"The Public Airwaves as a Common Asset and a Public Good: Implications for the Future of Broadcasting and Community Development in the U.S"

Ford Foundation funders briefing, March 11, 2005 – Complete Transcript

Becky Lentz: This is our third and final event in our winter series of briefings on electronic media policy. All three events have been sponsored by Grantmakers in Film and Electronic Media, and we'll hear more about our co-sponsors in just a moment. And each event has focused on a critical issue facing media in the public interest. It's so good to see people having such a good time. This is a vibrant community, I think. Put simply, and I think there should be a yellow newsletter in your packet, the first quarterly newsletter of our Working Group on Electronic Media Policy, but just briefly, I wanted to summarize for you how we look at that area of work. Simply put electronic media policy works at the intersection of media content, production, and distribution policy. And it affects commercial as well as noncommercial media. It embraces a very wide range of interrelated and converging issues that concern the design and democratic governance of communications resources that mediate or filter the flow of information, knowledge, political and creative expression in society. These resources include, among many other things, broadcast and satellite television and radio, Internet television and radio, cable television, telephones, computers, and the Internet. And electronic media policy is primarily concerned with issues of transparency, representation, and accountability and the governance of these and other emerging electronic forms.

When we talk about electronic media policy we talk about convergent media. And the issues and some of what you'll hear about today—the issues we're tackling in the field with the grantees and others in the community is what's happening when those things converge, and how does that change governance and a lot of other important questions. So governance about electronic media falls roughly into four historically separate, but now increasingly overlapping, areas: what you may know as traditional broadcasting policy has a lot to do with media content, children's television, and a host of other things that you'll hear more about today; telecommunications policy; Internet and information policy. And all four issue areas concern policy-making at several levels—global, national, regional, and local. We'll hear today about some of the local issues, and I think that will be quite enlightening for all of us. Broadcasting policy everybody knows pretty well because it's more accessible to all of us, to nonexperts, who witness its effects every day. It has to do with government and industry decision-making about things like media consolidation, indecency on prime time television, community-based low power FM, public broadcasting, and educational programming for children.

The other three policy areas are a lot less visible, but equally important in our everyday lives. We'll hear more about each of those in some fashion today, so I invite you to listen to these themes about phones, the Internet, and issues of content.

Our first event in January focused on how intellectual property rights laws are negatively affecting freedom of expression in this country and around the world. And if you were not able to join us for that, just let us know and we'll send you a copy of the proceedings for that day. And David will talk about how we'll have all this media on the Web soon. We revisited issues of freedom of expression at our February meeting, but from the perspective of media ownership. We learned from those on the frontlines about how the public interest community was able to stop a major decision at the Federal Communications Commission in 2003, largely because of widespread grassroots activism. We were also very privileged to have as our special guest speaker, FCC Commissioner Michael Copps.

So today we invite you to join us as fellow learners in a tour of the future. We're pleased to have with us experts on today's topic, The Public Airwaves as a Common Asset and a Public Good. In the morning our presenters will hopefully capture your imagination to consider a slightly different media landscape than what we're used to hearing about. And after lunch we'll explore strategies that are working to get us closer to that future. But before we get started I'd like to turn to David Haas for a brief welcome from Grantmakers in Film and Electronic Media. Thank you.

David Haas: Thanks Becky. Grantmakers in Film and Electronic Media is a broad association of grantmakers that one way or another care about media content, distribution, as well as the policy that shapes the world in which it can or cannot be delivered. And in recent times, just as out in the field, there's been a growing interest among funders, whether they have funded media or not, in the policies that shape our media policy landscape both commercially and noncommercially, which is why we formed the Working Group on Electronic Media Policy. And there will be further programmatic strands that will address this. I just want to thank our co-sponsors....(& announcements).

