Engaging citizens: The high cost of citizen participation in high technology

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This paper contributes to ongoing discussions on democratic engagement through an exploration of citizen participation in two citizen consensus conferences on nanotechnology, one held in 2005 and the second in 2008. We analyze the factors that motivate citizens to participate formally in debates about emerging "high technologies" and consider demographic and related characteristics of the participants in these two consensus conferences and the reasons they provided for participating. We suggest that in an era in which the barriers to civic engagement—most especially time—are large for many citizens, significant incentives are likely to affect participation. These incentives may be internal (e.g. a personal interest in a topic or an investment in a policy outcome) or external (e.g. money). In this context, we critique the aim of recruiting "blank slate" participants for consensus conferences and other deliberative democratic forums.

Keywords: consensus conferences, nanotechnology, participation in science policy, public participation, technology assessment

1. Introduction

For more than a decade, scholars and policy analysts have been writing about the role of lay citizens in the development of science and technology (e.g. Epstein, 1996), in the analysis of science- and technology-related risk (e.g. Wynne, 1992), and in debating and making science and technology policy (e.g. Kleinman, 2000). Various forms of scientist–citizen collaboration (e.g. Brown and Mikkelsen, 1990) have been explored, as have forums for lay engagement in science and technology policy (e.g. Einsiedel and Eastlick, 2000; see also Brown, 2006). The motivation for these initiatives varies from a belief that better research might result (e.g. Epstein, 1996) to the claim that citizens have a right to a say in all matters that directly affect them and/or for which they contribute taxes (e.g. Sclove, 2000).

At the same time that this body of work was developing, other scholars expressed concern about the character and quality of civic engagement in the United States. Robert Putnam's *Bowling Alone* (2000) drew widespread attention to the issue, and since the publication of Putnam's initial work on "bowling alone" (1995) all manner of positions have been staked out on the issue of civic and political engagement. Some, like Putnam, have documented what they

view as a substantial decline of such involvement. Others have complicated the picture, exploring inequalities in who engages politically and with what implications. It is true too that not all civic engagement is equivalent. Surely, involvement with a parent–teacher association has different implications than volunteering for Greenpeace (see Skocpol and Fiorina, 1999a).

The scholarship on technoscience and democracy does not explicitly consider problems associated with motivating citizen participation (but see Powell and Kleinman, 2008), and the civic engagement literature does not explore workable conditions for citizen involvement in technoscience-related matters. Our experience with two consensus conferences on nanotechnology in 2005 and 2008 provides an opportunity to explore a host of issues at this intersection in the American context.

Consensus conferences were pioneered in Denmark in the 1980s as a means of understanding citizen perspectives on developing technologies and obtaining citizen input on related policy matters (Sclove, 2000). Consensus conferences generally involve four components: background reading preparation by participating citizens, facilitated discussion among citizens, interaction between lay panelists and content experts, and development by participants of a set of policy recommendations (Kleinman et al., 2007).

In this paper, we analyze the factors that motivated citizens to participate formally in debates about emerging "high technologies" (technologies with high degrees of complexity, high costs, and potentially large impacts)—that is, why people participated in the two consensus conferences.[1] We consider demographic and related characteristics of the participants in these two consensus conferences, and the reasons they provided for participating. Our analysis provides insight into civic engagement, broadly speaking, as well as consensus conferences as a specific form of citizen participation in debates about highly technical matters.

Our article is divided into four parts. First, we discuss some of the benefits to and constraints on civic engagement. Next, we consider the principles behind consensus conferences and the organizational characteristics such principles imply. This is followed by background on the two consensus conferences that we analyze and a discussion of our data on reasons for citizen involvement. In particular, these data permit us to explore citizens' attitudes towards stipends as compensation for participation. Finally, we conclude that in an era in which the barriers to civic engagement—most especially time—are large for many citizens, significant incentives are likely to affect participation. These incentives may be internal (e.g. a personal interest in a topic or an investment in a policy outcome) or external (e.g. money). In this context, we critique the aim of recruiting "blank slate" participants who do not have instrumental interests related to or deep involvement with the topic under discussion for consensus conferences and other deliberative democratic forums; such practice may not only be unnecessary to realize the potential of citizen engagement, but may also construct an unintended barrier to broad citizen involvement.

2. Understanding civic engagement

Civic engagement covers a broad swath of citizen participation in community life. The title of Robert Putnam's book, *Bowling Alone* (2000), literally points to a decline in the postwar period in involvement in bowling leagues in the United States. This shift reflects an overall pattern of declining place-based contexts for American citizens to gather regularly, develop social connections with one another, come to understand each other, and perhaps build a sense of common mission. Putnam suggests that this cultural shift has enormous implications for the institutional support of civic participation in the United States.

Theda Skocpol and Morris Fiorina (1999b) starkly outline the contextual characteristics in which we must consider the decline in civic engagement in the US. Since the 1960s, the level of voter participation in the US has dropped some twenty-five percent. Polling data suggest a dramatic decline in the number of Americans who trust the government from three-fourths in the 1960s to under a third at the onset of the new millennium. Additionally, and more concretely, "Americans are participating less in many kinds of shared endeavors, from unions and political parties to religious groups and other sorts of voluntary membership organizations" (Skocpol and Fiorina, 1999b: 2). A drop in bowling league participation may be the least of our problems.

But why should we worry about a decline in involvement in civic life? What does it suggest about the health of American democracy? What does civic engagement do? As Schlozman, Verba, and Brady (1999) note, there are at least three ways to think about civic engagement. First, participation in voluntary organizations allows for the development of the social capacities of individuals. Second, voluntary associations provide the basis for building community and "the cultivation of democratic virtues." Third and finally, group participation makes possible the protection of collective interests (Schlozman, Verba and Brady, 1999: 427). Thus, in a country structured by social inequality and consequentially divergent interests, civic participation can allow citizens to develop the skills necessary to collectively resolve social problems and represent their interests. Furthermore, civic engagement among a diverse collection of citizens enables the representation of opposing interests and opens the possibility of bridging conflicting positions.

Such lofty goals of civic engagement meet documented constraints—most significantly time and money. Having a job, a working partner, and children are all constraints when individuals weigh their decision to participate in civic life (Schlozman et al., 1999: 433).[2] While competing roles have always complicated the choice to become involved, Juliet Schor (1992) reports a slow but steady increase in the amount Americans work and a commensurate decline in the amount of free time they have. Self-reports of those surveyed suggest that around the time of the publication of Schor's book, US workers had under seventeen hours of free time per week after attending to work and domestic obligations. In this context, it is worth asking how average citizens will find the time to be civically engaged, and under what conditions they will be inclined to do so.

