and possibly attracted new participatory acts. The character of the messages submitted to the 2010 Strategy web site differed from the docket submissions in a number of significant dimensions.

First, the character of participants in the web-based discussion differed from those who commented in the docket. Table 1 shows that the docket was dominated by the standard participants of iron triangles of policy-making, with 78% of all submission coming from local, state, and federal government bodies, industry, and trade associations and interest groups.⁹ Outsiders to these issue networks including individuals, academics and commercial drivers are not completely silent. Fifteen percent of all docket

submissions, for example, came from non-standard participants, but they constitute a minority voice.

Participation in the web discussion in contrast was more eclectic. Most noticeable is the prevalence of contributions from non-standard participants, with 20 percent of the messages coming from commercial drivers and another 57 percent coming from other non-standard participants. These differences in participation patterns are highly statistically significant.

The degree to which the web-based discussion achieved the FMSCA manager's goal of a broader discussion between stakeholders and agency employees was, nevertheless, limited by a number of factors. Representatives of trade associations and interest groups, an important source of expertise, did not actively participate, contributing only four comments to the web site discussion. In addition, participation was more homogeneous within specific discussion threads. Finally, agency employees did not participate, at least openly, in the discussions. It is possible that they posted some of the anonymous messages, but the extent of this activity is not known.

The division of participation between the two alternative forums is noteworthy. Only six participants who submitted comments to the docket also participated in the web discussion, and in five of those cases, the participant simply posted the same comments submitted in the docket to the web site discussion. This lack of cross discussion is all the more remarkable in that the web site provided links directly to the docket, making submissions to the docket no more difficult than contributions to the web discussion. This division suggests that the individuals who participated in the web discussion

constituted a distinct group with differing motivations and expectations compared to those who participated in the docket.

Second, responders to the docket had much greater previous contact with the FMCSA. To generate input into the planning process, FMSCA invited almost 1,500 individuals in industry, trade associations, universities and research institutions, and government to participate in the planning process. This invitation list was compiled from existing agency mailing lists of organizations with which agency managers had been in contact previously.¹⁰ In addition, the list was augmented with names from business directories, and state field offices contacted state agencies and industry groups with whom they were familiar. Over 85 percent of those who submitted comments to the docket were contacted in this manner.¹¹

In contrast, the web site drew most participation from individuals that the FMSCA had not identified as likely respondents. Only five individuals who had been previously contacted posted messages. Most likely, the other participants learned about the 2010 Strategy web site from the press release, the Federal Register, links from the FMCSA and DOT web site, by word of mouth, or general web searches.

Third, the topics broached in the 2010 Strategy web based discussion also differed from those in the docket, introducing new voices and concerns to the strategic planning exercise and placing greater emphasis on a different range of topic. We coded each message on whether it addressed one of nine specific issues. The issue coding scheme is described in Appendix A. Each message could address more than one topic. Figure 1 presents a comparison of topics addressed by docket submission versus the web site discussion. Some topics, such as concerns related to commercial carrier practices were of

equal interest. However, the web discussion focused on different issues and topics – with more concern on roadway safety conditions, aspects of FMCSA regulatory and enforcement policy, and behavior of passenger car drivers. These differences are probably due to the greater representation of commercial drivers and other non-standard participants in the web discussion. Commercial drivers were more concerned than other participants with enforcement policy, commercial vehicle design, and passenger car driver behavior. Other non-standard participants were also more likely to raise issues of commercial vehicle design and were twice as likely as commentators to the docket to raise issues of the roadway conditions. Elsewhere we compare other details of the docket and web-based discussion and find that the formality and interactivity of the communications in the two forums also differed (Stanley, Weare et al. Forthcoming).

Finally, more qualitative evidence regarding the participants in the web-site discussion also supports the interpretation that the Internet attracted input from stakeholders who typically do not meet or discuss commercial vehicle safety issues with regulatory authorities. The tone and approach of these messages suggest that many were written by political neophytes with no experience contacting officials. These messages emphasized personal experience and opinions over broad group interests. The comments of the father of a crash victim illustrate how personal and poignant perspectives were introduced to the discussion. He began by stating, “this is not a group” and then pled for someone to pay attention to design flaws before “other parents have to go through the same pain and trauma that this family has gone through.”