Becky Lentz: It's really a pleasure to have as our guest speaker today, Dr. Mark Cooper. Mark is Director of Research at Consumer Federation of America. He also is affiliated with Stanford University, Fordham University, and a host of others. The community at large draws a lot upon Mark's expertise and his passion for what he's going to talk about today. And he has responsibility at Consumer Federation for analysis and advocacy in the areas of telecommunications, media, digital rights, economic, and energy policy. So this is a person who has broad reach, not only in our field, but how it connects to a lot of other program areas. In addition to providing expert testimony in over 250 cases for public interest clients, Mark is also a prolific writer, and I mean prolific. I get boatloads from Mark, and I know all of us really pore over it for all the wisdom that he has to offer us. And Mark is also working on several new books, which hopefully he'll be able to talk to us about at some point. His most recent books include *Media Ownership and Democracy in the Digital Information Age* and *Open Architecture as Communications Policy*. Please join me in welcoming Mark.

Mark Cooper: It's funny, I do two things, I write those humongous piles of stuff and I give this speech. I give speeches, stump speeches, sermons. My members actually say they're sermons, and I do it all over the country. This year I'll go to Wichita, Kansas, and somewhere in the middle of North Dakota that I still haven't found on the map. So I give this speech, and again, I do it with a little passion. And I'm going to try to do something a little big different today, and I've got a big task. Becky has given me a big task in addition to being on my best behavior. My task today is very difficult and very easy in some respects. It is difficult because I really need to challenge you to think very differently about something that is very important to you, something you've been involved in for a long time. I'm going to try to make you think about the public interest in the airwaves in a very different way. So I'm going to ask you to leap away from where you were.

And to make this challenge worse, the thing we are talking about, the airwaves or spectrum, is something we mere mortals do not understand. I mean, in fact it is not a thing, it's magic to us. The thought of speaking into this microphone and projecting my voice or a picture thousands of miles, of even a few feet as the Prometheus Project will do later in the day, is just incomprehensible to the average person. It's actually not magic, it's technology, but that is incomprehensible to the average person. It's something that's not really tangible.

But my task is also easy in one sense because what I want you to do is to adopt an aspiration for free speech that is beyond anything you have dreamed of in generations, a bold aspiration for free speech that will meet your desires for how our democracy should work in a much more effective and democratic way. And so it also should be easy to motivate you, because as you know this is a critical moment in that free speech possibility. We have the constitutional right, the strategic need and the tactical opportunity to completely change freedom of speech in America. It's actually to get freedom of speech back to what it was when these colonists and pamphleteers wrote what proved to be a pretty radical political document. And so it's a very exciting time.

My job is also made a little bit easier by the announcement I saw for this session, and I quote "The airwaves, considered the nation's most valuable public asset at market value of nearly $750 billion." Now $750 billion sounds like a lot of money – although it's not, we'll spend that in the Iraq war before we are done. More importantly, no matter how much the dollar figure you could put on it, free speech is not worth it. Free speech is priceless, to use the TV ad. The airwaves are not an asset, and speech is not a commodity. You have to get that 20th century concept out of your heads, and adopt a 21st century concept, or maybe an 18th century concept, which is where our constitution was born.

I can understand how you got those analogies in your head, assets and values and commodities, because for 100 years we've sort of had this deal in which spectrum was used primarily by commercial people. And it's interesting to note that if you go back a

100 years ago, and it's almost exactly 100 years ago that the radio spectrum started to be used, we didn't have this problem of exclusion. Anybody could broadcast. And just like we Americans did when we were pamphleteers, they started broadcasting. And people would wake up in the morning and they'd build a radio station, sort of like Prometheus does today, and it was probably the same level of sophistication. And they started popping up all over, and 25 years later, lo and behold the airwaves got crowded. Because the technology was not very smart, it was very, very blunt, and so people started interfering with each other. So after a quarter of a century of this wonderful experiment in free speech where anybody could speak, the Congress adopted and the Supreme Court accepted a bit of a compromise. They accepted the granting of exclusive licenses to broadcasters for their exclusive use in a part of the spectrum under the rationale that if all citizens tried to speak, no one's voice could be heard. We'd all drown each other out. And so, under the theory that some voices are better than none, they said we'll let some people use the spectrum. And of course, in so doing, some people got First Amendment Rights in electronic speech, and others lost them. I lost my right to speak. You lost your right to speak, because you don't have a license. So this was a compromise, and we added into the compromise that those people who were given the right to speak would also have some public interest obligations, we called them. And they'd have to do something to give back some value to the public while they got to speak. Now it was not a very good deal from my point of view. I wasn't there, but there were other citizens there. And so the system was—and remember how this works now—they get to speak, they have to produce at least something of public value, and other people get to listen to that. So at least I got something back as a listener for what I lost as a speaker.

