

>> Susan DeSanti: And I first want to address yet another housekeeping detail. The fans we don't have any control over, because they regulate the air throughout the whole building, so they can't change it specifically for us. The fans are louder over here and not so loud over there. So people who are bothered by it might want to move over there. It's colder over here. It's less cold over there. So, well, we looked into this. We really did try to do something about it, but this is life. So feel free to move. It's quite all right. We're gonna start today. This afternoon, we're very fortunate to have a senior representative from the FCC to briefly give us a sense of their ongoing and upcoming activities relevant to the topics that we've been dealing with today and yesterday. And as Chairman Leibowitz said, the FTC will be coordinating closely with the FCC. Here to speak on their behalf is Steve Waldman. Steve has just started as senior adviser to the chairman of the Federal Communications Commission, heading up the agency's efforts on the future of media. Until this week, he was president and editor in chief of beliefnet.com, the leading spirituality site, which he cofounded. Before that, he was a reporter for Newsweek and U.S. News & World Report. And we're delighted to have him join us today. Steve?

>> Steve Waldman: Thank you very much, Susan, and Chairman Leibowitz. Julius Genachowski, the chairman of the Federal Communications Commission, recently asked me to head up a major effort at the FCC to assess the full range of issues related to the future of media. This is my third day on the job, and the first two have been mostly filling out paperwork, so I'm mostly here to listen. These have been two days of excellent hearings that I know are gonna be enormously valuable to our efforts. So I'll just make a few very brief points, especially about government's role. First, there are, in fact, good reasons for skepticism and caution when government, whether it's the FCC or the FTC or anyone else looks at the health of the news media. The news media is here in part to make life miserable for public officials, so it's understandable and appropriate that there would be some suspicion about why the government would be probing these questions in the first place. As a former journalist and entrepreneur, I have a natural bias towards assuming that the private or nonprofit sectors will solve most of the problems facing the media. However, we are gathered here today in recognition that the new era, while providing breathtaking new options and innovation, may leave some holes, and some of those holes may not merely be unfortunate or inconvenient market gaps, but rather real threats to the public interest. News is both of public and private good. A well-functioning news media is essential to democracy and the ability of citizens

to hold leaders accountable. And by the way, we should think not only in terms of public officials as leaders, but leaders of all institutions -- universities, labor unions, community groups, and businesses, as well. The ability of consumers to get the information that they need to lead their lives is part of what's at stake. The question really is not whether the government should become involved in the media. As others have pointed out in the previous panel, the government already is very involved in setting the rules of the road for the media and communications industry. FCC policies touch radio, TV, mobile, and the pipes of the Internet with varying degrees of success. What's clear is that inappropriate government policy can hinder innovation, and wise policy can enable innovation and benefits for the consumers and the public interest. The FCC already has several efforts under way related to these matters. By February, the FCC will produce a national broadband strategy. This is very high-priority for the agency. And it is related to this conversation. Universal broadband is important for the future of news media in that Internet-based innovations to provide better news and information cannot be available just to the affluent or to the well-wired. The FCC has also begun a process to preserve an open Internet. Regardless of the means for achieving this end, we should at least be clear on this much -- The principle of an open Internet directly connects to the future of the news media. We've heard story after story about the exciting journalistic experiments around the country, the revolution in citizen journalism, the recent wave of local journalist experiments. All of these could falter if we didn't have an open Internet. Thirdly, by law, the FCC is undergoing its quadrennial review of media-ownership rules. The experts at the FCC are deeply conscious of the fact that this is a review like no others, the first in an era where the Internet has changed almost all the rules and in which we see these challenges to journalism. Though the exact process is not yet clear, the FCC will also be looking at several other issues related to the future of the news media, including, but not limited to, what are the gaps likely to be filled by innovation without government doing a thing, and what, if any, are the gaps likely to be left unfilled? We've talked a lot about newspapers, but crucially, what is the state of local TV news? What role can tax policy play in improving the news-related business models? What role did debt play in leading to stress on media companies. Very important, how does spectrum policy relate to these questions? What role does mobile play? What are the public-interest obligations of broadcasters in this new era, and what is the best way for them to fulfill those obligations? And for that matter, in this new era, how should the FCC interpret its historic, bipartisan commitment to ensuring competition, diversity, and localism in the media? So thank you very much, again, for

gathering this great collection. This gathering combines with really outstanding work that's been done in the last year by numerous other groups, and we look forward to working with the FTC, the other groups, stakeholders and citizens, to ensure that the media continues to make the lives of public officials miserable and perform other important functions. Thank you. [ Applause ]

>> Susan DeSanti: Thank you, Steve. And now that you've been three days on the job, you can say yes, you want to make the lives of government officials miserable. But welcome to the life of a miserable government official. [ Laughter ] Now I will invite the first panel for the afternoon to come up. This panel will be moderated by Suzanne Michel, who is deputy director in the Office of Policy Planning, and Chris Grengs, who is our unofficial technology expert, who we have had here today.

>> Suzanne Michel: That's because Chris is younger than Susan and I. [ Laughter ]

>> Female Speaker: Exactly.

>> Suzanne Michel: We got enough seats?

>> Chris Grengs: I like to tell them I'm not as good as a 13-year-old, but I can keep up.

>> Suzanne Michel: All right. Thank you, and welcome back for the afternoon. The title of this panel is called "Reducing the Cost of Journalism." During this workshop, we've heard quite a bit about the economic challenges that are facing news organizations, many of which have been driven by the loss of advertising revenue due to the rise of the Internet. While cost reduction is a natural and typically necessary response to a drop in revenues, one way to reduce cost of journalism, of course, is just to do less and to cut news staffs. And we've certainly heard a lot about that problem faced by the industry. But the goal of this panel is to explore more positive and more constructive ways to reduce the cost of journalism. News organizations are partnering and collaborating in exciting new ways. Digital technologies and the Internet can empower professional and citizen journalists to more efficiently investigate stories in ways that were not previously possible. Our first speaker today is going to be Aneesh Chopra. Aneesh is chief technology officer and associate

director for the Office of Science and Technology in the Executive Office of the President. Part of the promise of the Internet is making government information increasingly accessible to all of us, and we're very grateful and lucky to have today the administration's point person on that. So, Aneesh, thank you for joining us, especially understanding that you have another commitment this afternoon and may be ducking out a little early. So thank you.

>> Aneesh Chopra: My very much pleasure. Thank you for having me. And let me begin by saying perhaps I come from the exuberant and enthusiastic wing of the government employee. I have a lot of enthusiasm and excitement around the work we're doing. This is a wonderfully titled seminar, as it dovetails well with the president's commitment to a more open and transparent government. In many ways, a great way of reducing the cost of journalism is to make frictionless the information necessary to uncover those areas where leaders and actually the community at large can be held accountable and made more informed about the challenges we face. I would like to describe the president's commitment to open government in the three areas that he had outlined for us on his very first full day in office. The president issued an open directive, a memorandum, if you will, calling on the chief technology officer, in coordination with the Office of Management and Budget, to think through how government can be more transparent, more participatory, and more collaborative. So I'll just take a couple of minutes and describe for you our vision in each of these areas and its relationship to journalism. First is on transparency. We launched earlier this year a web portal, data.gov, that is the platform through which we hope as much public information as you would like to consume would be made available in as accessible a manner as possible. We're envisioning from the more media-oriented topics, those that occupy the news, like the White House visitor logs, which are now made available in machine-readable format through data.gov and will be a staple of an ongoing publication through data.gov as outlined by the White House Counsel's office earlier this year. But even beyond some of those more higher profile data components, we are unprecedented levels of performance statistics and national data files to help us understand what is the rate of childhood obesity in my neighborhood, to what extent is the graduation rate in my community relative to others. All of these performance and outcomes goals we will have what I would call round one of additions to data.gov, but we've now created sort of an ecosystem where the general public or media professionals can literally request on data.gov data that they would like to get from the federal government, and we would evaluate how to make that

information accessible in a new and more streamlined format. We will in hopefully not too short order, not too long from now, be releasing a directive guiding agencies on how to operationalize this philosophy. And I can assure you that that directive will be very explicit about its call for releasing data. Second, we must make our government more participatory. This is one that strikes me as a bit odd, as I am now the recipient of this transition from the old to new models of media. And let me share a story. While we are tackling this healthcare-reform issue on Capitol Hill and it occupies a great deal of our media, we are in the midst of an implementation plan off what we believe to be one of the most fundamental investments this nation's made to transform the way care is actually delivered -- our multibillion-dollar investment in healthcare IT, a topic that is under way and will turn to regulation by the end of this year. Through this process, we have had public hearings on what these regulations should look like, from the policy objectives all the way down to the technology standards that will power how you and I as Americans can consume our medical information. Surprisingly, this process has not had as much attention in the media. We have been embarking upon this journey and in the second pillar of the president's opening directive on participatory democracy have been focusing on how we can make government more accessible. We threw open the doors of this deliberative process. We actually engaged in a three-week online forum where we invited every American to come online and engage and vote ideas up and down and tell us what standards should be the basis upon which these regulations should be based. It was the Huffington Post Innovation Fund, or whatever they call it, the Inspector Fund or whatever it is, that has sent news media to investigate the impact of these health IT standards, not once, but at two of our most recent public hearings, and in between mining the data on these open sites. I just found it curious that while this significant policy issue opened up in terms of access, lacked the traditional attention. Which leads to the final pillar of the president's directive, and that is on the [healthit.hhs.gov/blog/faca](http://healthit.hhs.gov/blog/faca), for those who are interested in the online forum. The last pillar is on collaboration. Increasingly, we are relying on the American people to help us in the execution of policy, in the implementation. How do we support public safety without understanding what the Twitter community or the online community writ large is commenting on to help us on form about where there may be threats to public safety? How do our operational systems incorporate some of this new media feedback in our execution of public policy? And again, keep your eye out as we roll out our open-government directive, again hopefully in the near future, and you will see in very explicit form how we intend to formalize our engagement with the American people. All of this

speaks to the question of the future of journalism. We're serving it up, a more cost-effective way of accessing the information that you need to hold elected officials accountable and the operating units of government accountable. Now the interesting question will be who will come and in what manner. Thank you.