In an apparent paradox, much literature suggests the disproportionate political impact of affluent Americans, many of whom have careers that demand sixty-hour workweeks or more. How are these individuals finding the time to become civically engaged? Common sense suggests that monetary donations made by the wealthy may increase the influence of political activity, but research also suggests that higher incomes translate into additional discretionary time. One can imagine that although the affluent may spend an equal or greater number of hours at their workplaces compared to the less wealthy, income provides the capacity to hire people to do housework that the less affluent must complete themselves; indeed, Schlozman, Verba and Brady (1999) found that those with family incomes over $125,000 constitute only three percent of the population, but their effort constitutes eight percent of total volunteer campaigning time. We remain skeptical of a neat, linear relationship between income and time volunteered—indeed, our own experience in political organizing suggests that the middle class presents the most accessible pool of volunteers—but questioning such a relationship surely deserves attention. While we acknowledge that a whole host of factors determine the likelihood of civic engagement for any particular individual, the mix of discretionary time and discretionary income surely plays some role.

Evidence of the decline of civic engagement in the US during a time of increasing social inequality and growing political and economic uncertainty frames our discussion of the 2005 and 2008 consensus conferences, the former organized by Kleinman and Maria Powell, and the latter organized by the authors of this paper, Powell, and Mathilde Colin. Our analysis leads us to several conclusions concerning the key role of incentives in motivating civic engagement and the drawbacks of "blank slate" approaches to deliberative processes.[3]

3. Civic engagement and science and technology

As we noted at the outset of this paper, the literature on citizen involvement in science and technology at the policy level and in actual research practice has mushroomed in recent years. High profile work highlights what lay citizens can bring to the actual practice of science. Wynne (1992), for example, shows how farmers' very local, hands-on knowledge might offer insights that scientists working at a distance miss. Epstein's (1996) work illustrates how patients' on-the-ground experience and knowledge can provide the foundation for more successful clinical drug research. Finally, Brown and Mikkelsen's (1990) research on popular epidemiology similarly shows how insights of community members aided the efforts of epidemiologists to understand a particular set of cancer clusters.

On the more policy-oriented end of citizen involvement in science and technology, there is a similarly wide array of examples. Among those which have drawn substantial attention are citizen roles in government advisory bodies, science cafes, and consensus conferences. With regard to the first, in the mid-1980s, the US National Institutes of Health began to include consumers on bodies that review research proposals to provide input on whether proposals match government priorities and address social considerations (Kleinman, 2000: 141). Science cafes differ by not providing any concrete mechanism through which citizens formally offer policy advice, but they aim to inform citizens about policy-relevant science and technology in an interactive environment (Powell and Colin, 2008). Consensus conferences, the focus of the discussion in this paper, also center on interactive discourse, but aim to produce policy recommendations suitable for an audience of decision-makers and the public.

Consensus conferences are promoted as a means of providing non-expert citizens with opportunities to have a voice in the trajectory of scientific and technological development and policy (Sclove, 2000). They are spreading across the globe (Einsiedel, Jelsøe and Breck, 2001) during a time at which high technology is an increasingly prominent feature of daily life and public policy, but when civic engagement in the US, at least—broadly defined— appears to be declining. The first US consensus conference took place in the Boston area in 1997 and focused on telecommunications (see Guston, 1999; Sclove, 2000).

As we noted at the outset of this paper, consensus conferences have four basic components: preparatory reading by participating citizens, facilitated discussion of readings, discussion between citizens and knowledge experts, and recommendation development. In Denmark, where this process originated, consensus conferences occur across three weekends; however, there is no single standard for the organization of each component of the process. In the Danish case, the process is deeply institutionalized. Efforts are organized by the Danish Board of Technology, a government agency, and timed to coincide with parliamentary debates about the issue to be taken up by the given consensus conference. As a consequence, there is some real possibility that the recommendations of Danish consensus conferences will serve as input for parliamentary debate. In the US, by contrast, the limited number of consensus conferences which have been held have been organized by scholars and non-governmental organizations, and although, in some cases, organizers sought to influence policy, there was no direct institutional mechanism to ensure this.

Consensus conferences are predicated on a particular model of deliberative democracy, which suggests that people can and ought to put aside their prior personal commitments or investments before entering into discussion. Indeed, in the ideal case, participants should begin the process free from instrumental interests or deep prior involvement with the issues at hand (Einsiedel and Eastlick, 2000: 327; Sclove, 2000: 35; Hamlett, n.d.: 6). The ideal participant should be guided only by "reason." Theoretically, through free, fair, and open discussion, citizen deliberators will develop a reasonable and representative perspective on the issue at hand (Bohman, 1996). The aim is to exclude people with "pre-formed," uncriticizable and unchangeable positions. Using proxy measures of these qualities, organizers commonly exclude prospective participants if they have deeply held prior positions on the issues at stake, or if they have financial or professional ties to the technology in question.

Typically, organizers of consensus conferences do not seek broad representation of political *positions* on the topic in question, but rather seek wide *demographic* representation. This strategy rests on the premise that a collection of individuals from diverse social locations and experiences is likely to entertain the largest possible array of positions and perspectives prior to arriving at final recommendations (Guston, 1999: 455; Einsiedel and Eastlick, 2000: 330; Sclove, 2000: 35; Einsiedel et al., 2001: 88). Facilitators of the process guide the group toward consensus positions with the understanding that constructive conflict enhances the quality of deliberation (Mansbridge et al., 2006) and the eventual credibility of the resultant policy recommendations.

Beginning with the original Danish consensus conferences, newspaper advertisements have served as the primary recruitment tool. In response to an announcement of the topic of an upcoming consensus conference, applicants provide information on their demographic characteristics and statements about why they wish to participate. Typically, in Denmark, this recruitment strategy generates 100 to 200 applications from which organizers select fifteen participants with the goal of maximizing the demographic diversity of the panel.

With only a relatively few participants, consensus conference results are perhaps not representative of the views of the broad citizenry of the country in which they are held, and one might ask how such forums contribute to civil society or to policy processes. Our response to these matters is threefold. First, at this point, most consensus conferences amount to only "tests of concept." Their limited size and the limited number held in any country on a given issue mean their contribution is likely to be marginal. To have a significant impact would demand a kind of institutionalization that does not exist, even in Denmark. Second, where institutionalized, as in Denmark, these conferences can provoke public discussion, as a result of media coverage and politician interest. Indeed, in the Danish case, there is evidence that they have influenced policy debate and industry plans (Sclove, 2000).[4] Even in the US, consensus conferences have received press coverage (Sclove, 2000; Powell and Kleinman, 2008), and this may have contributed to public debate. Finally, if only for a limited number of people, consensus conferences can cultivate democratic citizen skills (Powell and Kleinman, 2008).