In other instances, participants in the web site discussions other than organizational representatives, who traditionally represent their views in regulatory

forums, offered different perspectives based on their work responsibilities, expertise, and experience. For example, an executive from a commercial passenger carrier submitted written comments to the docket. At the same time, an employee of the same company submitted comments to the web discussion raising personal concerns about proposed regulations affecting nighttime driving schedules of bus drivers. In another example, a mid-level division manager within a state agency posted comments to the web-based discussions raising particular questions about the ongoing ability to enforce existing federal laws, while staff specialists from the same agency responded with their written comments about concerns related to goal attainment and the availability of vehicle safety data in the public docket.

A. Comparison to Other FMCSA-sponsored Dockets

It remains possible that those who participated on the 2010 Strategy web site would have participated on the docket in any case, and that the observed differences between the docket and the web discussion are the result of self-selection of participants into the two forums. To investigate this possibility, we examine participation in all of the FMCSA dockets that were open in the year beginning in February 2000 and that requested comments from stakeholders. None of these dockets offered the option of a web-based discussion. A list of these dockets is provided in Table 2. The 2010 Strategy web site and docket had a total of 553 comments submitted. This response is quite large in comparison to most requests for comments, though two dockets did receive more. Those two, a rulemaking concerning standards for commercial driver's licenses and a petition to create a pilot program for drivers under the age of 21, had particular circumstances that require further discussion and will be considered later.

We compare the responses to the other 14 dockets to the responses to the 2010 Strategy announcement. Among this set the 2010 Strategy response stands out, having both a greater level of participation and broader representation among those who do participate. Comments for the most routine decisions, notices and exemptions, are sparse. Excepting the young driver pilot program, no notice received more than six messages. In addition, as seen in Table 3, their pattern falls into the tradition of the iron triangles, dominated by interest groups and industry. The notices of proposed rulemakings (ANPRM and NPRM), in contrast, generate greater interest and attract some comment from non-standard participants. Given that rulemakings are more significant decisions broadly affecting whole segments of industry or society, this greater interest is not surprising. Nevertheless, even these dockets are still dominated by traditional stakeholders, and commercial truck drivers did not comment. Based on these comparisons, it does appear that the 2010 Strategy web site successfully attracted more and new participants to the FMSCA decision-making process than commonly observed in a traditional docket during the same period.

The 2010 Strategy docket is more similar to the other two dockets mentioned above, in that each generate much greater interest, but consideration of the particulars of the other dockets suggests that the web discussion still played a role in drawing new and different participants. In the commercial driver's license standards docket, the large number of comments is deceptive. Only about one hundred of these comments were unique contributions. Over 675 submissions to the docket were a form letter submitted by commercial drivers who were members of the Amalgamated Transit Union. Although an organized letter writing campaign is an important form of participation, counting each

letter as an individual comment exaggerates its import from the perspective of agency decision-makers. Excluding those letters, the distribution of the source of comments is similar to that of other rulemakings, and not as broad as the 2010 Strategy comments.

The docket concerning a proposed pilot program to reduce the commercial driving age to eighteen is another story. Based on a random sample of comments, a very high percentage of comments came from individuals writing on their own behalf. This heavy involvement on the part of individuals appears to have been driven by media coverage. A Lexis–Nexis search during the 15 months following the request for comments identified 47 stories and editorials in the print media on the proposed pilot program for younger drivers.¹² In contrast, not a single story concerning the 2010 strategy development can be found on Lexis-Nexis.¹³ The Internet also appears to have played a role. The majority of comments sent in by individuals, 75% in our sample, were sent by e-mail to the DOT electronic docket. Although for the young driver pilot program media coverage did boost the quantity of comments, it did not greatly expand the terms of the debate. Virtually all of the comments from non-standard participants were terse paragraphs proclaiming their opposition to the proposal. Unlike the 2010 Strategy web site, there were neither new ideas broached nor interaction among commentators.