>> Suzanne Michel: Thank you very much. Next we have Bill Allison, editorial director of the Sunlight Foundation, an organization that makes great use of government data.

>> Bill Allison: Thank you. I'd like to thank the Commission and Suzanne and Chris for inviting me. I'm a refugee from traditional media, in my case "The Philadelphia Inquirer," and I want to talk a little bit about what the Sunlight Foundation does and some of the things we are concerned about when it comes to government data and some of the things that we're finding. Sunlight Foundation is a nonpartisan, nonprofit organization here in Washington, D.C. We use technology to make government more accountable and transparent -- I'm sorry, more transparent and accountable to its citizens. We make grants to organizations like the Center for Responsive Politics, which does tremendous work cleaning up Federal Election Commission data, and other organizations. Through Sunlight Labs and the part of Sunlight that I head, the Sunlight Foundation Reporting Group, we also make government data. We digitize it. We free data sets in some cases that are available only on paper records and turn them into data. And in other cases, we bring together disparate data sets all in one place so you can compare lobbying with earmark data or different kinds of information and get some real context out of it. I want to start with an anecdote. I mean, one of the things that we also do is we do a tremendous amount of training of reporters, journalists, and try to teach them how to use federal data, whether it's from our grantees, like Center for Responsive Politics, or straight from the source. We just did a series of trainings on data from recovery.com with our partners, Associated Press Managing Editors and the Associated Press. And I think in some ways, this is sort of the success story of what you can do with data. We introduced reporters to the data, showed them where to get it, how to use it, how to download it, warn them about what's in it. And we had reporters who were trained on Tuesday afternoon or Thursday morning writing stories for Sunday's paper on where recovery money was going in their communities, talking about the jobs numbers, talking about all kinds of different issues that were raised by the data, but also really giving a picture of how recovery money is being spent. These

reporters, some of them will call me back and say that having access to the timely data that they can manipulate, download, study and guide them, made their reporting incredibly more efficient. I mean, they still had to make the phone calls. They still had to do all of the things that reporters have to do to write a newspaper story. But they had this guidance, and they could save a lot of time, and the data really helped them out. When one thinks of all the kinds of information that government tracks -- healthcare, education, household finances and wealth, foreclosures, unemployment, impact of foreign trade on domestic manufacturing -- these go on and on and on and on -- it's not hard to see that having ready access to this data would be tremendously helpful for reporters. And at Sunlight, we're big believers that quality government data freely available will lead to better journalism, and we believe that if a government record is public, whether it's data or a document or some kind of disclosure, it should be put online in a searchable and downloadable format as soon as possible. But we're a long way from that, and among the problems we encounter, which every news organization runs into when they're using this kind of stuff, is that data isn't always available, and when it is available, it's not always accurate. Sometimes it's inaccurate, impenetrable, or even unusable. Sunlight was one of many organizations that supported the creation of a site called [usaspending.gov](http://usaspending.gov), which I believe you're familiar with. And it provides really one-stop shopping of federal contracting and grant data -- who's getting money from the federal government. In fact, the design of [usaspending.gov](http://usaspending.gov) comes from a grantee of ours, OMB Watch, which created their own government-spending database a few months ahead of the creation of USA Spending. Sunlight is also one of the high-end users of the data on this site. Some of our researchers rely heavily on it or would like to. To give you an example of one of the problems with this data, there is a record in [usaspending.gov](http://usaspending.gov). It's on the site right now. You can look it up if you search for it, a company called Dynamic Research. They're in California. And in 2009, they received a grant according to [usaspending.gov](http://usaspending.gov) for \$333 million. And in fact the company actually received a \$1 million grant. We found that there are whole programs missing from this data. I mean, it's easy to pick on one record, but there are whole programs missing. There's a tremendous amount of information that's just not there. And if you're a reporter, can you really rely on this? Bad government data is just a huge problem. And again, the nonprofit sector and news organizations have spent millions cleaning it up, and it's really the responsibility of federal government to make this data available in a format that can be used. A second problem that we have is withholding data, having to go through FOIA requests that are different agencies in the

government that will tell you that the architecture of the database is proprietary, so you can't have the data that's in it. I can tell you any number of stories about having trouble getting data. But there should be a set policy for releasing data quickly. And for public records, we just start with this -- make them online, downloadable, and as close to real time as possible. Thank you.

>> Suzanne Michel: All right, thank you very much. We heard earlier from Professor James Hamilton this morning. He is director of the DeWitt Wallace Center for Media and Democracy at Duke University. We are very happy to have him on this panel again to talk about, I think, the future of journalism and how it might use technology.

>> James Hamilton: Thanks. This morning, I talked about the demand side, and right now, I'd like to talk briefly about the supply side. At Duke, what we're trying to help develop is a field called computational journalism. And people have different definitions of that. It could be the combination of algorithms and data and some knowledge from social science to lower the cost of discovering stories, to essentially lowering the cost of doing accountability or investigative reporting. If you imagine, say, a set of a hundred documents right now, the software exists to take those 100 documents, look at the entities there, look at the people, look at what are surprising statistical associations, mine those documents for chronology. Or imagine videos or transcripts, videos that don't have transcripts. The government right now will fund that software creation if I tell you that it's related to Homeland Security. And in fact, if you go back and look at software development, Georgia Tech was funded by DARPA, Homeland Security, DOD to develop a program which is great, called Jigsaw, which actually does that text mining. Carnegie Mellon was funded to develop the creation of transcripts from video in three languages -- English, Chinese and Arabic -- again relating to defense. And the reason why the government is willing to do that is 'cause it views defense as a public good. Now imagine that those hundred documents dealt with state and local officials. And in fact, if you think about the state of Wisconsin, over a thousand people have to file financial-disclosure forms in the state of Wisconsin, government officials, each year. But they literally file paper forms that are handwritten. And that makes it very difficult to analyze for reporters. Essentially, the government relies on the transaction costs of doing that, the high transaction costs of doing that, to discourage the actual use of that information. Or if you think about, again, the state of Wisconsin, the state legislature committee hearing are videotaped,

but there's no creation of a transcript. So what we're hoping is that academia as a nonprofit can play a role in the development of open-source software that will allow reporters to do what lawyers in large cases, what the government in Homeland Security are already able to do. We've been fortunate to hire Sarah Cohen, who's a Pulitzer Prize-winning reporter from "The Washington Post." She hopes to develop an open-source suite of reporting tools that would allow you to create a chronology, to take videos and create a transcript that she could then mine. And we also hope to be a catalyst in pooling research in other parts of academia. Digital humanities -- That's an area where right now in Switzerland people are analyzing over 600,000 forms from World War I. World War I was the first war fought by form. And they are looking at forms which are handwritten, trying to solve optical character recognition problems, which are very similar to the things that you would need to solve if you want to make the Wisconsin state legislators' financial-disclosure forms easily readable. So, what we hope to see is a development of open-source reporting tools that essentially would lower the cost of journalists to discovering stories. We realize that the data is gonna be imperfect in that there will be imperfections. So we see this as the start of story-making, that it will lower the cost to you of finding the part of the transcript or finding the stack of documents that will help you. So that's the supply-side story. And hopefully I've shifted out the demand curve for DocumentCloud, because I think that they are doing some of the things that we hope to happen.

>> Suzanne Michel: Yes. Thank you very much. You see the reason for my order here. Next we will hear from the cofounders of DocumentCloud, Aron Pilhofer and Eric Umansky, who will also provide a demonstration of what the future could be.

>> Aron Pilhofer: Okay.

>> Female Speaker: Yeah, thank you.

>> Aron Pilhofer: Connected.

>> Eric Umansky: No.

>> Aron Pilhofer: All right. While I'm rebooting this, my name's Aron Pilhofer. I am editor of interactive news at "The New York Times," which is one of those big organizations we've been talking about, legacy organizations. And I -- What's that?

>> Eric Umansky: No, go ahead.

>> Aron Pilhofer: And so I'm here with Eric Umansky, who is from ProPublica. And we're gonna talk about a project that we are -- Oh, no. That's not good.

>> Eric Umansky: You want to give a brief overview of DocumentCloud as you're doing this?

>> Aron Pilhofer: Yeah. Here. Why don't you do that?

>> Eric Umansky: Sure. So, we are here from DocumentCloud, as Aron was saying. It looks like we're running into some technical difficulties. But DocumentCloud is a new nonprofit that we have started that has no affiliation with "The New York Times," nor ProPublica. It started using funding from the Knight News foundation. And...

>> Aron Pilhofer: Plan B. Yeah. Looks like we're --

>> Chris Grengs: Where's the tech guy?

>> Aron Pilhofer: Hold on, hold on, hold on.

>> Male Speaker: Oh, wait.

>> Eric Umansky: Okay. I'm still talking. [ Laughter ]

>> Male Speaker: The Wi-Fi doesn't work.

>> Eric Umansky: Yeah, the Wi-Fi -- Yeah, we've been having trouble with the Wi-Fi. That's actually what our project is about is about getting Internet access at the... [ Laughter ]

>> Aron Pilhofer: The fans killed Wi-Fi?