Consensus conference on nanotechnology (2005)

In 2005, one of the authors of this paper (Kleinman) was a member of the social science component of the Nanoscale Science and Engineering Center, a National Science Foundation-funded initiative on the University of Wisconsin–Madison campus. This arrangement allowed Kleinman to explore the workings of a consensus conference and to provide undergraduate university students with an opportunity to study a real-time experiment in deliberative democracy. In addition, Kleinman and the other organizers intended from the outset that they would do all within their powers to make the voices of participating citizens heard beyond the walls of the forum itself. Thus, although we had no formal connection with government

agencies or institutions and no formal link to the news media, we told participating citizens we would work to make connections for them with government and the media.

Working with students in an undergraduate course on "Democracy and Expertise," taught through the Integrated Liberal Studies Program, we set out to organize a consensus conference on the general topic of nanotechnology. Each component (discussion of readings, interaction with experts, development of policy recommendations) was allocated approximately six hours on three different days across three weeks (Kleinman et al., 2007; Powell and Kleinman, 2008). We initiated our organizational efforts in mid-January and held our three sessions on different weekends in April. Thus, we had approximately three months to prepare the entire logistical groundwork for our effort, including the recruitment of participants. This contrasts with the ten to eighteen months typically spent organizing the early European consensus conferences. Our budget was also quite small, between $5,000 and $6,000, compared to budgets of $100,000–$200,000 in Europe. Under such conditions of resource scarcity, we offered potential participants very limited benefits: free meals at each session and paid childcare for parents who required it.

Our recruitment effort involved three components: publicity, community meetings, and personal networking. Opportunities to participate were announced on several community websites and in a local neighborhood newspaper, and we spoke at several community group meetings to encourage participation. We also held a public meeting of our own to describe the consensus conference and promote interest in applying to participate. Our most effective means of recruitment was our personal networks. We received only two applications in response to formal media (websites and newspaper announcements) and four more from our work at community meetings. Consequently, we put a great deal of effort into recruiting through our own social networks to garner ten additional applicants (for a total of sixteen). We excluded two applicants who had strong and explicit activist commitments in areas related to the consensus conference topic, and one citizen withdrew his application, which resulted in a final panel size of thirteen, two short of our goal, but substantial enough to run a formal consensus conference.

Our group of panelists was demographically relatively diverse in terms of gender, income, age, ethnicity, level of education, occupation, and religious affiliation. Our panel included six women and seven men. Ten had incomes at or below $47,000. Participants ranged in age from 18 to late 60s, with a fairly even spread across the decades. Ten members were white, and three were people of color (a fair representation of the demographics of the Madison area). Three participants had high school diplomas and some college, five had college degrees, and five had master's degrees. A wide array of occupations and religious affiliations were represented. Thus, despite starting from a small pool of applicants, we achieved a level of demographic diversity that reflected reasonably well the Madison population from which we recruited.

One characteristic that we did not explicitly target was participants' own histories of civic engagement. Civic engagement can mean anything from bowling league membership to volunteering for a non-governmental organization to working in an election campaign, and thus, we did not see this as a classically demographic category. What is more, we would have had no way to measure the population-level standard to which we might aspire. Still, using the broadest possible definition, our 2005 group reflected a variety of forms and levels of engagement. Two of our panelists were active in community affairs (e.g. school board and city planning); one member was a paid staff member for a civil rights group; three mentioned participation in political demonstrations in our interviews with them; and one noted that he regularly wrote letters to elected officials.

National Citizens' Technology Forum (2008)

In 2008, all of the authors of this paper were involved in what was termed the National Citizens' Technology Forum (NCTF), a consensus conference that examined emerging technologies of human enhancement at the convergence of developments in nanotechnology, biotechnology, information technology, and cognitive science (NBIC). Organized under the auspices of the Center for Nanotechnology in Society based at Arizona State University and funded by the National Science Foundation, this was the first effort in the US to carry out a nationwide consensus conference. Like the 2005 initiative, this effort too was a "test of concept." The lead organizers (based in North Carolina) aimed to ascertain the feasibility of a considerable scale-up beyond a single site consensus conference in one US location. Although we were interested in the feasibility of this national model for a consensus conference, as compared to the North Carolina-based organizers, our primary motivation from the outset was that involvement in the NCTF would permit us to consider the value of different practical features between our 2005 consensus conference and the local Madison component of this national effort. In this case, a national consensus conference meant the coordination of participants from six sites across the country: Madison, WI; Berkeley, CA; Phoenix, AZ; Golden, CO; Atlanta, GA; and Durham, NH. The authors of this paper coordinated the Madison, Wisconsin site.

The organization of the NCTF involved localized and nationally coordinated activities. All panelists began by reading the same background materials. The initial session in which participants discussed the readings took place separately but simultaneously at the six sites over two full days. The second phase of deliberation, interactions with content experts, took place online and combined participants from all sites in nine two-hour virtual sessions over a period of three weeks (for an analysis of this phase of the NCTF, see Delborne et al., forthcoming). The final component of the consensus conference, in which participants developed policy recommendations, took place face-to-face at each local site during two full days. Citizens who participated in the entire process—the two weekends of meetings, the Internet sessions, and completion of pre- and post-event surveys-earned a $500 stipend.[5] Scholars at North Carolina State University served as central coordinators—composing a handbook for site organizers, publishing the background materials, coordinating recruitment, organizing and facilitating the online sessions, and distributing the stipends. But staff at each site had significant discretion in terms of the logistics and facilitation of the two face-to-face weekends.[6]

The centralized recruitment process for the NCTF was less elaborate, although more successful, than the 2005 effort. Based on their previous experience of recruiting for a similar project in Raleigh, NC, coordinators of the national project placed advertisements in local newspapers with the intention of attracting 75 applicants in each city in order to fill six panels of 15 members each. Results fell short of expectations, and many sites engaged in additional recruitment practices (e.g. advertising on Craig's List, posting flyers). In the end, the number of applicants totaled 61 in Phoenix, 74 in Berkeley, 64 in Golden, 67 in Atlanta, 20 in Durham, and 61 in Madison.