In sum, this comparison with other FMCSA-sponsored dockets suggests that web-based discussion opportunities are a sufficient but not necessary component for expanding the amount and range of comments. News coverage, mobilization by mediating organizations, and access to e-mail also play a role in facilitating participation. Nevertheless, the 2010 Strategy web site elicited more and a broader range of comments

than other standard decisions under consideration. It is unlikely that the topic of the 2010 Strategy planning exercise had broader appeal eliciting greater interest. Strategic planning is an esoteric exercise of interest primarily to industry insiders who have the most to gain from directing the course of future agency actions. In fact, previous DOT strategic planning exercises had been gained sparse attention.¹⁴

This interpretation of the participatory effects of the 2010 strategy web site is supported by an evaluation of a similar experiment by the Environmental Protection Agency (EPA) (Beierle 2002). In July of 2001, EPA conducted a two-week electronic dialogue to discuss its public involvement policies. 1,166 individuals participated in the dialogue, 309 of which responded to a survey. While the dialogue was clearly dominated by agency employees, environmental organizations, and industry officials who were intimately involved in EPA policy-making, it also drew in a number of new voices. Twelve percent of the survey respondents had had no contact with EPA in the previous five years, and 22 percent were unfamiliar with EPA policies concerning public involvement.¹⁵ At the same time, the evidence is less conclusive on whether the web-based dialogue mobilized the politically inactive. No specific questions were asked concerning past political activity. Nevertheless, the composition of dialogue participants was heavily weighted toward highly-educated whites, segments of the population that are already likely to participate.

B. Comparison to Survey Results on Internet-induced Participation

While the data indicate that the web discussion attracted new and different participants to this decision-making forum, we lack direct evidence of the previous political activities of these participants. Thus, it is not possible to draw firm conclusions

regarding the extent to which the web discussion attracted politically active individuals taking advantage of another venue in which to voice their views or politically inactive individuals mobilized by this opportunity to participate. Comparing these results to survey analyses of the effect of the Internet on participation, however, can provide some insight into the political experience of web discussion participants.

Using NES data, Bimber (2001) focuses on the discrete choice on whether or not to participate in one of a number of campaign-related activities, and he finds that use of the Internet for gathering political information does not increase the odds of participating. At first blush, this result appears to be at odds with the evidence presented here.¹⁶ If Internet users are no more likely to participate in politics than non-users, why should targeting Internet users with a web-based discussion forum increase the number of comments received during the 2010 Strategy process?

The results can be reconciled if we assume that the participants in the 2010 Strategy web discussion were already politically active. In this case, participation in the web discussion represents a deepening, rather than a broadening, of participation and would not be captured in Bimber's model. This interpretation suggests that the Internet is more effective in getting the already active to participate in additional venues than motivating the inactive to participate.

Bimber's results can also be reconciled with our own by recognizing that the magnitude of the possible mobilization effect on the politically inactive is small from a macro perspective. If 10 percent of the non-standard respondents had been previously politically inactive, the web discussion would have elicited only 35 new participatory acts. This number pales in comparison to the numbers of overall participation. There are

about 212 million voting age adults in the United States. NES data suggest that approximately a quarter of them, or about 50 million, may write to contact public officials in any year. It would take tens of thousands of such successful experiments to generate a one percent increase in the overall number of individuals contacting public officials.

Thousands of such successful experiments would be a major achievement from the perspective of electronic democracy advocates, significantly influencing the quantity and quality of comments received by agency decision-makers. Nevertheless, such an increase is very difficult to discern through survey data. Replicating a model similar to the one presented Bimber (2001) and using the same NES data, we calculate that there is only a small chance, about 20%, of correctly identifying a real effect as large as one percent.¹⁷ Thus, while the evidence is not conclusive, it is possible that the 2010 web discussion did induce a small number of inactive individuals to get involved.