>> Male Speaker: Yeah.

>> Aron Pilhofer: Oh, that's awesome.

>> Female Speaker: Really? [ Laughter ]

>> Aron Pilhofer: Okay. I'm gonna try to reboot the AirCard here, which was working mere moments ago.

>> Female Speaker: Are you working okay?

>> Eric Umansky: As Aron tries to do that -- Oh, it looks like we have another potential AirCard here.

>> Aron Pilhofer: Just get this...one more shot.

>> Eric Umansky: DocumentCloud is, as I was saying, a Knight News Challenge-funded organization that we got funding as of this summer, and it is a two-year project funded by the Knight News Foundation to basically take original source documents that journalists achieve via FOIA mainly or other methods and to index them, to make them more searchable, more findable, more shareable, and to do it in such a way that we're extracting information from these documents.

>> Aron Pilhofer: All right.

>> Eric Umansky: So, I'm about to show you what that actually means with this.

>> Aron Pilhofer: Phew! All right. So, the idea here -- thank God -- the idea here -- This project is a collaborative effort. I think you probably just covered that. But I think it also shows how larger news organizations can be somewhat nimble. I think you heard Eric Newton say today that many news organizations are gonna survive. It'll be the ones that are nimble. And I would just hasten to add that I don't think that nimbleness and size are necessarily mutually exclusive, particularly in my own newsroom. I'm a reporter by background in trade, but I'm also a nerd by avocation, and that's what I do. On a daily basis, I run a team of developers at the "Times" in the newsroom, building tools like this. Some of the software we build I'll show you right now, 'cause it's part of DocumentCloud, and it will be part of the open-source release. And you can tell I'm talking very quickly, 'cause I have very little time.

>> Suzanne Michel: To take a couple minutes, we want to hear about the project. Please.

>> Aron Pilhofer: Okay, well -- So, what DocumentCloud is, it's gonna be -- Think of it as a card catalog for -- Did you already say all this stuff?

>> Eric Umansky: I said, "index."

>> Aron Pilhofer: Okay, an index of documents. And we're gonna have organizations contributing primary-source documents to us. Once they do, we will process those documents and make them far more easy to find by pulling out entities, places, organizations, people. And I'll just sort of demo how that might work. So, you can see I'm logged into DocumentCloud right now. And I want to hasten to add that this, what you're seeing here today, I wouldn't even call this an alpha. This is really more of a functional prototype. It may ultimately not look anything like what you're seeing here. So, we're showing it because I think it's definitely easier to show than explain. So, say I'm a reporter or just a member of the public. I can log in. You can see I have various saved searches here. You can do just normal search. Like here I'll search "CIA." And it'll pull up documents from our database that have been committed here. And you can see a lot of the gobblegook. That's largely because a lot of these documents are OCR'd, which is a very imperfect process of extracting text. But some of the ones that aren't you see are quite good. And then along the left, you can see what we've done here is pull out all of these entities, these terms, countries, web pages,

places, cities, states. So you can start getting into more complex, sort of faceted search using DocumentCloud, drilling into your repository with these search terms that allow you to cluster documents together in a much more meaningful way, to start to treat documents more like structured data, like columns and rows, rather than what we have now, which is just sort of your blunt instrument Google search, where you're looking for a particular text string within a group of documents, which may or may not always be successful. So, just to give an idea of some of the faceted search, you could -- For example, here, you can click on an entity on the left, and you can see up here in the search bar, it'll add "province or state." So -- this is in the background here, We've processed this through a piece of software called OpenCalais, which does all the magic here that you're seeing, pulling out these entities. And we've stored those as facets of the document. And then so as you drill down, now you're only gonna see the documents that actually meet these two criteria. So it's just one, and I can click on that document, and then you'll get this lovely -- This is the software that we built at the "Times." We call it the Document Viewer. This is a version of it that we're going to actually end up open-sourcing this piece of software. But you can click through it. It has this Google Books-style infinite scroll. There's search within the document, and of course zoom, which is one of the features that is pretty important. Once you find a document, you'll have the ability to do things with it, like if you have a project ongoing that you want to add this document to, you can create a label, have a notion of a cluster of documents that you're sort of collecting that relate to a particular project. So here I'm gonna add that to my Gitmo project, even though it has nothing to do with it. But I can also download it in various formats, including a Document Viewer format. So if I find a document here that somebody else has submitted, and hey, I might want to put this on my own website, I can do that. And it'll download in a format that you'll see here -- I'm not even putting this on a web server. It'll just basically run, and this is it. This is actually what "The New York Times" version of the Document Viewer is gonna look like. We're a couple of weeks away from releasing this. And this will run regardless of platform. All it needs is -- It's just purely HTML and JavaScript and CSS. so you don't need any back-end software to run that. So, if I wanted to, say, upload -- I'm gonna upload a test document. I'm a reporter. I have a pile. I want to do something with it. Me, I'm gonna choose one from the desktop. Hit this one, "example." And then I will process it. And you can see on the left -- This runs a little bit slow, because it's working in a test environment, but you can see here it'll process the pages, which should go relatively quickly if I picked the right document. And then once it's done, it'll be

available for search. So, let's say I wanted to start finding connections between documents. I can do that through DocumentCloud here by -- Let's say I'll start looking for terms related to Guantanamo. So, here, I'm gonna start with "injury." And I come up with a lot of documents, right? Three pages worth. And I want to start drilling down into those. I can add entities to this, faceted search to this. So let's say I want to look for a particular place. In this case, they call it a "natural feature." We need to change the language on that, but that's what Calais considers it to be. And so we can drill down into it even further and get to a document that we want that in this case relates to non-injurious interrogation. So, you can get the idea that what this project is is both a repository, a way of finding, searching, sharing documents, but most importantly, it is -- At least for, you know, my own particular needs, it's a tool to analyze documents and to present them to the public. We're a few months away from a real release of this in say an alpha form. And the question often comes up when we're asked about DocumentCloud, "Is something like this gonna work? Can you get a bunch of news organizations to collaborate on something like a project like this? Can you get them to put their source documents in?" And I'll tell you, the answer so far is a resounding yes. We've got 38 news organizations already signed up for DocumentCloud. That includes "The Los Angeles Times," "Chicago Tribune." Several top-10 news organizations, NPR, many of the nonprofits, some of whom you've heard from today, signed up to be part of that, two in the U.K., one in Canada. And we haven't even started asking yet. Those are just folks who have actually just approached us. So, we're looking for more all the time. If anybody here is interested, [info@documentcloud.org](mailto:info@documentcloud.org). Or you can go to our website, which is just [documentcloud.org](http://documentcloud.org). And I would be remiss -- You did mention Knight Foundation, I hope.

>> Eric Umansky: Many times.

>> Aron Pilhofer: Many times. Okay. [ Laughter ] And, so, that was just a very quick, kind of clumsy overview. So, I think we'll just leave it there.

>> Eric Umansky: I would just add one quick thing, and that is, it's not so obvious from this prototype that we have here, but organizations that contribute documents, whether it's "The New York Times," "The L.A. Times," any of the places that are gonna be contributing documents, can keep those documents on their own site. We're not talking about a central repository here, because

we want to make it in people's interests to contribute documents. So we'll operate much more like a search engine, where you'll be able to do a search, and it'll come up with these documents. And then when you click on that, you'll go to the contributing organization's website to view the document. So they get all the page views, any ads that run on it, they get it, and we're not looking to get any of that stuff.

>> Aron Pilhofer: And just lastly, there will be visualization tools. Obviously they'll be analytical tools, some of which Professor Hamilton had mentioned. This is just sort of a rough --

>> Eric Umansky: Connections.

>> Aron Pilhofer: Yeah. This is just sort of drawing connections among documents based on keywords here. You can sort of see how that works. That's just a placeholder. We're gonna build in some fairly sophisticated tools to help reporters and members of the public plow through these documents and find those key connections that Professor Hamilton was talking about. Okay.

>> Suzanne Michel: All right. Thank you very much. Next we'll hear from Bill Adair, who is editor of PolitiFact and the Washington bureau chief for the "St. Petersburg Times" and a Pulitzer Prize winner for that work. Hopefully, we can make the technology transition so that he can also show you about his work. Do you need any assistance?

>> Bill Adair: I'm all set. Thank you.

>> Suzanne Michel: Good. All right.