Interested panelists responded to advertisements by e-mailing organizers at NC State, who then referred them to a short online survey to secure demographic data. Drawing on data on age, educational achievement, race, household income, and four measures of political affiliation, each site took on the responsibility of building as diverse a group as possible. Madison recruitment followed an informal protocol of qualitatively maximizing the diversity of invited panelists. Because of a relative dearth of Republican/conservative-leaning applicants, we invited all four of them immediately (one declined; one dropped out at the last

minute for medical reasons; and one was disqualified after we learned that he was heavily involved in the nanotech industry as a consultant). We invited both applicants who had attended some college or equivalent but did not finish (one declined), as most applicants had completed college or attended graduate school. We also invited all four non-white applicants (one declined). We were successful in confirming panelists from all income ranges (although nine had incomes above $49,999 and only five had incomes below this threshold) and from a large array of ages (23–72). Despite male applicants outnumbering female applicants 18 to 13, we filled seven female spots quite quickly, working hard to confirm an equal group of men (four men who had initially applied later declined to participate).

After the selection process, we conducted initial interviews with all 14 panelists, which gave us an idea about their individual histories of civic participation. The majority of panelists said they had attended some form of public gathering, whether a protest or a local school board meeting. All but three said they had contacted a public official, whether through phone calls, letter, or e-mail. However, only four panelists indicated membership in an association or regular participation in some kind of volunteer work. At least two participants who mentioned this kind of engagement said their experiences were school- or work-related.

The Madison area budget for this forum was considerably larger than that for our 2005 consensus conference. We were able to hire a dedicated postdoc (Delborne) who spent about half of his professional time laying the logistical groundwork for the conference for two months prior to the forum, took the lead in managing our team during the month of the conference, and served as our lead facilitator during both of the local weekend sessions. In addition, we provided meals during the two weekends when the citizens met together, and, as mentioned, we provided citizen stipends. As with the 2005 initiative, the NCTF depended on considerable volunteer labor. Thus, estimating the actual cost of the event is difficult. Complicating our estimate even further, publicity, initial in-take surveys, and management and organization of online portions of the consensus conference were undertaken by staff based in North Carolina for all local venues. Very roughly then, if we include local staff time, stipends, and other local (only) expenses, the Madison budget was in the neighborhood of $20,000—three to four times the budget of the 2005 Madison consensus conference.

4. The lure of engagement?

In this section, we explore what motivated citizens to participate in the two consensus conferences that we organized. We must begin by acknowledging that motivating participation in discussion about high technology raises distinctive challenges. First, in contrast to, for example, debates on public school funding where citizens would be likely to know a priori the importance of the issue for themselves and their community, in both of our exercises (2005 and 2008), we sought citizens willing to participate in debates about technologies that had limited public visibility. In contrast to, for example, genetically modified organisms, no major public controversies have yet emerged around nano- and related technologies. Second, the invisibility of prospective risks of new technologies to lay citizens may lead prospective participants to question the importance of participating at all. Third, as we have suggested, unlike Denmark, which has a government institution for citizen debate about high technology, the US lacks this tradition and so there is no public knowledge about or experience with consensus conferences. Finally, in a society in which an ideology of expertise figures prominently (Kleinman, 2005), it may be that prospective participants begin by imagining that debates over high technology are best left to those who are highly trained. Given these challenges, we interpret our data on recruitment to suggest that in the US participation in an activity such as a

consensus conference on a not yet controversial technology requires some sort of incentive—whether external or internal. The two consensus conferences in which we were involved demonstrate two very different versions of participant motivations for citizen engagement.

Following the 2005 consensus conference, we undertook semi-structured "exit interviews" with all of the panelists. We asked each participant explicitly, "Why were you interested in participating?" As we noted earlier in the paper, roughly half of the participants in the 2005 forum had some experience of civic engagement, although the variety and extent of such involvement varied considerably from person to person. Several of the citizens spoke of that involvement or of the virtues of learning about consensus conferences as an alternative democratic mechanism as motivating their participation. One respondent put it this way:

> I would say that the biggest reason [I wanted to participate] is because I'm so disheartened by my inability to participate in activism just by living in this time, constrained [by] work/kids/days. And secondly, I've been really frustrated with activism in general and … I was … trying to figure out some other way to participate in society and in government in a way that's not just walking down the street protesting.

This is a multilayered reaction. The respondent raised the issue of time constraints on engagement, but in the context of wanting to allocate her limited time to something that is effective. She went on to say that the environmental activism in which she had engaged in college had not seemed particularly effective. She added: "This seems like a good opportunity, it's got more credibility somehow, and so I thought that was a really good aspect of it." Other respondents expressed a broader interest in consensus conferences as a democratic forum. One noted that she had "been interested in issues around democracy for a really super long time." Another participant spoke of being "very interested" in learning more about the consensus conference as a process and of its potential. One panelist talked of being "concerned" as a citizen; and still another highlighted the value of a process in which citizens might hear the pros and cons on an issue and then have a "substantive impact" on public debate. Many of these anticipated benefits of participation stem from the desire to make a difference in a context where citizen engagement can have a real impact.

Other respondents spoke of the consensus conference as an opportunity for personal satisfaction. Several described an interest in learning more about nanotechnology, about which panelists uniformly knew little. Two retired panelists spoke of the value of trying something new. One man put it this way: "It was something that would get me out of my basically monotonous life and get [me] back involved into learning about things." The other said: "My philosophy in retirement is, if I haven't done it, then I'll do it."

In 2008, we made efforts to gather comparable data about individuals' reasons for involvement in the Madison component of the NCTF. We conducted pre- and post-forum interviews with all of the Madison participants, and we had access to pre- and post-test fixed choice questionnaire responses for participants from all NCTF sites, including Madison. In the discussion that follows we rely primarily on data from our semi-structured interviews, but also incorporate quantitative data when they inform our discussion.

The significant improvement in our ability to attract Madison applicants in 2008 compared to 2005 serves as one important datum. As a result of rather standard newspaper announcements, roughly four times as many persons applied to participate in the NCTF as applied to the 2005 conference, which we promoted through concerted personal networking and on a number of listservs (on, for example, local environmental issues) that might attract citizens predisposed to be involved. Nevertheless, in Madison, we failed to reach our target application number of 75 for the NCTF. Despite placing ads in two local newspapers with a combined circulation of nearly 80,000, our response rate was unimpressive.