V. Conclusions

This paper presents evidence from a government agency experiment with a web-based discussion. This evidence provides an interesting contrast to existing studies that find the Internet has little effect on democratic participation. By creating a web-based discussion running in parallel to a traditional docket, the FMSCA increased the number of comments received, expanded the range of constituencies that were heard, and broadened the topics on which respondents commented.

We lack data on previous levels of political activity of the participants in the web-based discussion. Thus, we cannot decisively conclude the degree to which this new web-based discussion attracted already active individuals versus the degree to which it

mobilized the inactive. Survey findings that Internet access does not mobilize individuals politically, suggests that many of the web-discussion participants were already politically active and were attracted by the opportunity to exercise their political voice in another realm. Nevertheless, the tone and content of messages strongly suggests that some mobilization of the inactive did occur, though these effects are most likely small.

This evidence suggests that the Internet's impact on opening up issue networks to new voices and interests may have a greater influence on political participation than its impact on changing individual motivations or capabilities. New opportunities for political participation do attract new participants to decision-making forums, thereby changing the information environment in which agency decisions are made. This conclusion holds even if Internet access does not mobilize individuals as is suggested by previous research or mobilizes only small numbers as argued here. Other researchers have suggested the Internet may have its greatest impacts outside of normal political routines, either by an accelerated pluralism leading to rapid changes in agendas or by facilitating protest activities (Bimber 1998; Norris 2002). This study indicates that technology can also play a similar role in democratizing routine government decision-making processes.

The results also reemphasize the role of mid-level elites in mediating between group interests and elite discussions. Theories of local power (Dahl 1961) and the effects of mass communications (Katz and Lazarsfeld 1965) emphasize the central role of such communication bridges. It is not surprising that an early effect of a powerful new communications media such as the Internet would be to empower these actors. The fact that non-standard respondents raised new issues suggests that they informally represented

groups of individuals, such as commercial drivers or relatives of crash victims, whose views were not being heard in the decision-making process. In one clear example, a truck driver, who commented in the web discussion, actively distributed the draft strategy plan in truck stops.

This evidence, by itself, does not conclusively support either the mobilization or the reinforcement hypotheses, but it does help refine the debate. The web-discussion clearly mobilized new participation in this particular decision-making arena, even if it led to little or no mobilization of the politically inactive. To the extent that these new participants informally represented the views of previously unrepresented or under represented interests, it qualifies some concerns that have been raised due to persistent divides in digital access. Universal access may be less important from a political perspective than access for mid-level elites that can informally represent various interests. Further study, however, is needed to clarify the role that such mid-level elites play in newly created electronic decision-making forums.

On the other hand, theory and experience justify a healthy skepticism concerning the long-run survival of more open decision-making processes in the face of political and bureaucratic resistance. Further study is warranted to examine the eventual impacts of broadened participation on agency decision-making. FMCSA managers did review all comments, but their impact on the eventual development and implementation of the agency strategic plan is difficult to evaluate. Comments from both the written docket and web-based discussion were considered at both the draft stage and the subsequent revision, yet manager comments indicate that neither had a significant impact on the final plan, largely because the managers had already had much contact with numerous stakeholders.

The plan was developed within an assumed goal framework that did not change as a result of the planning process, but some of the embedded strategies were enhanced based on participant comments.

Finally, this work demonstrates the importance of seemingly small changes in political participation. The amount of participation mobilized by this experiment – little more than 100 individuals – is miniscule from a broad social perspective, all but invisible to standard statistical analysis of noisy, cross-sectional surveys. Nevertheless, the political effects of these seemingly small changes cannot be discounted. They increased the workloads of agency managers, increased the range of issues, and potentially broadened the level of conflict that would have to be resolved. Further research that focuses on specific decision-making forums is warranted. We need to deepen our understanding of how increased participation affects agency decision-making. In addition, electronic decision forums are a useful place to track the effects of the Internet on participation. To paraphrase Willy Sutton, forums are where the participants are. Given the difficulties of detecting and analyze very small changes in participation at the social level, focusing on forums facilitates more refined analysis of individuals who participate, thereby increasing the probability of identifying small Internet effects.