>> Bill Adair: I just wanted to give you a quick minute or two on what PolitiFact is all about. PolitiFact is a rollout of the "St. Petersburg Times," newspaper in Florida. We started it about two years ago with the idea of fact-checking the presidential candidates. We did that through the Truth-O-Meter, and you can see [here](#), these are our latest Truth-O-Meter items. And the whole idea is traditional fact-checking journalism harnessing the power of the web. And I'll show you how, in terms of reducing cost, we've been able to do this thanks to a lot of things on the Web. So, here

you see our most recent Truth-O-Meter features, Truth-O-Meter items. The one other thing we have over on the right is our Obameter, which keeps track of the president's promises that he made during the campaign. And what we did was go through his speeches, his position papers, debates, and catalog every campaign promise that Barack Obama made. There were 505 when we first did our tally. We found about another 15 since then. And what we do, using old-fashioned journalism, is see how he's done. And so we rate them on our Obameter as "promise kept," "promise broken," "compromise," "stalled," "in the works," or "not yet rated." We also sort them by category. Here I'll show you -- this is gonna be all the promises broken, which is always our most popular page. I think a lot of Republicans are diving for that page. [ Laughter ] And then if you click through, you can see that we have done research into -- let me see here -- done research into the promise and then listed our sources. And this gets to what Aneesh talked about, about openness. And one, we want to be open with you about how we made our Obameter ruling, and we want you to be able to go in and see if you agree with our rating. So, in this case, he said that he would end taxes for seniors making less than \$50,000 a year. That promise has gone nowhere. And so we've rated that a promise broken. And you can see here the sources that we used to make that determination. Our most popular feature, though, is the Truth-O-Meter. And here what we do is we listen to the political discourse on any given day, and we then do research and rate the accuracy of what elected officials and now pundits are saying. So you'll see here we've got Keith Olbermann claiming that Ronald Reagan wouldn't pass the Republican litmus test. We gave that a half true. Paul Krugman. We do, you know, anyone from Rush Limbaugh to Glenn Beck. Glenn Beck is our most popular pundit page. I'll show you just some of the items we've rated on him. And this is all just ordinary journalism produced in a Web-y way. Here's a Glenn Beck item. He actually said this on the radio, and he was serious. "In the healthcare bill, we're now offering insurance for dogs." And he was basing that on a provision, a public-health provision in the bill. We checked it out. We found it was ridiculously false, and we gave that our lowest rating, "pants on fire." [ Laughter ] You can see here -- You can see Glenn Beck's -- You can see Glenn Beck's track record. He's actually -- Of the things we've checked, and we only check things that we're curious about, he's not received any "true" or "mostly true" ratings. [ Laughter ] He's received three falses and two pants on fires. And we do -- You know, we also do President Obama, and his record is a little better than some. He's got 64 trues, 34 falses, and 3 pants on fires. So, he should be happy with that. So -- And we get a lot of cooperation from the White House press office and other press offices. The offices on

Capitol Hill are very aware of us, and so they're pretty good. Let me get to our point here about reducing cost and transparency. If you look over there on the right, you see under the "about this statement" some of the sources that we used in reporting this item. The kind of stuff that we do on PolitiFact would not have been possible 10 years ago because these kind of things just were not available. I remember when I came to Washington 12 years ago, it was right about the time that -- I think it was Newt Gingrich who had created Thomas, and Thomas was just getting started. But the whole idea of transparency is really only beginning. And I'm very encouraged to hear the commitment, not just by the White House, but by everyone in government, to more transparency. I've got to say, though, we've got a long way to go, and even when we talk about the White House visitor logs, I think we're not seeing every single visitor. We're seeing a subset of that. And I would challenge our government and our White House to adopt what is the law in Florida, the Sunshine Law, which basically says that as a citizen, as a journalist, you can go into any government office and say, "I want to see what's in that file cabinet," or, "I want to see all of the mayor's e-mails," or, "I want to see all of the governor's correspondence." And that should be the law of the land, I would say, and I think every journalist would say, in the federal government. And I encourage you to adopt the Sunshine Law, Aneesh. And you guys could probably do it by an executive order.

>> Male Speaker: Thank you.

>> Suzanne Michel: Thank you. Very interesting. [ Applause ] If anyone in the audience has questions for any of the panelists when we move on to the question section, feel free to pass them up. Perhaps Dan can pass them to me. Also, we have Jessica in the back who will float through, and you can hand her a card, and she'll bring it up to us. Our next speaker will be Alisa Miller, who is President and C.E.O. of Public Radio International. Thank you for being with us.

>> Alisa Miller: Thank you. I am excited to be here today to talk about what I believe is an incredibly important time for our democracy, both exciting for journalism as well as scary for journalism, and how we can sustain quality, trusted journalism that helps us be informed, enlightened, and hold power structures to account and at its best inspire people based on powerful storytelling to live their lives better. I'm C.E.O. of PRI, and we're a public-media network, an

organization focused on providing global news and cultural perspectives to millions of people each week. And in this role, I've listened to and participated in many sessions about the future of journalism. And I'd like to underscore a key point that I think is missed in some of these discussions. I believe that we're not just facing a journalism business-model problem but that we're suffering from a journalism scope and quality problem in America. Because even when profits were high, the fact is that in many communities and even from many mass-media news sources, key beats have not been represented for years, and certainly not at levels that are sufficient given these topics' importance to our society. And this has everything to do with incentives that were present in the commercial sector, as well as the mass consolidation of sources and channels in the last decade or so. With that said, the impact of new media shifts and advertising revenue and economic downturn, as we've all been talking about, have only accelerated part of this decline. So, what can we do? At the same time, I'm incredibly optimistic. In this digital environment, there's so much that's possible. And I believe that the future is about how we can strive to practice more of what we call at PRI galvanizing journalism. PRI's galvanizing journalism model is driven by five major principles, and it is more possible than ever today. Number one -- meet the need. It starts from asking ourselves, what are the unmet content needs that Americans have in terms of functioning in our democracy and living successfully in our interconnected world? For PRI, this means making the local-to-global connection and to have content that reflects the changing face of America, inclusive of diverse and robust voices. Number two -- focus on context each day. Focus resources on contextualized journalism and producing this journalism in a sustained manner each day and each week responsive to the news cycle. Third, and I think a part that we can really explore today, is to leverage the power of partnership to tell stories differently. This means featuring diverse voices and focusing on non-duplication of resources, something that PRI has worked on for a number of years. We believe that partnership done right and with experience can lead to a model that can be three to five times more efficient than traditional, vertical journalism operations and can complement these many institutions. And I look forward to sharing some examples of this. In other words, don't look at your editorial capacity as your editorial capacity -- or the end of your editorial capacity. As Jeff Jarvis said, "In the Web world, cover what you do best and link to the rest." But we think that should be just the start. We can also partner more with our public end blogs. They can provide eyewitness accounts, highlight and bring issues to the floor, and crowd-source to attack complex topics together with journalists. Number four -- operate

as a catalyst to galvanize organizations and resources. It's just not enough to create the content anymore. How are you helping and leading others to create content, too? And number five -- model the transparency that we seek in others. Use Semantic Web to help people make connections and understand our content better and how are we being transparent and how our content is actually being created. So, I look forward to the discussion today, and thank you, again, for the opportunity.

>> Suzanne Michel: Thank you, thank you. Next we will hear from Bill Buzenberg, who is executive director of the Center for Public Integrity. And, Chris, you want to --

>> Chris Grengs: Oh. And for anyone watching the webcast or following online, we are also, again, taking questions via Twitter using the @ftcnews. We've been taking a few questions, and we'll be happy to have more as we have time.

>> Bill Buzenberg: Okay. I'm delighted to be here. I applaud what you're doing with data.gov and all of that, and I share the sentiment there's a long way to go. You still have to fund a lot of these things, you have to convince the bureaucracy that they should actually get engaged, and, you know, you could also create a federal cloud of documents and other things yourself in so many ways. I could talk more about that. I want to talk about the Center. We're 20 years old. We're an investigative-news organization, nonprofit, non-advocacy, nonpartisan. And I'll give you about five examples of the kind of work we do, which uses this data and documents. And we spend so much time cleaning it up and trying to use it, it's interesting. We do believe in transparency. That's our mission. We hold institutional power accountable, make this information transparent for people. Here's a project we did just this year on naming the top 25 subprime lenders in America. We thought after the crash a year ago, we started working on this, and we downloaded 350 million mortgages to start with from the HMDA data and isolated the 7 1/2 million subprime loans, who made them and where they were made, and we created maps of this. We listed every one of them, who their C.E.O. was, who funded them, because they were all invested in by the major banks that we bailed out, by the way. But it was a good project. It got used on the front page of the "Financial Times." Every major California newspaper used this, because California was the epicenter of so much of what happened. And it's still being used, and we get attorneys general

asking for us for information and all of that. Nobody quite made it accountable and transparent who did this to us a long time ago. So that's one quick one. Another, we do states of disclosure. We work in all 50 states. We've been tracking their ethics laws to see who's making their information transparent on conflicts of interest, and we grade the states. We've been doing this for 10 years. We actually give -- 20 states still get an "F" in this country. Michigan, Vermont, and Idaho still have no disclosure laws, no ethical requirements for their members, and they don't make it public, so they get the lowest of the low. But we can happily say that 24 states have actually changed their laws to represent more openness and ethical disclosures of conflicts of interest, the latest being Louisiana, which went from an "F" to an "A" under Bobby Jindal because he came to us and said, "What do I need to do?" And we said, "Well, the only 'A' state is Washington state." So they adopted all of the ethics laws of Washington State and now are disclosing it. And what difference does this make? Well, from the newspapers in Louisiana, we hear different people are running for office. Those who didn't want to disclose anything are not running, and those who don't mind that disclosure are running. So it's changing who's running for office. This is a little project on the transportation lobby. We looked up everyone who is lobbying on the new transportation bill -- thousands of lobbyists, as you would expect -- but we didn't know all of the issues they're lobbying on, so we made a national map. We made it for every state, every community, and you could go in and see who's lobbying and who's paying them. And then we're asking as sort of a crowd-sourcing project, "Tell us who's doing that? Tell us what they're looking for?" Because this is how our transportation policy is made in this country, which is the worst way to do it, but we thought we should make it more open and transparent, and that's getting traffic. Just two quick ones. When the climate bill was -- and it still is -- going through the Congress, we looked up every single lobbyist. You can look up any one of them. We have them listed by sector, by name who's paying for them, 2,000-some lobbyists in this country, 4 or so for every member of Congress, just on the climate lobby bill. It was a good project, and we decided to take it global, as well, because of Copenhagen. So we did it in eight different countries, and we did a comparison of the fossil-fuel industries lobbying on climate lobbying in all of these countries and put this together. We did a Canadian database. We gave them the data of their lobbying in Canada, which is going up this weekend and will be in "The Montreal Gazette." We did it for Australia. We gave them, and we predicted that Australia would probably not vote for restrictions on their fossil fuels. Anyway, they didn't, because we saw all of the lobbying going on in Australia. But it's a good