Changes in public knowledge or awareness of nanotechnology cannot explain the increase in our Madison applicant pool for the 2008 NCTF. In fact, US public tracking polls run between 2004 and 2007 suggest the public remained largely unaware of nanotechnology, and only about half of those surveyed in both periods knew the definition of a nanometer (Scheufele and Brossard, 2008a, 2008b). Locally, while the 2005 consensus conference did generate some press (several radio reports and talk shows, a television talk show, and several newspaper articles), it did not generate so much media attention that we would expect Madison to have become a hotspot for understanding of and interest in nanotechnology between 2005 and 2008.[7]

In fact, 2008 NCTF Madison participants echoed their predecessors by anticipating an opportunity for learning. Respondents frequently mentioned a desire to learn and specifically to learn (more) about nanotechnology. Indeed, when asked in pre-conference interviews why they were interested in participating, eleven of our respondents spoke explicitly of their desire to learn, their interest in science in general, or their interest in nanotechnology in particular. One respondent put it this way: "I'm interested in nanotechnology. I just briefly read here and there in magazines. And I'm interested in having a voice in a future process. I'm aware that this is happening and the end result is going to be important." Another participant noted that nanotechnology was something that he "got interested in a few years ago," and he had "read a couple of books on the subject." Other respondents spoke of an interest in science more generally. One noted that "On a personal level, even though I don't have [a] science degree, I've always been sort of interested in science." Another said that the latest in "technology or in science … is quite interesting to me because I am from a science background." A third said: "I'm genuinely interested, I guess, in different research things that are going on and participating in them." These panelists' motivations to participate did not explicitly reflect a desire to pursue civic engagement or democracy, but instead interest in opportunities for learning.

National survey data of the 86 panelists at all six NCTF sites indicate similar findings with regard to what motivated people to participate in the 2008 forum. The desire to learn was a prominent explanation citizens gave for participating. Panelists at all six sites gave "a personal interest in learning about nanotechnology and human enhancement" an average score of 8.48 ($SD = 2.39$) on an eleven-point scale, which was the highest score for the five reasons they ranked. Six of the 14 Madison participants specifically rated learning about the issue as 10, or "very important," in their survey responses.[8] "A desire to take part in current research" received the second highest average score of 8.33 ($SD = 2.02$) among participants at all six sites, and "financial compensation for my time" received the third highest average score of 7.28 ($SD = 3.01$).

When compared to the 2005 panel's reasons, this general interest and excitement about nanotechnology suggests a relatively technophilic attitude among 2008 NCTF national participants and among Madison participants, in particular. But not all 2008 Madison participants spoke of science and technology in uncritical and gushing terms. One noted during the pre-forum interview the "huge risks involved with nanotechnology" and the "potential dangers." A second spoke of her belief that "ethical considerations come into play in the development of new anything." And, indeed, the general tenor of discussions among Madison participants in the latter part of the 2008 consensus conference was more cautious than effusive.

One major difference between the 2005 and the 2008 conferences was that for the latter event, we were able to offer a $500 stipend. We wondered the extent to which this factor affected our participants' decision to participate. In interviews, Madison respondents varied in their view of the importance of the stipend for their participation. One said: "Initially I saw the ad; I saw you could be paid $500; and for college students [that's a lot of money] so that

kind of drew me in." The second said that he was in "an income transition, so to speak" and that the $500 made a big difference. One applicant who declined our invitation to participate suggested that if we could double the stipend he would be willing to join the panel! Other respondents reported that while the stipend was not their primary motivation, it played a significant role. One noted that although the money was not his primary reason to participate, he was "broke," so the money was "important to me as well." Another commented: "I have a full time job so it's a bit of an incentive." Several spoke about the number of hours involved, indicating that they might not have participated without the monetary incentive. Others said that the money was "nice" and made a difference, but was not decisive.

The 2008 Madison participants' responses on the pre-forum questionnaire are similarly mixed and complicated. The survey answers indicate that the stipend played a key role but was not the sole motivator for most of the Madison participants. While only one participant from Madison responded she would have been *very unlikely* to participate if she had not been offered the stipend, five said they would have been *somewhat unlikely* to participate without the stipend. On the other hand, six said they would have been *somewhat likely*, and two said they would have been *very likely* to participate without the stipend. Put differently, when asked how important financial compensation was as a reason for participating in the forum, on an eleven-point scale, the Madison participants ranged widely. All but three of the respondents rated financial compensation at 5 or higher with five of these citizens ranking financial compensation as 7 or higher. This suggests that to these participants financial compensation was, indeed, a significant factor. Still, three respondents rated financial compensation 4 or lower, and the average ranking (6.36) of the importance of financial compensation as a factor influencing willingness to participate is lower than the average ranking for the importance of the desire to learn (8.79) and the desire to be politically engaged (7.21).

National survey data from all 86 NCTF participants reinforce this mixed picture. When asked whether they would have agreed to participate without being offered money as compensation for their time, just under half (47.7%) of participants at all six NCTF sites said that it was very unlikely or somewhat unlikely that they would have participated anyway. Thirty-six percent said that it was somewhat likely and only 16.3% said it was very likely that they would have participated without a stipend. The correlation with income is relevant here. Those who had higher family incomes were more likely to say they would have participated without the stipend. Over half of those who made at least $50,000 annually said they would have been likely to participate without a stipend, while more than half of those who made below $35,000 said they would have been unlikely to participate in the absence of the stipend.

Beyond serving as an incentive for recruitment, the stipend also played a significant role in ensuring the continued participation of the panelists. The high demands of participation—especially in terms of the time and attention required for the online sessions—became clear to some Madison participants only after getting into the process. Several noted explicitly that the stipend reinforced their commitment to remain involved until the end. As one put it: "When I began I said that it [the stipend] didn't matter much; it didn't when I began. But about the second week of the online sessions I probably would have dropped out." One described the Internet component of the consensus conference as very frustrating and said, "It was like, it's ok, you're gonna get a check so …." Another Madison citizen clearly indicated that the stipend justified her time commitment: "I actually might have dropped out if there hadn't been a stipend just because I have kids and a husband [who] was like, 'Oh, and I have to watch the kids, ohhh.'" These responses suggest that the stipend reinforced their commitment to participate as a kind of contract—exchanging time for money.

We do not mean to overstate the role of the stipend in motivating participation as there were certainly other factors at work. For two or three of the 2008 Madison panelists, depending on how one reads their responses, the money mattered less once the process was under-way. As one noted: "It [the stipend] played a big part in my initial decision to take part in the group. But once I decided I was committed to it, I was like, I don't know … if they would have cut funding in the middle I would have stuck with it because I was committed to it any-ways." This view was echoed by a second panelist: "I would say that once I entered the pro-cess I didn't even think about the money." Of course, it is impossible to know whether the removal of the stipend mid-way through the process would have resulted in a mass exodus of participants, but the initial agreement made clear that the stipend was a payment for effort[9] and this arrangement could not have been too far from any panelist's mind.