Now it's important to remember that the problem was not in the spectrum, because it's just there. The problem was in the technology. The technology was the constraint on the use of the spectrum. And that's very, very important. It was just too primitive to avoid interference except by getting everybody out of the way.

Okay, now, Becky told me to try to paint a picture because whenever we mere mortals try to deal with this magic out there, we always look for analogies, physical analogies. We talk about pipes and highways and stuff, because it makes us feel better because we don't understand that magic stuff up there. And so some of you have gotten wind of this analogy, and I'm sure that when David Reed at MIT, who is not a mere mortal when it comes to these things, hears my analogy, he will blow it out of the water. But here it is, the maiden voyage of Mark Cooper's spectrum as ocean analogy, okay. And I hit on this analogy at a recent conference called the Silicon Flatirons Conference. Some people may know it; it's run out in Colorado by a fellow named Phil Weiser. And there was an ultra-conservative judge from the D.C. Circuit, Judge Williams, who's very popular in Colorado but not in my house, and an ultra-conservative chief economist from the FCC, and they were absolutely dead certain that property was the only way to do anything, even if it's not a thing, but they got press. And they said, maybe the ocean is a commons because there are no rules there. And they literally said this, and I being the unassuming

person I am said, you guys are wrong twice. You're wrong once about property and once about this notion that the ocean is a commons because there are no rules.

Of course we all know that commons is not a question of rules. There are governance rules. It's simply a matter of how you govern the use of something. And it turns out of course there are rules in the ocean; it's called the law of the sea. And the law of the sea basically are a set of principles to do exactly what we need to do in spectrum, that is avoid interference, i.e. collisions, right. So boats have certain rules about where they go and how they travel, and so forth. It turns out that government makes a little bit of investment in the rules of the commons. They put lighthouses and buoys in the sea to sort of tell you where you shouldn't go, but it's a very light-handed set of rules. In fact most of the rules inhere in the captains of the boats in their ability to move those boats around. So spectrum is like an ocean, only it's a lot bigger than the ocean. And actually technology can make it bigger and bigger and bigger. Spectrum may be infinite and that's what David Reed will tell you, which is why he probably hates my ocean analogy. Because even the boundless sea is too limited for him.

But let's go back to 1904 and look at this ocean as spectrum. The technology of navigating the ocean was incredibly primitive way back then. In order to get a boat, a transmission, from New York to London, what do I do? Well, I sort of push the boat out, and then I have to clear a huge lane in the sea so that my boat can get there. And in fact, I need guard lanes around my lanes so that no wake possibly can come across my lane because if I get a ripple in the ocean, I'll get pushed off course and I won't get to London. The folks in London won't receive my signal. And so I create these huge swaths of ocean in which everybody has to stay out of my way because I can't steer. Okay, now over time of course, I may invest in steering and in radar, and things like that. And well, the lanes can shrink a little bit and now I can have more traffic. And it gets better and better over time. But remember, and this is the critical point, the investment necessary to use the commons inheres in the boats, the individual investments that I make in the boats. There's no infrastructure out there. That's very important. There's no wires or concrete to pour, so that it's in the boats that I make those investments. And the commons itself, the spectrum, does not need property to make it valuable. To me that's very important.

