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Legal and Policy Challenges of Volunteered Geographic Information in the United States

The Commons Lab within the Science and Technology Innovation Program of the Wilson Center advances research and non-partisan policy analysis on emerging technologies and methods—such as social media, crowdsourcing, and volunteered geographic information—that empower individuals (“citizen sensors”) to collectively generate actionable scientific data, augment and support disaster response and recovery, and provide input to government decision-making, among many other activities. Over the past year, we have sponsored a series of discussion roundtables and directed research studies focusing on the legal and policy implications of these new tools and methods. Two of our studies are highlighted below. The first explores the potential tort liabilities for individuals and groups who provide or curate user-generated content and volunteered geographic information to support disaster response. The second explores a case study presented by the National Broadband Map; it highlights the regulatory framework under which all federal agencies must operate when engaging citizens through social media and crowd-mapping approaches.

- **Responding to Liability: Evaluating and Reducing Tort Liability for Digital Volunteers in the United States**, by Edward S. Robson, Esq., Robson & Robson LLC:

Major emergencies and crises can overwhelm local resources. In the last several years, self-organized “digital volunteers” have begun leveraging the power of social media and “crowd mapping” for collaborative crisis response. Rather than mobilizing a physical response, these digital volunteer groups have responded virtually by creating software applications, monitoring social networks, aggregating data and creating “crowdsourced” maps to assist both survivors and the formal response community. These virtual responses, if conducted from or directed to the United States, can subject digital volunteers to tort liability in the United States. Digital volunteers are at risk if they fail to use reasonable care in making their responses. This could include disseminating false information, sloppy software development, failing to act in a matter commensurate with similarly situated professionals or failing to properly vet and supervise volunteers. Digital volunteers may also be subject to liability if they fail to act when they have a duty to do so. Such a “duty to recuse” can arise if a digital volunteer creates a hazardous condition, begins to render assistance or forms a special relationship with survivors. In certain states, there are statutes that may mandate a response.

There are statutory protections available for certain digital volunteers however. Individual states provide varying degrees of immunity for digital volunteers who have utilized appropriate organizational structures. Since many digital volunteers make interstate responses and choice of law doctrine is applied unpredictably, the utility of state immunity laws may be limited. A federal statute, the Volunteer Protection Act of 1997, offers more predictable protection to a broader range of digital volunteers. Like its state counterparts, the “VPA” requires that digital volunteers adopt particular organizational structures to come within its protections and imposes limits on volunteer compensation that can be inadvertently exceeded. Contrary to the belief of many digital volunteers, so-called “good Samaritan laws” offer little, if any, protection for digital volunteers. Good Samaritan laws typically require that the volunteer rescuer be responding, in person, to a medical emergency that he or she came upon by happenstance. The digital volunteer model does not satisfy these requirements.

In addition to statutes that limit or eliminate liability, there are several other strategies digital volunteers can use to mitigate their risk. Groups should engage in a high-level risk assessment to identify where they are most at risk for liability and install appropriate protections. The development and enforcement of operational policies can help to mandate reasonable behavior and create an industry practice across groups. Digital volunteers should also organize non-profit corporations to avail themselves of statutory protections and to reduce vicarious liability among individual volunteers. Insurance may be available to digital volunteers for certain types of liability. Groups can also utilize disclaimers and contracts of adhesion to discourage reliance or limit liability. Finally, groups should seek professional legal counsel.

The report concludes that evaluating the precise contours of potential liability for digital volunteers can be difficult because of the novelty of issues and lack of court guidance. Deliberate planning and organization can mitigate many of the potential liabilities, allowing digital volunteers to proceed with confidence.

- **The National Broadband Map: A Case Study for Crowdsourcing Data for National Policy**, by Zachary Bastian, J.D., Research Assistant, Commons Lab, The Wilson Center, and Michael Byrne, Geographic Information Officer, Federal Communication Commission

In the Broadband Data Improvement Act, the National Telecommunications and Information Administration (NTIA) was directed to produce an interactive and searchable map detailing broadband availability nationwide. This mandate was an outgrowth of the American Reinvestment and Recovery Act and the National Broadband Plan. The former sought to reinvigorate an economy that had faced numerous challenges, and the latter identified broadband as a vital ingredient in lasting infrastructural improvement. Internet connectivity has become a vital part of our society. To ensure that no one is left behind, we must first identify where the gaps are in Internet availability, and identify those communities.

The National Broadband Map accomplished this difficult goal, and did so in an innovative way. Agencies face numerous regulatory burdens, and those that spearheaded the project, the NTIA and Federal Communications Commission (FCC), are no exception. However, the National Broadband Map was up and running in a relatively short period of time, and has had a tangible impact on policy, thanks to the dynamic, flexible analysis provided by GIS. This is due to a series of deliberate decisions by the team that built the National Broadband Map.

The project utilized a diverse set of crowdsourced inputs: It took data from numerous sources and encouraged citizen feedback in multiple ways, including the provision of volunteered geographic information. It was built transparently and using open source software: The building blocks are freely available software programs, not proprietary products chained off by licensing fees. It broke away from the traditional way government software is developed, taking cues from how the private sector operates. This method prioritized regular communication with programmers, allowing the agency to have a better understanding of the process as it happens. This novel approach also tapped into the enormous power of Geographic Information Systems, shifting away from static, tabled representation of data and towards dynamic visualizations of community needs.

In order to undertake these new approaches, NITA and the FCC had to address a series of laws and directives, including: the Administrative Procedure Act (APA), which sets a wide scope of information that agencies must provide to the public; the Freedom of Information Act (FOIA), which mandates government to allow public access to information, unlocking federal records for wide scrutiny; and the Paperwork Reduction Act (PRA), which mandates limits on the information that the federal government can collect and creates disincentives to new collections. Conceptually, the PRA asks the agency to build a cost-benefit analysis into the process: why is the information needed and what burden will be on the public to provide the information?

In a memo dated April 7, 2010, the U.S. Office of Management and Budget (OMB) enumerated a series of exemptions where data that an agency collects will nonetheless not be considered “information,” and recently identified parallel exemptions within new technologies and social media. In short, the memo provides strong encouragement to agencies that have been seeking opportunities to use new technology and social media to engage the public. But although a wide variety of web-based activities do not require PRA procedures, the OMB memo details what does constitute “information” and therefore creates a regulatory burden on the agency, requiring them to submit paperwork justifying the burden on the public. A general prompt that will elicit an unstructured response is fine, but a poll or customer satisfaction survey, due to the higher level of specificity, is considered information.

By following these guidelines closely, the NITA and FCC gained the benefit of the data the public provided without the administrative burden that would add both time and cost. Other agencies interested in expanding their options in public engagement without being required to jump through the PRA’s hoops should carefully consult the OMB memo while planning their interactions.

In summary, the NTIA and FCC were saddled with a large goal and given a small window of time to achieve it. They succeeded because of the creative approaches described in this report. This groundbreaking project has already influenced congressional budget appropriations through the Connect America Fund, now offering grants to communities lacking robust high-speed broadband service. The use of crowdsourcing and GIS could have numerous applications across national policy. Other agencies with big goals and limited resources can examine this case study and hopefully see lessons worth applying.