project. Again, we have partners. The Center has two different partnerships I'll just tell you about and then stop. We have something called the International consortium of international journalists. It's a hundred journalists in 50 countries who work with us to do these projects. And it's a very efficient way to work and do global cross-border investigations. We helped start the Investigative News Network, in the summer, bringing together 20 different organizations that are doing this at the state level often, many of these, and we find we can share data, share information. We can create, if the government will give us information or we can get it -- And I have one for you, a request that I'm going to pass on here. If we can get this information, we can share it with these investigative centers, and basically, it makes more accountability, more transparency. One of the projects we wanted to do was Medicare, during this whole issue of the new healthcare legislation. So we, of course, filed FOIA, and, of course, we were denied, because lots of people in the government want to deny it. And they said, "No, it's proprietary. If you pay \$90,000, we will give you the 10 years of data" that we are requesting for Medicare, because we want to show who's doing it. Anyway, my time is up. I have to say this one, and then I'll really, really stop. This is the last one, last slide. It's a prototype. What have we done? This is an Ujima project, it's called. We have now taken all of the data -- And I give Ron Nixon at "The New York Times" tremendous credit. It was his idea, and we're now expanding it to take -- You know, in any African country, they have no access to all kinds of information, but it's available in our country, and it's available in Europe, and it's available from the U.N. So we've sort of reverse-engineered it so you can look up, and you can go into Uganda, and you can find all of the arms sales, you can find all of the aid traffic, who that money's going to. They could do this and use all of that information for their own reporting in each of the countries. So each country is listed on five or six different topics, and it's something we want to take to both Eastern Europe, East Asia, and Latin America, where we also have partners that we can do this for. The data is available. It's making it and making the interface and giving it to people and, in fact, giving it to journalists. Thanks.

>> Suzanne Michel: Thank you. Thank you so much. We just have another minute or so of Aneesh's time, so I'll ask just for your reactions. We've heard a lot of calls for more information and more accurate information from the government. We're sitting here in a room where the fans and the Wi-Fi don't work at the same time, so I'm wondering what's feasible and what's doable and what your thoughts are.

>> Aneesh Chopra: Well, let me begin by saying I'm taking copious notes, because you learn a lot in these environments. And actually, I'm very grateful. Part of my service to the president is we act not in budget cycles or multiple years, but literally in days. And so I will -- there will be several things that have come out of this that I'm pretty confident we will take action on right away. By the way, in defense of the \$90,000 CMS issue, it's in part because of the patient-privacy concerns. But I know that exact database that you're describing, and I know the price point is fixed at that level, so I know a bit of the issue.

>> Bill Buzenberg: We don't want the patients' names.

>> Aneesh Chopra: I know. It's hard to de-identify without going through some very difficult work. I'll make three observations. Observation number one -- Nothing can be better to cleanse the quality of data than more exposure, because then you point out the inaccuracies. And what often happens is -- Look, we're all good people trying to do good work. You know, it's -- maybe get a good set of laughs to say that someone uploaded an inaccurate report that, you know, Congressional District "A" doesn't exist, but the data is wrong. Well, you ask a technical question. Can we auto-populate a congressional district by a geo-coded map, right? So you surface these stories, and, you know, you don't just say, "Woe is me. Everything is wrong." We actually say, "Look, we can iterate, and we'll improve as we go." By the way, a lot of the reason why our websites that we've launched carry the "beta" tag and we're not removing the "beta" tag is that we are constantly improving on their capability. Number two -- I would say that this notion of scorecarding done by the public sector, these public stakeholders, whether they be the Center or these nonprofit consortia or media companies themselves -- they have a remarkable impact. They capture the imagination. This notion that a politician would come to you and say, "How do I go from 'F' to 'A,'" and then turn that into legislation, that should not be an uncommon occurrence. By the way, same is true -- We had a very specific conversation when best places to work in the federal government came out, which agencies scored high or low in terms of their workforce thing. I can assure you a conversation was had about what does it take to get from bottom of the pack to top of the pack, precisely the point you raise. So I strongly value those types of activities. And that's point number two, which is these create feedback loops which then lead to action. And I would say

the third point, and I would say this one is the most interesting one, that the third point is this notion of -- this line between what is this side of the FOIA request and that side of the request. You heard in this session, that line is already blurred when we are "allowing" the American people to help weigh in. You asked one of these sites that, hey, others are coming in to help inform the answers. Was it the PolitiFact thing? Maybe it was. In a sense, that blur is healthy. This notion that you have to send something in, and it, like, sits in one room, and then something will come back to you maybe or maybe not -- That may be kind of a legacy world in which we're operating in, but really, this notion of collaboration is such that there should be an open place where conversations can take hold. I will go back to that health IT standards point, because I personally was involved in that effort. You theoretically could have had FOIA-like circumstances that would have taken weeks and weeks and weeks to kind of answer what an online forum surfaced and answered in minutes, because it was the nature of the discourse and the platform that enabled it. So the third concept of this sort of ongoing, thriving, the product quality improves with time aspect, I would imagine DocumentCloud had the same spirit -- more documents in, the better the quality, the iteration. So, anyway, I have several ideas that will come out of this, and I thank you for the chance to participate. And with that, I am off to Boston. Cheers.

>> Suzanne Michel: Thank you so much. We appreciate your time and your openness.  
[ Applause ] We heard many calls for more government information. We're going to now launch into a conversation among the panelists, let me say. And if you'd like to respond to any of my questions, any of Chris' questions, or to each other, please just turn up your table tents. Also, feel free to jump in. I encourage you to talk to each other, to respond to each other. You are the experts, and we want to hear from you. So, I will start the conversation throwing out a question that we heard very many calls for more information, calls for more transparency from the government, from you today. Can any of you provide any specific suggestions and some thoughts about how you think the information that you're calling for will lower the cost of doing good journalism? Yes, please.

>> Eric Umansky: Sure. So, as I mentioned earlier, in addition to DocumentCloud, I'm an editor at ProPublica. We're a nonprofit investigative newsroom. And one of our large projects has been bird-dogging the stimulus and reporting on the stimulus on an ongoing basis. I will say when

recovery.gov, the government stimulus website, came out -- and it's come out, as Aneesh said, in different versions, and they've iterated on it and improved a lot on it -- well, at first, we actually had a lot of -- There was very basic information on there, and so we went through it ourselves, downloaded information from various sources, put it online, and got enormous feedback from readers and enormous response from local reporters, because we had information that wasn't actually even on recovery.gov. When recovery.gov then improved, we then went through the data again, and as others have pointed out, we had to clean up the data time and again and spend an enormous amount of time cleaning up the data. And, you know, if they were to spend more time, if the government were to spend more time with recovery.gov and the data regarding the stimulus, that would be enormously helpful.

>> Suzanne Michel: What do you do with the data when you clean it up? Do you share it with other journalists? Is there some way to make it more accessible to everyone?

>> Aron Pilhofer: I'm not the cleaner, so I can't say exactly what we did when we cleaned it, but in terms of -- We then put it online.

>> Suzanne Michel: Yes.

>> Eric Umansky: And one of the things that we did, for example, is we created a database that allowed you to search by county so that effectively you could say, "What are the stimulus projects near me?" You could type in your zip code. You could look up by county. And that was something that at the time recovery.gov didn't have. So, you know, that's the kind of thing that you spend time, and you're just able to offer more features.

>> Suzanne Michel: Yeah, Bill. Bill Adair. [ Laughter ]

>> Bill Adair: A lot of Bills.

>> Suzanne Michel: Yes.

>> Bill Adair: I think we've got three. One thing I think the government can do is, one, I think the government deserves more credit than it often gets for FOIA. I often tell other reporters who come up and work in our bureau that FOIA has a reputation for being slow and painful, and it's surprising sometimes that you can get timely information out of it, and I often have. And I think there are many people in the federal government committed to making FOIA work, not just for news organizations, but for anybody. But I think much of that process is still paper-based, and I just think the approach by too many in government is you can't have that. And I'm very encouraged by the administration's commitment to transparency, and I think if they walked the walk the way they talk the talk, I think we'll be in much better shape in four years, and these first steps are encouraging. But even we talked about the White House visitors log. We're not seeing the whole log. And we're seeing what, I think a subset of people with names who others have requested or something. And so for the administration to say, "Well, we're being transparent," unh-unh. You know, what they've done is put out a list of some people who've gone to the White House. I'm not on there, and I've gone. So it's interesting that I think we need to hold them accountable when they say they're open about that.

>> Suzanne Michel: Okay. Aron?

>> Aron Pilhofer: Yeah. I actually -- I've spent most of my professional journalism career as a data cleaner. That's what I used to do. I mean, it sounds horrible, and it actually is. It's just about as horrible as you can imagine. [ Laughter ] Because almost everything you get from the federal government or anywhere you just have to assume that it's, you know, dirty data, and you have to go through it and split names and, you know, geo-code addresses and standardize before you can actually start analyzing the data. So that's very frustrating. I'm not sure how much you can do about that, but I'll tell you what you could do right off the bat is build these systems with FOIA in mind. I mean, we were just talking about this FOIA request that Bill was mentioning, where there's non-releasable information embedded in the database. If that system were built up front with FOIA in mind, you could have built in the ability to export that data in a format that would conform with both FOIA requests and with privacy. I don't understand why that isn't done, and I think it ought to be done.

>> Suzanne Michel: Bill, did you have a comment?