But the current generation of technology in the ocean really does finally break the analogy because boats are made to carry stuff by putting them in bundles and packaging them up and moving them across. But there's another way I might send goods across the ocean. I might build platforms in the ocean and fling the packages from platform to platform across the ocean. Instead of piling them up, I simply shoot them across the ocean one at a time. And of course the more platforms I put out there, the more traffic I can throw across the ocean from platform to platform. And so the carrying capacity of the ocean gets bigger and bigger. Folks that is what Wi-Fi is. That is what a mesh network is. They're a series of little transmitters and receivers spread all over the place that actually grab packets and move them across. And they're very smart little radios. They know what to look for and they know where to throw stuff. So it's a series of rules

about individual private actions, and David Reed will tell you it's infinite. It never needs to stop expanding in its carrying capacity.

But let's be clear, our need for physical analogies has gotten us in a little trouble. Because we now have this silly little image of the ocean filled with platforms and all this stuff flying through it. And we're ducking our heads. It's a little bit silly, but it's actually exactly what happens. When I came in here I looked for, and other people looked for, that Wi-Fi network. And we walk around in the streets above grounds, and outside this building I'm told, and this stuff is whizzing around our heads all the time. And it finds us all the time. This is a heck of a wonderful world to live in.

The lesson then is very, very simple and clear: The ether—the spectrum—is bigger than the ocean. You must get out of your heads that old 20th century concept that the airwaves are scarce. Don't let anyone ever tell you they're limited again, and start to think about what that means for stuff. Think about what it means for that crummy compromise we made 100 years ago. I want my free speech rights back; you should get yours back. Don't let anyone ever tell you we have to propertize it and only let the people who own it use it. Think about it. NBC never invested in spectrum. They simply got the opportunity to use it, and they invested in a series of transmitters and supported the purchase of receivers. They never did anything to add value to the spectrum itself. They made their own private investments. So that is absolutely critical to remember.

And that's why I, unlike some people in the room, never want to auction off the airwaves. I don't need to do that, and remember, when I auction it off to them they're not going to do anything to improve it from a public and social point of view. They're simply going to have the opportunity to use it. And the problem in America is we may write a contract that says, even though you're paying for it, it's not your property. But man, once you buy it, once you pay for it, they start to act like it is their property. And then you give them these public interest obligations, and they moan and groan about not being able to maximize their profits. And they say look at how much money I spent on the spectrum. So I don't like to sell my free speech rights.

Second implication, very important implication, if the spectrum is not scarce, what happens to the public interest obligations of the people who are using it? And here blood pressure starts to rise and hearts start to pound a little bit. Because now the theory of the public interest obligations, at least one theory was, scarcity is what let me put those obligations on people. And actually the question is do they go away? And the answer is actually yes and no. Yes in the sense that there may be some applications that say I need special treatment. I really can't break my stuff up and let it be flung across the ocean on those silly platforms we built. I really do need a lane. And that's a fair proposition. They can show me that I'm a guy who needs a lane, and I'm a gal who needs a lane, and so I need special treatment. Well if you get special treatment, you have special obligations too. So I might preserve my public interest obligations there. Now that doesn't mean I should absolve them of sharing. I mean if they need this lane it might be

okay if I go under them, dive under them, or dive over them. So the obligation to let people infringe on their free-speech rights to recapture my free-speech rights, as best I can, might be a reasonable compromise. But if they want special treatment, they have special obligations.

Second point, and interestingly, is that over the past 75 years, the fact that they had these huge exclusive lanes, enabled them to build aircraft carriers with immense amounts of fire power with which to assault public opinion. So they have a legacy of licensing here in these aircraft carriers. I have to work that legacy off, because remember on those aircraft carriers, I got to put a few bundles of public interest stuff, labeled "public interest." The problem was I was never allowed to look inside the bundle and see what they called "public interest," so we fought about it all the time. But basically they've had 75 years to build up this armada, and we need some time to work it off. I use the analogy here—the University of Michigan case on affirmative, where they basically said, you know there's a tremendous legacy of discrimination, and we hope in 25 years we can do enough so we no longer need these public interest obligations, these exceptions to the rules. So that might be an analogy as well. But for those two issues, once we all have the same rights to speak, then we're going to have to police ourselves. The leverage for saying you have to speak this way gets reduced because I've no longer excluded people. And we have to face that.