In contrast to the 2005 consensus conference panel, only one of the Madison participants in the 2008 NCTF mentioned citizen participation or activism in responding to our question about why he was interested in participating. He said:

> I was also kind of interested in the aspect of getting involved as a citizen and at least steer some policy. I'm not really politically active, but I am politically aware. I pay attention to the news … I feel I should be more involved in decisions. Not that I should personally be involved but I should personally be contributing to this stuff somehow.

It is notable that this respondent mentions a degree of interest in broad civic involvement, but also explicitly denies an activist stance—declaring that he is not "politically active" and ques-tioning the degree to which he should be "involved" versus simply "contributing."

5. Reading engagement

Comparing the apparent reasons for becoming and staying involved in these two consensus conferences offers some insight into the realities of civic engagement in general and consensus conferences as a particular form of democratic engagement. First, we clearly attracted somewhat different populations to each of these conferences in Madison. On the one hand, the 2005 group included several participants who were or had been civically engaged in one way or another and several who were explicitly interested in learning about the consensus conference process. The 2005 group, it is worth noting, expressed skepticism throughout the consensus conference about the idea that new technologies are automatically good and valuable, and they demonstrated concern over relying upon government officials to always act in the best interest of the citizenry. By contrast, the 2008 Madison group was more broadly interested in technology—nanotechnology, in particular—and saw the NCTF event primarily as a learning opportunity. Although it is probably fair to say that the caution of this group grew over time, they were certainly more technophilic than the 2005 group.

In our 2005 recruitment effort, we stressed the importance of consensus conferences as a novel mechanism of citizen engagement. Thus, it makes sense that we would attract citizens interested in modes of democratic organization and people with an interest in civic engage-ment broadly construed. That we attracted such people among our participants was probably further reinforced by our need to draw on personal networks that included people whom we knew to have at least some interest in civic engagement and/or democratic process. Significantly, we had trouble finding the requisite number of participants, and we drew from a narrow population that included people interested in civic engagement, again broadly under-stood, or in democratic practice. Of course, there are many variables at play here, but surely our experience does not allay concern about the decline in civic and political engagement since the Second World War.

Table 1. Promotional text from Madison consensus conferences

2005 consensus conference	2008 consensus conference
"This spring Madison will host a unique democratic forum on nanotechnology…. This event will provide a diverse group of citizens from the Madison-area an exceptional opportunity to work together and influence public policy on an important new technology."	"*Paid participants needed for university research project*…. A local panel of fifteen citizens, part of a national project, will discuss recent technological advances… and make recommendations in a report about the impacts and consequences of human enhancement technologies that will be widely circulated to government, industry, and to the general public."

The 2008 NCTF Madison component attracted a group of techno-enthusiasts who wanted to learn more about what they viewed as an exciting—if slightly disturbing—technology. Although our data do not allow us to draw precise conclusions about relations between independent and dependent variables, our reading of the interviews and the contexts within which our two consensus conferences took place suggest that the mode of recruitment, as shaped by the goals and resources of consensus conference organizers, may have made the difference between the two cases. As we noted, in our 2005 recruitment, we stressed the importance of the conference as a test of a democratic mechanism. By contrast, the 2008 recruitment advertisement mentioned "public deliberation," but did not speak of the NCTF as an experiment in democratic engagement and did not use the term "consensus conference" at all. The first sentence of the ad read: "A local panel of fifteen citizens, part of a national project, will discuss recent technological advances leading to significant enhancements of human mental, emotional, and physical abilities." It spoke of "formulating opinions" and the circulation of a final report to government and industry officials and the general public. Readers of the ad likely imagined an opportunity to learn, perhaps more than an opportunity to have political impact. The fact that the advertisement speaks of "technological advances" without speaking of possible drawbacks, risks, or problems might have drawn more technophilic citizens to the NCTF (see Table 1).[10]

In addition to the framing of the two projects, the recruitment protocols obviously differed in the offer of a $500 stipend for participation. While only two Madison participants in 2008 said in the interviews that the stipend was their primary reason for participating, the vast majority said money was significant. At the national level, despite failures to attract the desired 75 applicants for each site, the relatively low intensity recruitment protocol (newspaper advertisements) still resulted in a substantial number of applicants (61)—far more as a ratio of applicants to spaces to fill (nearly a factor of three in Madison) than the intensive efforts undertaken for the 2005 consensus conference. This strikes us as significant and leads us to tentatively conclude that money very likely affected our ability to recruit participants.[11]

Despite our reading of interview data from Madison NCTF participants, we caution against concluding that the provision of money would solve our civic engagement problems—too many factors are at play (not least of which, as we noted above, is that consensus conferences probably cannot stand in for all civic engagement) and measurements of intention and internal rationales have clear limitations. However, surely, money does serve as an incentive and may overcome some participants' constraints to engagement. But even if it were possible to pay citizens on a regular basis to be involved in community policy deliberations and electioneering, we question whether we would achieve the degree of breadth, depth, and diversity of desired civic engagement in exchange for cash.

Specifically, we suggest that stipend provision may tend to attract a particular kind of participant. Again, while disentangling the variables that affected interest in participating in our cases is impossible, in the case where we offered a stipend, we attracted more citizens

who were positively inclined toward new technologies; where we did not offer financial compensation, we ended up with a group that, at the outset, expressed more criticism and skepticism. It is also possible that participants who are not financially compensated may end up investing more of their energy in and attention to the process than those who are paid, since individuals need to make sense of the rationale for their actions, and paid individuals can easily fall back on the financial incentive as sufficient to justify participation (an argument derived from cognitive dissonance theory).

Turning our attention more broadly to consensus conferences as mechanisms of deliberation and civic engagement, the differences in the two cases suggest that a fundamental assumption needs reexamination. Classically, consensus conferences are predicated on what we might term a "blank slate" or *tabula rasa* approach to democratic engagement. The idea, as we noted earlier, is that in the best case participants should enter the deliberative process with no instrumental interest in a particular policy recommendation and be guided by a commitment to the public good. Consistent with the position of some advocates of deliberative democracy, the premise is that bringing open-minded citizens together in a fair and open process will produce the best possible set of policy recommendations: proposals that are likely to be "rational," aligned with the interests of the broader community, and valid (recommendations that would be largely equivalent had a similarly demographically diverse and blank slate group developed them).

