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Committee on Oversight and Government Reform

Hearing on
"The American Recovery and Reinvestment Act of 2009:
The Role of State and Local Governments"
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My name is David Robinson. I serve Princeton University as the Associate Director of a newly created research center, called the Center for Information Technology Policy. We study digital technologies in public life, bringing together technological expertise, social science, and public policy scholarship to work on a range of issues, from electronic voting, to copyright and digital media, to new ways the Internet can make government more effective and more transparent. In each area, we hope to help policymakers meet the information revolution with well-informed, confident and successful public policies. The testimony I offer today has benefited from the insights of my colleagues, but I speak only for myself, not for Princeton University or any other group.

The Recovery Act is both an urgent response to a crisis, and the most significant public works initiative in a generation. One facet of its historic nature holds particular interest for me: It is the first public program of its scale to be launched since the birth of the Internet. Businesses, schools, nonprofits and individuals today use computers and networks to connect, understand, and create in ways that were once unimaginable—and they often do so at remarkably low cost. The Recovery Act, with its call for rapid government growth, presents a rare opportunity for government to catch up and "cash in" on the benefits of the information revolution, taking advantage of the efficiency, flexibility and power of digital technologies.

Information technology can make Recovery Act activities more transparent than any government project has ever been. Government transparency means making all public information available in a way that is useful for citizens. Transparency delivers benefits in at least three different ways: enabling public scrutiny, empowering people to make new insights, and connecting people to opportunities that might otherwise be obscure. Because the stimulus effort starts fresh with Recovery.gov, it can unlock each of these possibilities as never before. The driving force behind all these benefits is simple: reuse of government data. Information about the stimulus must be published in a form that enables and encourages citizens to reuse it.

What can the results look like in practice? First, public scrutiny can help government institutions become more effective. Where there is fraud or abuse, public

attention gets problems solved. Where government is working well, that same attention builds trust and confidence in public actions. For example, a site called WashingtonWatch uses public information about Congressional budget proposals to calculate their net present value or cost so they can be accurately compared and debated, leading to more efficient spending choices. As another example, Jerry Brito, who testified before this committee last month, has created a site called StimulusWatch that allows hundreds of people working together to discuss, evaluate and rank the spending proposals published by the U.S. Conference of Mayors. But WashingtonWatch, StimulusWatch, and similar sites can only be as good as the government information that is provided to them.

A second payoff of transparency is that it can offer insights for individual citizens, letting people put the pieces together in new and unexpected ways, to understand their government and their world better. For example, Vivek Kundra (who is now the federal administrator for e-Government) ran a contest while he was serving as Washington, DC's CTO encouraging people to take advantage of the unprecedented amount of data that the city had published online. Inspired citizens responded by building a site called iLive.at, which provides a local dashboard and map integrating all kinds of information about local demographics, transit services, businesses, and crime. The same data publishing approach that made iLive.at possible could be applied to the spending and programs of the Recovery Act. Making data available for innovators would let all kinds of tools emerge at no cost to government itself. An example similar to iLive.at might highlight the benefits stimulus funds bring to specific communities, and by extension the good work of state and local officials across America.

Thirdly, transparency can allow individuals, businesses and other organizations to spot the economic opportunities available to them—helping not only the people involved, but the economy as a whole. The Recovery Act creates so many possible grants, contracts, and loans that it is difficult to connect each opportunity with the person or group who can really make the most of it. Government web sites can do their best to provide a single unified view of the information, but we will all be better off if there is a competitive ecosystem, and a range of options, for presenting information about stimulus opportunities. If conditions are right, this ecosystem can thrive: there is already, for example, a private firm building a web site at Recovery.org that combines scattered lists to provide information about the stimulus projects available to government contractors. Only if government makes smart choices about how to publish its data can resources like these become truly comprehensive.

In each of these areas, people are finding fresh ways to understand what government is doing. Innovation often begins with people outside government—citizens, activists, companies, or scholars—who are reusing the public data in new ways. Reuse is the key: Whatever public data is reported by states or agencies, we need to make it easy for innovators to download a complete copy of the data, in a "machine readable" format that computers can understand, so that innovators can develop their own new tools to make sense of it.

An increasing number of experts and groups have highlighted the importance of data reuse. One such body is the Association for Computing Machinery—a scientific society that combines more than 92,000 computing educators, researchers and

professionals. Its U.S. Public Policy Committee (USACM), on which I serve along with more than 75 computing professionals from around the country, recently issued consensus "Recommendations on Open Government." I have attached them to my testimony. I hope recommendations like these succeed in nudging Recovery.gov in the right direction.

How, exactly, will the information about stimulus spending be put online? The most recent and detailed information we have appears in a memo from the Office of Management and Budget dated April 3, 2009 (OMB Memo M-09-15, *Updated Implementing Guidance for the American Recovery and Reinvestment Act of 2009*). There are some encouraging elements here, but also some causes for concern, particularly regarding money that is destined for the states. Of nearly one trillion dollars in the Recovery Act, several hundred billion will be given to, and expended by, state governments. For these state-based funds, there is a potentially serious gap in the reporting requirements. As the recent guidance explains:

> In limited circumstances, recovery funds will go from a Federal agency to a State, and then to a local government or other local organization. In this case, the current reporting model will not track funds to subsequent recipients beyond these local governments or other organizations. OMB plans to expand the reporting model in the future to also obtain this information, once the system capabilities and processes have been established. (*id.*, p. 21)

In other words, at least initially, Recovery.gov will be able to tell people that monies were sent to a certain state, and then sent to a certain place within that state—but the site will not be able to tell people who the ultimate recipient of the funds was, how that recipient was chosen, or what that recipient did with the money. Being able to say where the funds were initially sent is important, but incomplete: real transparency means knowing where the funds end up.