So we have a transition here. We have a period of time, the analogy that I like to use is that if you think about the radio about 30 years, 25, 30, 40 years after the radio was first used for mass communications, it became the dominant means of communications. And with TV, it probably took about 20 years, right. After the TV was introduced, it became the dominant means of mass communications within 20 or 30 years. Well, when the Internet is 30 years into mass communications, when digital communications platforms are 30 years old, will they be the dominant means of mass communications in our society? Absolutely. We're exactly 10 years into the mass deployment of Internet as a means of communications. We've got 10 or 15 years to configure those means of communications to promote the public interest in a fashion that maximizes free speech.

So we've got some time, but this is the moment to get going. This is the moment to get going. Remember constitutional, strategic, and tactical. Constitutionally, I firmly believe, and Harold constantly tries to calm me down about this, but I firmly believe over the course of the next 20 years exclusive licenses will be an impermissible infringement on my free speech rights. We need to get working on that. We need to have a bunch of lawyers to start working on that. Just like we got rid of separate but equal, we have to get rid of exclusive licenses in spectrum. As a matter of strategy, it has become clear to me, in my opinion, that the commercial mass media is unsavable, either internally or externally. The movement for media reform and justice needs to beat on them restrictions on ownership limits. They restrict the size of the aircraft carriers, but they don't eliminate them. They restrict the size of the aircraft carriers. Public interest obligations get us to put some stuff on the decks of those aircraft carriers. But in the end

we need a different fleet to promote the public interest in the ocean of spectrum. And we have the opportunity to do so. I think we can build a democratic space in the spectrum as long as we treat it as that shared thing that we really can use.

Tactically, now is the moment. It may be an opportunity. It may be a risk. But there's no doubt that this is the time. This is where the transition is. The digital transition has [been] completely bungled. They've been sitting on the spectrum for ten years. The broadcasters couldn't figure out how to monetize it, so they have all these channels and they want to keep them, and they don't know how to make money. And they keep begging for different ways to do it. There are lots of other people who want it, and they want to free it up. And so this is the moment when folks really want to get that spectrum out of their hands and into somebody else's hands.

But I think the most important reason that this is the moment is not the failure of the broadcasters, but the success of Wi-Fi. Because Wi-Fi was an unlicensed space, and the junk bands they used to call it. You know, the Arctic Circle route that was too far and not very friendly for traffic. But here is an unlicensed space, a pure commons, that has proven exactly the fact that we don't need centralized investment or control to exploit the ocean. We simply need to liberate people to actually use it by making the investment that they want and need to speak. And that scares the heck out of the people who want to propertize it. They simply can't deal with the fact that the best example of a commons is right under their nose—came right out of their own agency that they own and operate on almost all things, the FCC.

So now is the time. But even if they could prove to me that their approach would generate more economic value, let's remember, the spectrum is not about economics—it's about politics. It's about the right to speak. And so now is the time, as I say, to reclaim the First Amendment, to take it away from the broadcasters and return it to the people, the citizens in their communities. And you'll get lots of examples over the rest of the day about how that can be done. Thank you.

Becky Lentz: And we're just getting started. So, great, thank you, Mark. Well, I just want to mention that we have a special person here today with us leading our first panel, my former colleague here at Ford, Emy Tseng. And our first panel that she will be coordinating for us gives us a glimpse of the promise that airwaves are as a force for social change. So we have—what we're looking at are case studies and examples to make it really real for people as to how different communities are using this new opportunity. And I think our four speakers will touch on various things having to do with the spectrum and innovative ways to build community, bridge the digital divide in rural and underserved areas, and also enhance civic participation. So Emy, let's just give a little intro for those who haven't met you yet. She's now currently senior policy advisor at the Community Technology Foundation of California and managing director of the Innovation Funders Network, which is a group of grantmakers, and it is global, who

support technology for social change. Emy is well known to many in this room for her previous work as Program Associate for us here at the Ford Foundation, and we learned a lot from her expertise and passion for wireless. So Emy, please take it away.