Tables and Figures

Table 1

Source of Comments, Docket vs. Web Site

Affiliation	Docket		Web Site	
Academic/Research	2	2%	30	7%
Commercial Driver	5	5%	90	20%
Government	38	37%	29	6%
Industry	14	14%	42	9%
Membership/Trade Association.	28	27%	4	1%
Other Non-Standard Participants	15	15%	256	57%
Total	102		451	

Chi-squared = 129.3, with 5 d.f. $p < .001$

Figure 1

Percentage of Issue Mentions, Docket vs. Web Site

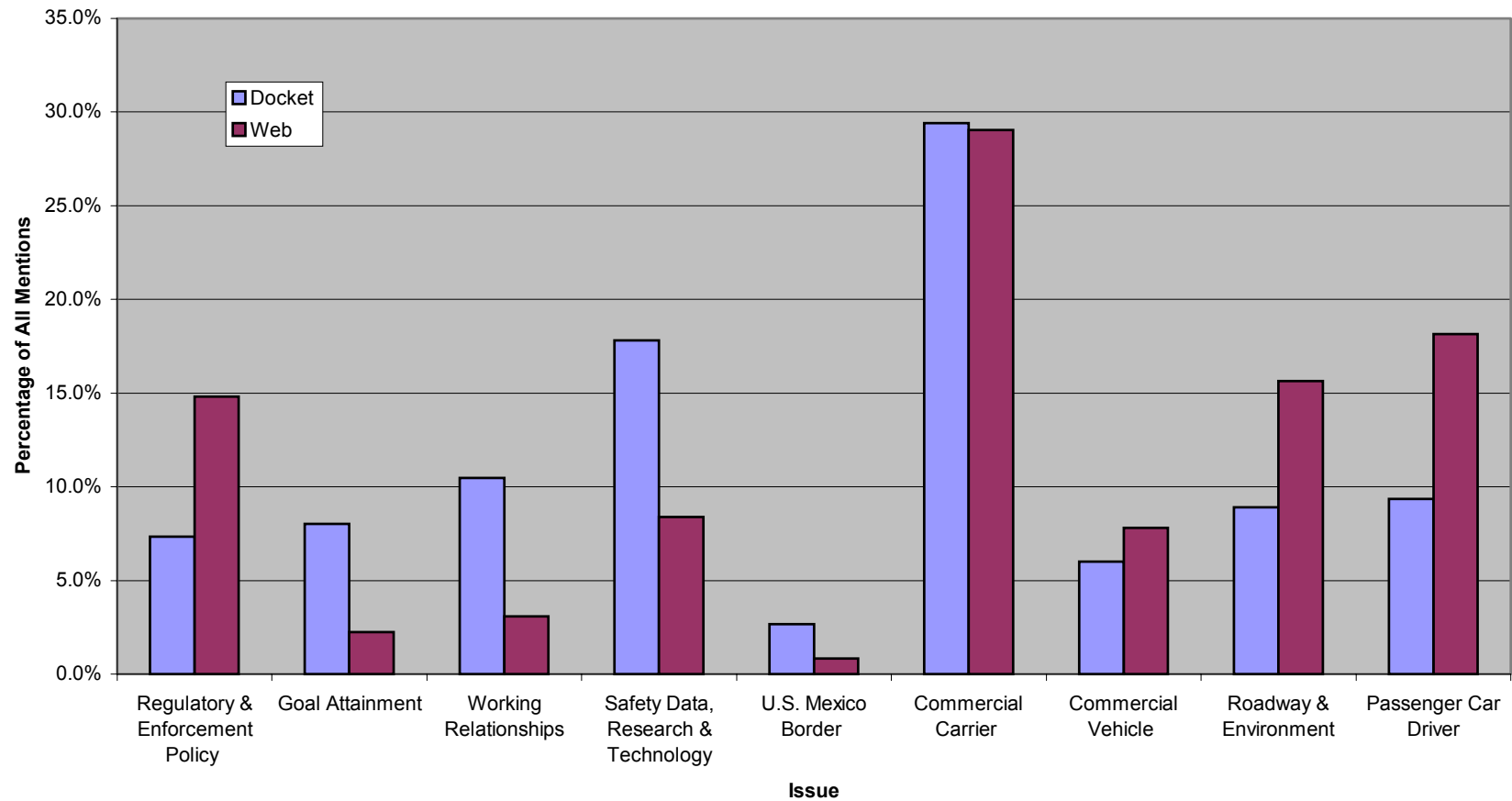


Table 2

**FMCSA Dockets with Request for Comments,
February 2000 – February 2001**

FMCSA Docket Number	Total Comments	Subject Matter	Notice Date	Decision Type
7316	1	Medical Qualifications	May 2000	Notice
7827	2	Information Collections	Sept. 2000	Notice
8033	2	MCSAP Information Collection	Sept. 2000	Notice
8398	2	Vision Standard Exemptions	Dec.2000	Exemptions/Waivers
6938	3	Vision Standard Exemptions	Feb. 2000	Exemptions/Waivers
7363	3	Qualification of Drivers	July 2000	Notice
7165	4	Qualification of Drivers	May 2000	Notice
7918	4	Vision Standard Exemptions	Nov.2000	Exemptions/Waivers
8203	4	Vision Standard Exemptions	Nov.2000	Exemptions/Waivers
7006	6	Driver Qualifications	Mar. 2000	Notice
8209	6	Motor Carrier Identification	Oct. 2000	Interim Final Rule
7332	7	Sanctions Against MC	May 2000	NPRM
7017	26	Commercial Van Operations	Mar. 2000	NPRM
7174	30	Interstate School Bus Safety	Apr. 2000	ANPRM
7645	553	2010 Strategy	Aug. 2000	Notice
7382	781	Commercial License Standards	May 2000	NPRM
8410	1674	Young Driver Pilot Program	Feb. 2001	Exemptions/Waivers

NPRM -- Notice of Proposed Rulemaking
 ANPRM -- Advanced Notice of Proposed Rulemaking
 Interim Final Rule -- Proposed expanding on previous rulemakings

Table 3**Affiliation of Commentators by Forum**

Affiliation	2010 Strategy Web and Docket comments	Routine Decisions	Major Decisions excluding outliers	Commercial Driver's License Standards ¹	Young Drivers Pilot Program ²
Government	12.1%	9.7%	15.9%	1.5%	1.4%
Industry	10.1%	9.7%	13.0%	1.5%	2.1%
Membership/Trade Association	5.8%	74.2%	44.9%	2.2%	2.1%
Academics	5.8%	0	0	0	0.7%
Commercial Driver	17.2%	0.0%	0.0%	91.8%	9.7%