This means that along with money, responsibility is for the moment being passed along to the states: in the short term, state law and state officials will determine what information about the ultimate uses of these funds is available, and how and where it is available. The longer term picture, though, is less clear. The recent guidance reserves the right to require deep reports of state stimulus spending directly back to OMB:

> In addition, the Director of the Office of Management and Budget has the authority under the Federal Funding Accountability and Transparency Act of 2006 (the Transparency Act) to require Federal agencies to collect information from all Federal recipients on all tiers of sub-awards. The Director also has the authority under the Transparency Act to expand reporting requirements to include additional relevant information. (*id.*, p. 25)

The current uncertainty about OMB's intentions leaves states with some tough choices. Just as the federal government is doing, state governments may wish to create new infrastructures to expose the details of their Recovery Act spending to public view. But any new system that a state deploys today could turn out to be a risky investment: it

could become redundant or even obsolete if OMB later decides to centralize and standardize the nationwide reporting of the same information.

Recovery Act spending that flows through the states should be just as transparent as direct federal spending is. In an ideal world, the federal government would either collect detailed information about state stimulus spending itself, or else set a clear and public minimum standard of disclosure for each state to follow. Which approach is better? There are good arguments on both sides. Federal monitoring of the details of state spending could allow apples-to-apples comparison and analyses of spending across the nation. And state officials might well find it worthwhile to publish the reports they send to OMB, within their state-level web sites. On the other hand, if individual states establish their own reporting formats and standards to complement the OMB reporting infrastructure, we may end up with systems that are better tailored to each state's existing budgetary and information technology needs.

How far does OMB plan to expand its reporting requirements for states? Will it collect all of the detail that we need for real transparency? Or, will it leave room (and cede responsibility) for states to collect and manage the most detailed information? Either way, OMB should lose no time in reaching a decision and clearly and publicly communicating its intentions.

By holding hearings like this one, the Committee is performing a vital public service. Given the rapid pace at which the stimulus must proceed in order to be effective, there is an enormous range of questions to consider. I thank the committee in particular for recognizing the central role that online data can play if its usefulness is maximized.

ACM US Public Policy Committee

USACM Policy Recommendations on Open Government

Background

Computing and networking technology has made it easier than ever before for organizations and individuals to share, analyze and understand large bodies of information. Government agencies and legislators have long recognized the value of the Internet, having helped to create it, and share a strong commitment to providing for the information needs of citizens and others.

Government agencies increasingly post information -- often for the benefit of individual citizens -- on the Internet and through the World Wide Web (WWW). The U.S. Public Policy Committee of the ACM (USACM) applauds ongoing efforts to make these data as accessible as possible to all Americans. However, law, custom and technology have all contributed to diverse and often inconsistent forms of publication for the data provided.

Many Internet users are learning to control their online experience, including combining and analyzing information in innovative ways that go beyond what the data's original publishers imagined. Individual citizens, companies and organizations have begun to use computers to analyze government data, often creating and sharing tools that allow others to perform their own analyses. This process can be enhanced by government policies that promote data reusability, which often can be achieved through modest technical measures. But today, various parts of governments at all levels have differing and sometimes detrimental policies toward promoting a vibrant landscape of third-party web sites and tools that can enhance the usefulness of government data.

USACM makes the following policy recommendations for data that is already considered public information.

Policy Recommendations

- Data published by the government should be in formats and approaches that promote analysis and reuse of that data.

- Data republished by the government that has been received or stored in a machine-readable format (such as online regulatory filings) should preserve the machine-readability of that data.

- Information should be posted so as to also be accessible to citizens with limitations and disabilities.

- Citizens should be able to download complete datasets of regulatory, legislative or other information, or appropriately chosen subsets of that information, when it is published by government.

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- Citizens should be able to directly access government-published datasets using standard methods such as queries via an API (Application Programming Interface).

- Government bodies publishing data online should always seek to publish using data formats that do not include executable content.

- Published content should be digitally signed or include attestation of publication/creation date, authenticity, and integrity.

ABOUT ACM

ACM, the Association for Computing Machinery www.acm.org, is the world's largest educational and scientific computing society, uniting computing educators, researchers and professionals to inspire dialogue, share resources and address the field's challenges. ACM strengthens the computing profession's collective voice through strong leadership, promotion of the highest standards, and recognition of technical excellence. ACM supports the professional growth of its members by providing opportunities for life-long learning, career development, and professional networking.

ABOUT USACM

The ACM U.S. Public Policy Committee (USACM) http://www.acm.org/usacm serves as the focal point for ACM's interaction with U.S. government organizations, the computing community, and the U.S. public in all matters of U.S. public policy related to information technology. Supported by ACM's Washington, D.C., Office of Public Policy, USACM responds to requests for information and technical expertise from U.S. government agencies and departments, seeks to influence relevant U.S. government policies on behalf of the computing community and the public, and provides information to ACM on relevant U.S. government activities. USACM also identifies potentially significant technical and public policy issues and brings them to the attention of ACM and the community.

For more information about USACM, please contact the ACM Office of Public Policy at (202) 659-9711 or see <http://www.acm.org/usacm/>.