While in the narrowest sense, participants in our 2005 and 2008 consensus conferences may have met the standard of "ideal participants" lacking prior instrumental interests and deep prior involvement in nanotechnology-related issues (as discussed previously, we actively excluded several applicants who fit these descriptions), they were not individually or collectively blank slates. On the whole, the 2005 group, while having no firm positions on nanotechnology among them, did have deeply held views about citizen voice, the truthfulness of government officials, and the potential of new technologies. The 2008 Madison group had a different collective profile. With some exceptions, they entered the process viewing it as a learning opportunity and feeling collectively positive about the prospects for the use of nanotechnology in human enhancement.

The final reports of each Madison group reflect these differences (see Table 2). The 2005 report exuded a certain lack of trust in government and experts, stressed the importance of openness and accountability, and urged a precautionary approach to the development of nanotechnology. For example, the citizen panel called on the government to establish a method for informing the public of the "potentially" harmful effects of products that include nanomaterials. The panel said further that "We should not assume that existing health and safety regulations are adequate to cover products made with novel nanomaterials."

By contrast, the 2008 Madison report embodied a feeling of promise.[12] Assuming that new developments will be useful, the 2008 Madison body called for the equitable distribution of benefits and teaching about nanotechnology to high school students. However, while the different "entrance orientations" of the 2005 and 2008 consensus conference participants—the interests and concerns the citizens began their involvement with—were significant, there were important areas of overlap between the final reports. Both groups called for enforcement of rigorous safety standards and expressed concern about the use of nanotechnologies to invade the privacy of citizens. Thus, despite not being entirely blank slates, the citizens across the two different cases were apparently sufficiently open-minded that they arrived at some similar conclusions. In sum, our cases suggest that while seeking a *tabula rasa* body of citizens may be unattainable, consensus conferences may nevertheless create opportunities for open-minded deliberation.

Table 2. Comparison of final report recommendations

Topic area	2005 consensus conference	2008 technology forum
Information Access	Government should promote	Government should promote
Regulation	Anticipatory, cautious	Anticipatory, cautious
Privacy Concerns	Expressed; should be protected	Expressed; should be protected
Citizen Participation	Institutionalized into policymaking process	No discussion
Secondary Education	No discussion	Include nanotech training in teacher education and high school curriculum
Military Usage	Should be avoided	No discussion
Health Insurance	No discussion	Include explicit statements of provision

The fact that the citizens in our two cases were influenced in their deliberations by their prior experiences, and yet still arrived at some similar conclusions, suggests that a well-facilitated process in which participants have prior perspectives (although not clear instrumental interests) on the issues at stake might still produce a fair and reasonable outcome. If this is the case, the possible exclusion of some of the consensus conference panelists on the basis that they did not meet the rigorous and self-conscious application tenets of deliberative democratic theory concerning prior instrumental interests might be needless. Especially within an environment like the US in which civic and political engagement appears to be on the decline, it is worth considering whether abandoning the theoretical commitment to a "blank slate" panel might serve to improve and increase civic engagement. At one level, our experience suggests that some prior interests or commitments may serve as sufficient incentive to *want to* participate in a deliberative process (a clear hurdle demonstrated by our difficulty in recruitment). At a second level, the acknowledgement of prior interests may diversify the deliberative group—avoiding the unintentional bias of recruiting a panel supposedly without deeply held (instrumental) interests. Madison's 2008 NCTF demonstrated, for example, that the combination of the stipend and the rather generic framing of the issue led to the relative absence of applicants who highlighted prior civic engagement, of whatever variety, as parts of their identities. The 2008 Madison panel's relatively technophilic orientation represented no more of a blank slate, however, than an intentionally mixed group—and may, in fact, have hid the bias behind the myth of deliberation by parties without prior deep commitments on the issues at stake. If selection of participants reflects the widest possible range of orientations and interests (instead of demographic variables) and facilitation is careful and sensitive, the result may be thoughtful and fair recommendations. In short, interest and investment may prompt engagement without sacrificing fairness and reason.

An advocate of the standard premises of consensus conferences might respond to our critique and our call for jettisoning the search for "blank slate" participants with several observations. First, in critiquing a "blank slate" approach we have caricatured the deliberative model. Advocates of consensus conferences and other deliberative forums focus primarily on including participants without *instrumental* interests, not without any viewpoints or perspectives at all. Second, we are not rigorous in our use of the term "interest" and often conflate the idea that a person would find something "interesting" and that another person would have an instrumental interest. Finally, despite our critique of dis/interestedness in the consensus conference model, we ourselves excluded people with clear instrumental interests from our consensus conferences.

It is true that in describing the deliberative approach underlying consensus conferences as a "blank slate" model, we brush over the difference, for example, between an (instrumental)

interest in the rapid development of nanotechnology held by a nanotech entrepreneur and an interest in learning more about nanoscale science expressed by, for example, a farmer or a lawyer who reads books about popular science as a hobby. However, this blurring was undertaken self-consciously as part of a broader argument: we all have prior perspectives and interests (instrumental and otherwise) and these do not make reasonable deliberation untenable. To reiterate: our two cases suggest that under conditions of good quality facilitation, orientations and interests may influence the resulting consensus, but need not preclude "reasonable" and fairly reasoned results. Theorists and organizers of deliberative forums who stress the importance of excluding participants with prior instrumental interests assume that instrumental interests are different in kind, not just degree, from other varieties of interest (e.g. political orientation, religious beliefs, desire to learn). Those adhering to this line of argument might suggest that people with deeply held instrumental interests would be constitutionally incapable of deliberation and could only really bargain (even if in good faith). We would respond that the line between an instrumental interest and other types of prior interests, commitments, or orientations is not so sharp. As we have shown, our 2005 and 2008 consensus conferences attracted systematically different groups of participants, and such differences had some impacts on the substance of deliberation but did not predetermine the contents of final reports.

Even where it might be possible to set participation criteria that sharply draw a line between types of "acceptable" interests, there may be two reasons not to do so. First, we are not convinced that participants holding prior instrumental interests would not be capable of fair and open deliberation, given quality facilitation. Second, in a country like the US, where civic participation is relatively low, and in contexts where the topic of a given consensus conference does not generate a high level of "buzz," recruitment of a diverse group of participants may be challenging. Since citizens with prior instrumental interests may be more likely to participate, consensus conference organizers should consider including such citizens in the mix of all possible participants. In our consensus conferences, we excluded people who met our rather crude definitions of prior instrumental interest because we were following in the established consensus conference tradition. Were we to organize another consensus conference we would not do so, and we would carefully evaluate empirically the costs and benefits of this alternative strategy.