Non-Standard Participants	49.0%	6.5%	26.1%	3.0%	84.1%
Total	553	31	69	781	1674

¹ Based on a random sample of 134 comments ² Based on a random sample of 145 comments

Appendix A

Coding Scheme For Content Analysis of Comment Topics

Topic	Refers To Opinions and Views Regarding:
Regulatory and Enforcement Policy	How FMCSA approaches the regulatory process, including calls for new approaches; and expressions of concern about the practical aspects and cost of enforcing the regulations.
Goal Attainment	The feasibility of attaining the goal of a 50 percent reduction in fatalities; and the need to focus on crash causation and develop new measures of the goal that account for traffic exposure.
Working Relationships	The need for a more inclusive and collaborative approach by involving other government agencies and industry in policy decision-making.
Safety Data, Research, and Technology	How the lack of quality data hinders understanding, the need for more research and data, and the general concern that FMCSA is relying too much on unproven technology to achieve its goal.
U.S.-Mexico Border	Particular suggestions and concern about how the federal government is currently implementing the North American Free Trade Agreement (NAFTA) requirements for commercial truck movement between U.S. and Mexico.
Commercial Carrier	Particular concerns about federal oversight of commercial carrier practices, new regulations that will impact carriers, issues around the Commercial Driver's License (CDL) regulations, and related questions about medical and drug qualifications of commercial drivers.
Commercial Vehicle	Revising existing vehicle design requirements and the introduction of new safety-related technologies.
Roadway and Environment	Roadway design (i.e., use of rumble strips) and the use of facilities, including rest areas; also, concerns regarding roadway capacity and speed enforcement practices.
Passenger Car Driver	The need for more education and enforcement of traffic laws with respect to drivers of personal vehicles; particularly, when driving around commercial vehicles.