>> Bill Adair: Yeah. I mean, I agree with everything that's been said completely. I think the idea of just getting the raw, wholesale, structured, machine-readable data is what the government has to think about. And you get things on PDFs. I mean, you know, that's good. You get it on paper still. It's just, you know, it's really -- they could think about this as here's the data. Yes, it's gonna take some cleaning. They could do much more of it. But if we had a machine-readable, the whole database -- I mean, there's a lot of research that goes on behind this, this, and this and this, and sure, there are some things that are private and need to be restricted, but so much of that information, the raw data, could be released, could be made public, and in a format that we could all use and use much more quickly. It would save tremendous time. We have teams of researchers, and they spend months and months and months cleaning up data to make it useful.

>> Suzanne Michel: Bill Allison, I know Sunlight Foundation feels this is a very important issue.

>> Bill Allison: Yeah. I just wanted to touch on one thing about why the government can't do this. A lot of these are legacy systems that were designed years and years ago, and when they put usaspending.gov online, they found -- I think it was the Agriculture Department was listing loans, and part of the loan contract, they would use people's social-security numbers as an I.D. number, 'cause it had never occurred to them when they set this thing up, probably in the 1950s or 1940s, that a social-security number one day online would cause problems with people. But there are some new technologies that are available to clean up this data and process it more quickly. I mean, one of the big things that Sunlight Labs is working on is something called Matchbox, which is kind of an entity extractor and matching so, you know, when you have Boeing Company and Boeing Inc. and all these other kinds of things, you can go through thousands of records and process them. But again, this is kind of the outside working on the data. And I think that, you know, there just isn't a commitment inside the federal government to producing these records in a clean, useable format. I mean, and a lot of it, again, goes back to these legacy systems that are used.

>> Suzanne Michel: What's the role of organizations, then, like opensecrets.org, that mediate public databases and reporters in supporting investigative journalism? You've talked about all the

work you've put into cleaning up this data. Are the groups out there doing it? How do you get the cleaned-up data distributed to reporters who want to use it? How does that save on the cost of journalism? And where do you see the role of those kinds of organizations going in the future? Professor Hamilton, I know you've written a little bit about this.

>> James Hamilton: Sure. To make it an even harder question, I think the biggest market failure is in state and local reporting. So, we've been focusing a lot at the federal level, but at the state and local level, some of what we're seeing is with the decline of major newspapers. In North Carolina, for instance, more people are getting denied their requests for documents, and more meetings are actually being held closed, and they're essentially saying, "We know you're not gonna sue us because you've already fired half your staff." So the fact that the mainstream media is declining at the state and local level -- We're focused on federal transparency here, but at the state and local level, the news is even worse.

>> Suzanne Michel: Yeah, Eric.

>> Eric Umansky: Sorry. I would just say that, you know, this actually gets at a number of different issues that we've been talking about here, because databases are a way in which you can reduce costs for journalists. I think some people mentioned it earlier. We did a database earlier this year, again, about the stimulus, and it was basically about proposed cuts -- I believe it was in the Senate bill for school-construction funding in the stimulus, because the House bill had the funding, the Senate bill didn't. So we said, you know, "See if your school district is basically having funds cut in the Senate." And it was this enormously successful thing. And one thing we could have done was to just simply write a story about it. That could have been one model. But what we chose to do instead -- we did write a short story -- but what we focused on was creating this database where local reporters and residents could search. And this wasn't even really -- We weren't, frankly, thinking so much about it. What happened was we had somewhere between 100 and 150 local stories written about what was happening, and, you know, the potential cuts, basically, in each people's community and each paper's community. If you think about it, it was a force multiplier. We never could have done that. If we had tried to do it ourselves, who knows how many dozen of reporters we would have had to assign to it? And the corollary is the local

reporter couldn't have done it themselves, because it would have been them poring over all the data, cleaning up all the data. So when these things married, it was a quite successful thing, and frankly a real reduction in cost.

>> Suzanne Michel: That raises an interesting question of who is and who can fund this kind of data cleanup to make these databases more useable to reporters. In the project that you talked about, where did that funding come from?

>> Eric Umansky: It came from our benevolent founders at ProPublica. You know, we have a wonderful computer-assisted reporting director, and she oversees these projects. She's part of our news team. She's a full-time staffer. You know, we hire more cleaners as necessary, effectively. But, you know, it's an integrated part of our newsroom, so it's part of the overall cost of our newsroom, which is not cheap. I mean, it is not cheap by any means.

>> Suzanne Michel: All right. Jim.

>> James Hamilton: I think it's important to talk about failure. So last year, I applied for an NSF grant on computational journalism, because I wanted to see how the agency would think about the development of software that would help reporters. And the responses from the academic reviewers were bimodal. One set of people said, "This is impossible. You can never do public-interest data money. This stuff can't be developed." The other set said, "We do this every day," and it's all been funded by Homeland Security. So the idea that the government has wonderful software that they use for text mining, it was lost on the agency that there was a need to help develop software to help the people hold government accountable. So I thought that was an interesting example.

>> Suzanne Michel: Bill Allison.

>> Bill Allison: Yeah. One of our former colleagues at Sunlight used to love this saying that "the future's already here, it's just not evenly distributed." And I think that there are a lot of these technologies out there that can bring down the cost. And just to give an example, I'm gonna loop it

back to Center for Responsive Politics. This is a website that you can go to now and plug in any entity, a member of Congress, any kind of name. It will use Google search and some other search technology and pull up all of the campaign-finance records, campaign contributions, lobbying, whether or not a member of Congress owns stock in a particular company, and bring it all on one page. I mean, that's something that you would used to have to go -- I mean, I used to come down in 1996 to '95 to Washington when I was working in Philadelphia and spend days and days going from FEC to house clerk's office to Center Office of Public Records to I don't know how many other places, Justice Department FARA records. And now a lot of this stuff is online, and just with one search, you plug it in, and you click. And that's a huge savings that just, you know, didn't exist 10 years ago, 15 years ago.

>> Chris Grengs: This is a question for Alisa. I think you mentioned earlier some of the ways you're using digital technology to leverage partnerships and resources, and I was wondering if you could give us some tangible examples of what you're doing and how digital makes a difference in terms of getting information out to the public.

>> Alisa Miller: Sure, Great. Two levels of this. One, I think, is we've been thinking a lot about, and in a sense it's digital, and in a sense it's just, you know, how to practice or operationalize the work of creating journalism. So there's the aspect that we've been talking about of putting data out there that's reviewable and then has been scrubbed, and, you know, for us as a journalistic organization, how we can then take that data and create the kinds of analysis that can help people. And I think one of the things that we've worked on over a number of years is how the cumulative effects of journalists working together and how multiple editorial organizations, how they can come together to create economies in terms of going after and creating content on a scalable basis. So for example, when we recently launched a new morning news initiative, a program called "The Takeaway," in partnership with "The New York Times," with the BBC World Service, with WGBH in Boston and out of New York at WNYC radio. That's an example of instead of paying for correspondents across the world being able to leverage various organizations that can come together to create content in a way and really leverage resources to be credible in breaking and contextual morning news. So as many news organizations are figuring out how -- or are having to cut back, you know, how we are investing to create more capacity in key areas. And obviously,

technology is a key way of how you end up collaborating, because of systems and other things that can talk to each other. The other way, in terms of just economies, things like -- and, you know, we're fortunate to some extent in broadcasting, because each additional person that you reach, it's not like you have an incremental cost in terms of reaching them, unlike our friends in the print model on the print side. So that allows us to do things like podcasting and for relatively nothing being able to have your content out there in various forms so that people can consume it in different ways and becoming much more ubiquitous in a simplified way. So I think, you know, for us as the content creators, thinking about how digital technologies can help us tell stories differently and how we can scale that activity. So one of the things that we're thinking about at PRI is, okay, if we're managing 10 partnerships really well in an analog plus digital world, how can we scale up to manage 100 partnerships really well?" Because we're no longer confined by broadcast hours and minutes. So one of the things that we're working on within public media and collating this with National Public Radio, as well as Minnesota Public Radio's national arm, American Public Media, is a public-media platform, which the purpose is an application layer, an API, that allows us to pool our content in ways that then allow developers and others to conceivably create new applications and things on top of it to be able to export our content, use our content in different ways, leverage analysis that we've created, and also partaking in things like DocumentCloud and other initiatives so that we can link sort of this public-media universe so that the people, as well as other journalistic organizations or technology providers, can collaborate.

>> Suzanne Michel: Are you then talking about partnerships and collaborations both in generating content and in distributing content?

>> Alisa Miller: Correct.

>> Suzanne Michel: Okay. Are there other thoughts on collaborations and create content? Bill, how does CPI work with other news organizations?

>> Bill Buzenberg: Well, with this -- I talked about the International Consortium of Investigative Journalists. We have regular roundtables online, which we're drawing ideas, that they're coming up with ideas in Brazil that actually apply in India. And so we've come up with a project that way, and

we've been doing that. With the little Investigative News Network, the same thing. We have these conference calls all the time about editorial collaboration. We just did a project yesterday that we released on campus assaults around the country, a survey of 160 universities, and found a lot of really interesting things. And we gave it to this group early, and then they're using it in their -- many of these are university-based, so they're doing their own reporting based on the information we gave them. So there's a lot of back-and-forth in this virtual way of working that's very efficient, that's very -- You know, this future that you talked about is really being built now and in so many ways.

>> Suzanne Michel: Bill Adair?