Finally, it is worth noting some of the more long-term outcomes from the two consensus conferences, which reflect the different motivations the two groups had. The desire to learn about new developments in science and technology motivated the involvement of the 2008 Madison group and appears likely to prompt sustained attention by participants to the issues raised in the NCTF. In 2008, Madison participants indicated an interest in continuing to be involved in science and technology issues during their post-forum interviews, but many were unclear as to how they might accomplish that in traditional civic engagement terms. Rather, they indicated a desire to continue learning about the technology. One 2008 Madison participant said, "I mean when you find the subject matter interesting, you just like to read about it and talk about it. Oh, and see what other people have to think. I don't really know what the options are for a nonscientist." Another panelist explicitly expressed a desire for more information rather than opinions on nanotechnology in her future engagement: "Well I guess I'm not as much into [activism]—not necessarily that it's an activist thing—or that sort of group," which she said might promote an agenda rather than information. Thus, whether interest in learning can motivate ongoing civic engagement remains an open question.

By contrast, the long-term involvement of the 2005 group actually did continue with a form of engagement that drove their initial participation. Several members of this consensus conference went on to form a biweekly group that continued to meet, discuss and speak out on issues of nanotechnology. Their interest in questions of democratic mechanisms may have

motivated their ongoing engagement. Of course, without ongoing assistance of one of the 2005 organizers, these panelists may not have remained engaged.

6. Conclusion

There are clear limitations to our data. First, there is a great deal for which we cannot control. Thus, claims about causal connections are, at best, tentative. In addition, in this context, surely some of the difference between our two cases is explained by chance. Second, how much we can generalize from our cases to civic engagement more broadly is an open question. Our cases are "tests of concept," and neither was formally linked to an institutionalized policymaking or governance process. Finally, the US has a particular civic culture and history. Consequently, barriers to engagement and means to overcome them found in the US may not transfer perfectly to other countries.

Despite these and other limitations of our data, our experience with and analysis of the two citizen forums lead us to suggest that in the face of large barriers to civic engagement (especially time) in the US, those interested in broadening and deepening our democracy should consider the role of incentives to engage. Payment, while an external rather than an internal source of motivation, is one that seems to work. Additionally, interests, whether structural (in democracy), more individual (acquisition of knowledge), or even instrumental, are other motivations, and our experience indicates that these should not be dismissed out of hand as a threat to deliberative process. In fact, with careful facilitation, those with prior commitments may deliberate in exciting ways that produce valuable and useful outcomes. Involvement in a consensus conference might even encourage a seedling of motivation to blossom into long-term engagement.

While data from two consensus conferences cannot provide sufficient basis to move decisively forward in a particular direction, our analysis opens two critical areas of conversation for those wishing to foster meaningful civic engagement. First, those concerned with promoting civic engagement should think carefully about the range of incentives available for inducing participation under conditions of resource and time scarcity. Second, we hope to provoke further discussion about the wisdom of imagining or attempting to create a "blank slate" citizen panel. Such recruitment is ultimately unattainable because it is not possible to fully screen for relevant instrumental interests, independence from involvement in the issue at stake (how much is too much?) and broad commitment to the public good. In addition, by privileging such a goal, organizers of civic engagement initiatives risk the exclusion of some of the most interesting (and interested) and dynamic potential participants. Both conclusions present challenges to organizers and facilitators of participatory democratic practice, but we hope that our analysis leads to even more creativity and experimentation. In moving forward, just bowling—alone or together—will not get us very far.

Notes

1   As one reviewer of this paper noted, cultural differences may raise very different questions and challenges for motivating and integrating citizens into engagement with technological governance.

2   As one reviewer of this paper noted, unemployment and various forms of social marginalization may be even greater barriers to civic engagement for persons of lower socioeconomic class.

3   Our paper focuses on the US, and there is reason to believe that the US case is distinctive. To begin with, by measures such as voter participation, engagement is considerably lower in the US than elsewhere (Gallego, 2007). As far as consensus conferences go, while we had limited recruitment success finding willing participants, in Canada and Australia, despite limited public controversy, calls for participation in consensus conferences in the late 1990s netted 326 applications in Canada and 200 in Australia (see Einsiedel et al., 2001).

4   Of course, consensus conference reports could be selectively used by policymakers, contrary to the intent of the given citizen body, but this is true with all policy process inputs.

5   Madison participants were also required to complete pre- and post-interviews in person with one of the organizers. This was not a national requirement, but allowed our research team to collect additional qualitative data.

6   For example, in the spirit of collegiality, the team at UC Berkeley distributed a draft plan for facilitating the first weekend meeting. Other sites used these ideas as a launching point for their own plans, but NC State organizers communicated no expectations of consistency of facilitation across the six sites.

7   It is worth noting that national newspaper coverage on nanotechnology, which dominates other media of Internet and television in coverage of nanotechnology, increased sharply between 1998 to 2004, when its growth flattened. Recently, there has been a slight decrease in coverage. See Dudo, A., Dunwoody, S. and Scheufele, D. (2009, August) "The emergence of nano news: Tracking thematic trends and changes in media coverage of nanotechnology." Paper presented at the annual Association for Education in Journalism and Mass Communication conference, Boston, MA.

8   The responses were recoded to 1 through 11 for the purposes of statistical analysis.

9   The consent form for participation read, "You will receive five-hundred dollars ($500) for participating in this study. Recall that we estimate full participation at approximately 45 hours over the course of several weeks (which would translate into an estimated rate of compensation of $12/hour). If you do withdraw prior to the end of the study, you will receive a percentage of $500 comparable to the percentage of time you contribute to the study."

10   One reader of an earlier draft of this paper suggested that the applicant population for the NCTF might have been affected by the fact that 2008 was an election year. It might be that the applicants we would have attracted in a non-election year—people interested in civic engagement and democratic process—were otherwise engaged, occupied with volunteer efforts in the electoral political arena in the early months of 2008, during which presidential primaries were held across the United States.

11   Recruitment for other deliberative forums has shown problems in response rate without offering incentives. For instance, the 1995 National Issues Convention study, the first national deliberative poll in the United States, attempted to recruit individuals through a national randomly sampled poll, but failed to receive a response rate similar to the average response rate of the General Social Survey. In the middle of fielding the initial survey in the 1995 forum, the approach was changed to allow interviewers to use benefits, such as a $325 honorarium, a free trip to Austin, Texas, and the chance to appear on television, as enticements for survey response. Subsequently, they achieved a more acceptable—if biased—response rate (Merkle, 1996).

12   Of course, we should not exclude the possibility that the different positions articulated by the 2005 and 2008 citizen groups were affected by the fact that the background readings they did were different, as were the experts with whom they interacted.

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