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Endnotes

¹ A docket is the record maintained by agencies concerning rulemakings and other actions. It includes the Federal Register notice of a pending decision, background documents, and written comments submitted in response to the notice.

² Of course, the standard limitations of inference from natural experiments apply because we cannot control all confounding variables.

³ The five acts are 1) attending campaign meetings, 2) working for a campaign, 3) displaying a button or sign, and 4) donating money and 5) whether the respondent tried to influence others.

⁴ Regressing a time variable and a presidential election dummy onto the percent participating explains about half of the variance of the dependent variable. The coefficient for the year variable is very small and statistically insignificant.

⁵ Putnam acknowledges that this estimate may be biased upwards due to endogeneity, but we will use it as an upper bound.

⁶ In its first notice in the Federal Register, the FMSCA did not mention the web site because it did not yet have an URL. In a subsequent notice requesting comment on the draft plan, the web site is referenced, though the availability of the discussion forum is not explicitly mentioned.

⁷ The official FMSCA docket 2000-7645 (available at dms.dot.gov) contains 116 submission because 14 letters were recorded twice due to clerical errors.

⁸ In the web-based discussion, many of those grouped in the non-standard category posted messages anonymously. We grouped them in this category based on the content of their messages. It is possible, nevertheless, that a small number of those respondents grouped in the non-standard category were FMSCA employees who wished to participate in the discussion anonymously. While the numbers presented for the non-standard category may be somewhat inflated, the general results are not affected.

⁹ The one difference in this case from a traditional iron triangle is that legislative committees are not well represented.

¹⁰ Individuals who had contributed to previous dockets on their own behalf were not included in the mailing lists.

¹¹ While the overall response rate to the docket by those who were invited was 5%, the response rate was 20% for those who were contacted more than once suggesting the importance of outreach to generating individual participation. Because individuals who attended briefings may have been more inclined to submit comments in any case, however, the effectiveness of agency outreach remains a question for further research.

¹² We conducted the search on national news sources for these terms: FMCSA or federal motor carrier safety administration and age.

¹³ We conducted the search on national news sources for these terms: FMCSA or federal motor carrier safety administration and strategy or strategic. The press release for the strategic planning exercise was reported in a number of trade journals, but these are not part of the Lexis-Nexis database.

¹⁴ For example, truck and bus safety summit sponsored by the U.S. Department of Transportation held in 1999 involved fewer than 100 people, and the group was more homogeneous in its makeup.

¹⁵ The percentages reported exclude EPA employees who participated. The percentages would be slightly lower if EPA employees were included in the calculation.

¹⁶ This conundrum could result from differences in the measurement of political participation. Specifically, the NES data employed by Bimber (2001) focused on voting and campaign-related participation, rather than direct contact with public officials relevant to the data presented here. To analyze this possibility, we employed NES data from 1964, 1968, 1972, and 1976 when the survey included questions on both campaign related activities and contacting of public officials. The intercorrelations between letter writing and the campaign-related variables are significant and of similar size of the intercorrelations among the campaign-related variables. Factor analysis of letter writing with four main campaign activities extracts a single factor indicating that they do measure the same underlying construct.¹⁶ The reliability of the scale constructed from letter writing and four campaign-related activities is not particularly high (Cronbach's Alpha = .577, N=6812), which suggests that there may be multiple dimensions to participation. Nevertheless, contacting elected officials and other forms of campaign-related participation are sufficiently correlated that the differences in results cannot be dismissed as unrelated phenomena, though further research is warranted to examine how the Internet impacts different dimensions of political participation.

¹⁷ Data and calculations are available from the author upon request.