>> Bill Adair: I think it's interesting, as we're looking at this panel, I was just doing a little survey to see how many of us are still in the for-profit world, and I think it's just me and you, Aron. [ Laughter ] And I think that speaks to this thought that as times have gotten tough that journalism has to go outside of a commercial model to do good journalism, and I think we definitely need to explore that. I'm still hopeful -- I think Aron probably is -- that we can still do these things within the traditional media companies, because that's still the way that the overwhelming majority of people are getting their journalism is from for-profit companies, whether it's broadcast or print. And now online is a slightly different mix. What we're hoping to do with PolitiFact is take PolitiFact into the states. It's our hope that every elected official in America should have to face the Truth-O-Meter, and we're seeking partners in different states to do that. And we're open to different ways of doing that, but I hope, ultimately, we can still be a for-profit company and do that. It just seems to work on the sort of scale that's necessary. There just isn't enough foundation money out there to pay for a ProPublica in every state, to pay for a Center for Public Integrity that's gonna cover the city council, that's gonna cover the county commission. And so it's our hope as we expand PolitiFact to find media companies that want to do this, you know, and still, hopefully, turn a profit.

>> Suzanne Michel: Yeah. Aron, view it from the commercial.

>> Aron Pilhofer: Yeah, I guess so. I'm the spokesman for the commercial side. Interesting. I actually did use to work for a nonprofit, as well. I worked for the Center for Public Integrity. So I've seen it on both sides, actually, and I've partnered with news organizations from the nonprofit side, and I've partnered with nonprofits from -- the for-profit side. And if you look at what's going on, and particularly with "The New York Times" these days, we're partnering with nonprofits in San Francisco, with one in Chicago. We've started a couple of -- We've experimented with some local blogs. We're branching out in ways that you probably wouldn't have seen five years ago, and we're not the only ones doing it. So I would expect that this sort of relationship between the organizations that have this sort of bully pulpit -- "The New York Times," "The St. Petersburg Times," the news organizations that are, quite frankly, I think are smart are gonna start looking at that as the way both to increase their impact, to, frankly, lower costs, and cover more and satisfy that journalistic mission. And from the nonprofit side, I think organizations that are working with organizations like mine are gonna benefit, because we can, frankly, raise their profile and provide the impacts that these organizations struggle to find, because they're so new. I think this is a really interesting area, and I think this is definitely something to keep an eye on.

>> Suzanne Michel: We just have a couple minutes left, so I wanted to get to the idea of partnering with the public. Several of you mentioned that, or getting public input into your stories. Can you give more specifics about that? Alisa, you mentioned getting input from the public. Can you expand on that a little bit?

>> Alisa Miller: Sure. One of the initiatives I spoke to earlier, our morning-news initiative that we're actually doing with "The New York Times," as I mentioned, is called "The Takeaway," and part of it is how can we engage in an American conversation about things and topics and news that's really important. And so a key editorial strain of the show is how we can use technology to reach out and incorporate. So there is examples where you'll have an hour and tee up a particular topic -- let's say it's on education or healthcare -- and by the mid to the end of the hour, not only have we featured various voices that have been on the website, for example, are called into this technology we use called spin box, but conceivably, people may be interviewed on the show in concert with experts, because you have a person who's really being affected by a particular issue, and, you know, "the expert." So it's about experts and expertise. And I think that it's really about

an editorial commitment to figure out how those things are incorporated together. And, of course, there's many examples, like, you know, what ProPublica has done with ShovelWatch, which we worked on with you, where you're really leveraging crowd-sourcing for people to help you mine through the data and try to figure out what is actually happening once the data set is made available. So I think there's a lot of opportunity there to look at the altruistic world that people care about these topics and these and how they want to communicate with and be a part of helping to enlighten.

>> Suzanne Michel: Other thoughts? Yeah, Bill?

>> Bill Adair: Couple of things. There's a group called Capitol News Connection which serves a lot of National Public Radio stations. They're based right here in Washington. And they have a feature on their web page where you as a constituent can say, "I'd like to ask my member of Congress this," and you type in the information and leave the question, and their reporters will go out and try to ask the question. That's one example. I think another example was something that Sunlight was involved in in 2006, where someone in Congress had a secret hold in the Senate on the Coburn-Obama bill. This is the one that created [usaspending.gov](http://usaspending.gov). And there was an ad hoc group of bloggers called Porkbusters, and Sunlight kind of joined in to try to find out who has a secret hold. And you just had average citizens calling up members' offices and saying, you know, does Senator so-and-so have a hold on this legislation? And we had to do kind of reporting 101. "Well, no, we can't accept it just when you say that no, he doesn't have the hold. We have to know who you talked to. Was it somebody who was, you know, capable? Did you get to the press office, or did you get to a legislative aid, or was it just an intern answering the phone? Did you get the name of the person?" But anyway, ordinary Susans got it down from 100 Senators of possible suspects with a secret hold to just four. And then who jumped in but Talking Points Memo and Rebecca Carr, who is with Cox News Service, who did the final legwork reporting on those last four and found out, lo and behold, there were two members, Robert Byrd and Ted Stevens, who had the hold. It was Ted Stevens first, and then Robert Byrd put one on later. So that was kind of citizens kicking off the ball and doing all the legwork initially and then bringing in reporters at the end to close the loop.

>> Suzanne Michel: Very interesting. Unfortunately, we are out of time, but this was a great panel. I thank you very much. And please give our panelists a round of applause, because they did a super job. [ Applause ]

>> Male Speaker: We were on "The Takeaway" yesterday. They interviewed our reporter for the campus-assault project. I was really happy. She's really good. She's in New York.

>> Male Speaker: It was great to see you.

>> Male Speaker: Anyway...

>> Male Speaker: You guys at one point, there was some recovery.gov thing that I wanted to partner with you.

>> Male Speaker: We should.

>> Male Speaker: Sorry about the...

>> Suzanne Michel: Oh, no. That's okay.

>> Male Speaker: secrets.org.

>> Female Speaker: All right, Well, you know what? I'll have Melinda call you.

>> Male Speaker: Oh, really?

>> Female Speaker: Excuse me?

>> Male Speaker: Do you have a cart?

>> Male Speaker: Yeah.

>> Susan DeSanti: We're gonna move on, because we have Reed Hundt with us. Reed Hundt served as chairman of the Federal Communications Commission from 1993 to 1997. He's a principal of REH Advisors LLC, a business-advisory firm, and of Charles Ross Partners, an investment firm. He's the author of "You Say You Want a Revolution: The Story Of Information-Age Politics." And critically, he's a member of the Knight Commission on the Information Needs of Communities in a Democracy. This is a very important report that was issued recently, and he's going to be telling us about it today. Reed.

>> Reed Hundt: Thank you, Susan. Hello, everybody. So, in a role that's unaccustomed for me, I'm actually going to talk about somebody else's work without claiming credit for it. I'm going to talk to you about the Knight Commission. First, however, I'd like to thank Chairman Leibowitz and the Federal Trade Commission in general for organizing this very, very important conference. All of yesterday and all of today are the first two days that I can recall literally in 40 years where the government or any government agency has organized itself and organized different stakeholders to think through these very important issues in a holistic and complete fashion. All through the 1990s, I can testify from experience that the idea of having a conference like this would have been thought to have been an inappropriate intrusion of government on the thought processes of the private sector. And I think that, in fact, the reality that law is relevant to the shaping of business opportunity and is a part of our culture is one that we now seem to accept, and by no means does it imply that we want government to effect the content of media or in any way impinge on the freedom of press, but I think that it's great that we can have an honest discussion about the relationship between law and the opportunities to actually exercise a freedom of speech and transmit information. When I came out of law school, it was about the same time as the Newspaper Preservation Act was passed, which is definitely an out-of-date piece of news. I mean, both me being a lawyer and the act are both a little out-of-date. But it's high time, some 33 years later, to take a fresh look at the relationship between law and the opportunities for freedom of expression. So I commend the chairman for doing this, and I hope that the spirit of openness that he and his commission have demonstrated is one that can be continued as these discussions continue, since in my own mind, there's very, very little doubt that there are affirmative, positive steps that can be taken by probably more than one regulatory -- or if you'll forgive the phrase,

deregulatory agency that would be in aid of individual rights and freedom of speech. One step taken in furtherance of that very goal was taken by the Knight Commission under the leadership of Alberto Ibarguen, the totally awesome head of that commission, and this is what I want to talk to you about. This foundation, which was founded by a great newspaper family, assembled a group of commissioners, pretty clearly bipartisan, but more than bipartisan drawn from a wide, wide range of disciplines. Or to put it another way, we had newspaper people sit down with Google and mediated by Ted Olson, who, as you know, is at one and the same time the winner of the case that caused me the most personal pain in my entire life, Bush vs. Gore, and also is without question one of the leading constitutional scholars in the history of the United States. So this was a terrific group, and it was an honor for Michael Powell and me to be part of it and to go along with it. And for more than a year and a half, in meetings all over the country, this commission deliberated, took evidence, and built a heck of a record. And I'm gonna give you just the summary of the outcome, and I'm gonna just try to underscore what I think are the most important points that the commission made without in any way hoping to discourage you from looking into the entirety of the report. First and foremost, it was the fundamental conclusion that the lens to use when examining the media was a geographic lens, with a focus on local communities. This notion of localism, many of you will know, actually goes right back to the earliest days of the regulatory paradigm for broadcasting and has been since those early days, the 1940s and 1950s, with a brief period of renewal in the '70s -- it has been consistently eroded over the years. It has been purposefully eroded from a business perspective as media conglomerates have become national and international, seeking quite reasonably to obtain economies of scale. But what's happened over these decades is that the regulatory paradigm has become -- and I think it's fair to say fundamentally indifferent to the geographic location of media outlets -- indifferent to. That doesn't mean against. It simply means not necessarily cognizant of. And what this commission concluded is that without reaching the question of regulation or nonregulation, that's the wrong lens for Americans, that the fascinating paradox -- I would wouldn't call it an irony -- the fascinating paradox of the Internet is that the more that the information is available without any boundaries of distance, the more that it actually needs to be translated to action in a local community. That's the fundamental lens used by this commission. And why is that? Because communities, in fact, are where Americans solve problems, where they identify problems and solve problems and where accountability really occurs. I suppose you could say this is a piece of

political science, and it's certainly there so that you can debate it, but here's what it isn't. It isn't a statement that for most problems we operate as a 300 million person collective and that we develop centralized solutions. It's a statement that like the computer itself, we are a nation of distributed activity. Like the whole network itself, we are a nation of distributed access, and therefore, on a truly localized basis, people do, in fact, gather to debate such things as what should be the food served in the local school to our kids in elementary school? Should we have special diets? What do we do about curb cuts? What about people with disabilities? Should we put speed bumps in the road? And on and on and on to issues of greater and greater significance when they're aggregated across the country, but that our view and our conclusion was that all of these issues, whether they're grave issues of national security and involve a war in Afghanistan or not, or whether they're local issues about speed bumps, nevertheless, that they start and in some way they're ultimately resolved in a granular, local fashion. And since that is what we concluded, then it followed that the media should serve that and not something else and that a local community should not be exposed principally to some sort of common-denominator news access that, in fact, didn't inform local people about local issues. This, we concluded, served both people in their individual lives and in most of their civic engagements, as well. So, with this lens, we reached these conclusions, that if we're going to focus on localism, then we ought to think anew about the meaning of competition and innovation on a localized basis and that most tests, for example, about competition, which, frankly, at the FCC in my time tended to be national really needed to be local. The second thing is that that led us to the conclusion that to talk about support for public media really should mean, not exclusively, but in very large part, support for public media on a localized basis. This has various corollaries that include, but are not limited to, local media. So, for example, radio is intrinsically local as a technological matter. The third recommendation, if you take the local lens and put that on, you reach the conclusion, and our commission reached the conclusion, that you will then be looking for local institutions to be hubs of local media -- community colleges, schools, community organizations, nonprofits that are particularly active in a particular town and in a particular city, that these can be hubs of journalistic activity, that it does not follow that a very big building that has in it an enormous \$100 million printing press is a natural hub for a local community. That doesn't mean we shouldn't have those buildings. It just is. Let's think about what the hubs are, particularly in a distance-free, virtual world, if what you want to serve is a local community. And then

recommendation four is that public records acutely of a local kind ought to be accessible. To that end, standardized formats are absolutely necessary. So having it be that thousands and thousands of towns and villages do not have standardized formats raises an unnecessary cost burden to access to that information. The same point can be made about healthcare records. The same point can be made about energy-monitoring records. It's a point that can be made across the board. And nonetheless, I make that point across the board. Recommendation number five, that if we're going to put the local lens on, we ought to be able to develop metrics that relate to local communities, and we ought to be able to test on a community-by-community basis exactly how we're doing. This, I heard from a wonderful, wonderful presentation made by Chancellor Joel Klein of the New York public school system last night, is exactly the way he's approached the school system in New York. He has said it is not a case where we want to fall to Simpson's Paradox and have it be that we look at an average. We want every school to stand on its own in some kind of metric-based measurement. So why don't we judge community access to information on the same basis instead of on big national averages, or even regional averages? Then we talked about the information capacity of individuals and established the rights. I want to move quickly in the interest of time to focus on recommendations. As to individuals then, we said if individuals operate in a local community, then it also follows that they ought to be able to be educated in the use of digital media on a localized basis and that what's important is not the silos of federal, state and local, but rather all the ways that government and public institutions touch an individual in a local community. Think of the individual as the center and all the arms of government as wheels, but it's the hub of the wheel that really matters here. Recommendation seven -- Where would you go to that training? Again, local places is where you would go to that training. This is different than saying, "Find it online at harvard.com." This is a different approach than that particular notion." Recommendation eight -- If we're going to focus on individuals in communities, then it follows that everyone ought to have very high-speed broadband, that, in fact, having it be a country where a third, more or less, don't have high-speed broadband is no more acceptable than saying a third of the students aren't gonna graduate from high school prepared for a job or prepared to go on to a community school, or a third of the country isn't gonna have access to quality healthcare, or a third won't be secure in their homes against a natural disaster or acts of violence. None of these statements would be acceptable, so why should it be acceptable that a third won't be connected to the information that makes it possible to participate in developing, understanding, and solving problems? And so it isn't

just a nice thing to have universal broadband. If you adopt this local lens and think about the individual in the community, it becomes an absolute imperative, no less important than any of these other acts of connection of all of us to each other. Number nine -- If everyone is going to be universally connected and being able to operate on a local level, then we do not need gatekeepers of information to establish the boundary conditions for access. And recommendation number 10 -- We aren't talking only here about broadband, but about all technologies, because we're really talking about information across multiple platforms. And so the multiple-platform approach, which is also distinctly contrary to 40 years of FCC regulation, just to point out what this is not -- The multiple-platform approach is a recommendation that -- It's not the first time you've ever heard it, but it isn't the way we currently do things in the United States.

Recommendation number 11 -- You would then expand all local-media initiatives. This would follow. This is in the concluding category. And in particular, you'd focus on the next generation. So, of all the things that I was probably and most enduringly proud of, that the team at the FCC working with Senator Snowe and Senator Rockefeller was able to do in the '90s, it was the E-Rate, where we created a matching-grant program that produced the following result, which is from 1997 through until yesterday, the single community in the United States that most readily had the lowest-priced access to high-speed broadband was young people in schools and anyone that would go in a library. And over the last 10 years, what we've discovered is that that's the demographic that outside of financial investors working in Wall Street firms in their offices 22 hours a day have the highest usage rate of broadband in the country. We have, because we made the access available to the young people first and not last, and simultaneously to those in the poorest communities as well as in the richest communities, that is why we have across all demographic characterizations of that generation in America today the highest penetration rate for broadband access and broadband literacy. Also, they're smarter. So this focus on this demographic is what our commission urges as the extra lens when you're thinking about these problems. Recommendation 13 -- If you're gonna communicate to them, then you have to empower them to participate in your problem-solving. And recommendation 14, that will lead to design decisions about all public spaces and communities. And here's the easy example, the example that my sister always talks about, because she's a librarian in the Montgomery County school districts. There's not enough space for the computers. There's too much space for the books. They use the computers more than the books. The design is wrong. Sounds really simple, except for that it's a fundamental design decision

which, if altered, will take many a year and billions of dollars will be spent over a long period of time to change the design. So let's get on it. Let's start doing it. And recommendation 15 -- When we do all of this, and when we go back and measure, let's look and see whether we succeeded. Let's look and see whether every community actually does have some virtual and real-world information hub that is operative, and people are participating in it. And if they don't, let's ask ourselves why. So, those are our recommendations, and they told me that I could have just a few seconds in which to say things that I think that I didn't run by anybody, and these are those things, and you're very nice to indulge me. I'd like to add to everything else the following, which is let's think about broadband not as a technological platform, although it is, not as multiple platforms, although it is, not as networks of networks, although it is. Let's not think of the conveyance. Let's think of the thing conveyed. Let's not think of the pipe. Let's think of the thing piped. Let's not think of the conduit. Let's think of the content. And let's see if we don't agree to the following, that there are five public goods that ought to be available at basically zero price or very, very close to zero price for everyone in America all the time everywhere, ubiquitously. And these are what I call HEIEDS, because I can't remember things without acronyms, so, they would be Healthcare, Energy-efficiency, Information, Education, Democracy, and Security. So what do I mean specifically? By regulation, if your car is caught in a snow bank in the middle of Iowa, and you have a cellphone, and you can't get out of that snow bank, instead of waiting there until God forbid you freeze to death or somebody drives by to save you, you can hit 911, and somebody will come and get you, and that signal goes up to a satellite. That's how it works, and this is by regulation. So why can't your healthcare records work the exact same way, and you transmit them anywhere, anytime that you need? Whether it's an emergency or whether, as in my case, and you go to see the orthopedic doctor on Monday to ask why, after all these years of running, my feet hurt, he says "fill out this form." It's the exact same form I fill out every time I've seen him for the last 20 years. And I fill it out in hand, and then I say to myself, as I'm sure you've had this experience -- is somebody gonna then copy this down on another form and eventually type it into a computer? Because I could give him this little thumb drive, which I'd be happy to carry in my pocket and plug it in the socket, and it's stupid not to be able to do this. Also, \$100 billion is the amount of investment that we would see if we mandated electronic healthcare records and if they could be transmitted for free everywhere, all the time. \$100 billion is the minimum of investment that we would see. \$1 billion is 10,000 new jobs. So \$100 billion is...a million job years. This would be

good, not bad, in our country at the present time. This can be done at the stroke of a pen. It is necessary to write some words on top of the page before you sign at the bottom, but this is a totally feasible activity, not more complicated than 911. Same point about energy information, the same point about access to education. There's no reason why these fairly thin streams of data need to be blocked by incompatible formats, uncoordinated transmission protocols, and extra price that ought not be charged by anybody. So they can all ride for free, which is what 911 does on the network today. They can all ride for free on these networks, and if all these things rode for free on the network, the bandwidth usage they would represent would be trivial, but the empowerment of people in local communities would be awesome. Thank you for listening to my add-on to the Knight Commission, and I hope that you join me in admiration not of the things I've said, but of the very, very hard work of this commission, which did it really to serve the public. Thank you very much. [ Applause ]

>> Suzanne Michel: Now we're actually going to have a break for 15 minutes -- Well, I take it back. We're gonna be back at 3:00. Thank you.