Emy Tseng: Good morning. Hi, I'm really honored to be here both representing IFN and also because as many of you know, this particular issue is near and dear to my heart. I started working on it with Community Wireless Group here in New York. NYC Wireless had the privilege of working with Becky on those issues here and have continued this with my policy work at the Community Technology Foundation of California.

So in this morning's panel we're going to hear how spectrum is being used as a resource, not only for community development, but for community empowerment. We've heard about new wireless technologies such as Wi-Fi, mesh networking, that use spectrum more efficiently and without interference, and we'll hear more about the policy impact of these new technologies. Technologies can also have a profound impact on communities, and their ability to provide a communications infrastructure that is more accessible, affordable, and with more relevant content. Communities around the world are leveraging these technologies to design, build and control their own communications infrastructures. The reasons for this are both technical and economic. This technology can enable people to communicate directly without centralized control. It removes centralized barriers and gatekeepers to access to the spectrum, to the deployment of equipment in the network, and to who can provide services and content. Again, the economics have changed with this new technology. Network deployment is much more affordable. The equipment, the transmitters, and receivers Mark talked about are standardized, ubiquitous, and becoming cheaper all the time. Also, as for the actual deployment costs, since you don't need to dig up the streets to every home and business, the deployment costs are much lower than other Internet broadband options such as cable, DSL, fiber to the home. Because of these factors ownership and therefore control over the network can be distributed amongst many entities—individuals, institutions (whether commercial or nonprofit), and communities. With this control, communities can become empowered to provide access regardless of economic means, race, gender, and class, foster open participation and exchange of ideas and information, amplify a diversity of community voices, and foster civic engagement and cultural identity within communities by providing opportunities for localized content and services.

In this panel's session we will hear how nonprofit and community organizations, tribal and local governments, are deploying wireless technologies to increase engagement and cultural identity among their community members. First up we'll have Randall Pinkett of BCT Partners, who will be speaking about their experiences deploying and using wireless technology to build community amongst residents of low-income housing and neighborhoods. Then we'll have Matt Rantanen of the Southern California Tribal Digital Village, who has deployed a wireless network across 18 tribes in San Diego County, and helped these communities connect and reclaim their cultural heritage. Hanna Sassaman

of Prometheus Radio Project will be speaking on how they're looking to apply their barn-raising model to mobilize communities around these issues. And Adam Werback of the San Francisco Public Utilities Commission and the Common Assets Defense Fund will speak about the city of San Francisco's plans to provide Internet access to all its citizens and that whole process.

Randal Pinkett: Good morning, everyone. My name is Randal Pinkett. I'm the President and Chief Executive Officer of BCT Partners. We're based in Newark, and one of the areas of expertise that we maintain is working with community-based organizations around deploying wireless technology, particularly low-income, underserved communities. I'll be talking about community wireless and community building. And let me also thank Becky and David and the hosts of this event for the opportunity to be here, and also Emy for moderating. When we get to presentation what I'll be talking about is, we've done a number of installations in low-income communities across the country—Philadelphia and New York; Roxbury, Massachusetts. I'll be talking specifically about the project in Roxbury. And suffice it to say, there have been a number of legislative and technological trends that we've observed over the past few years.

Many of us are aware of the diminishing price points of technology, as well as the fact that broadband technologies like DSL and cable modem have become more affordable and more accessible. At the same time we've witnessed those technological trends we've also seen—I mention the technological trends at the bottom of the slide. But at the top of the slide, on the legislative side what we've also seen is two trends. One, certain states are now allowing equipment donations to receive tax credits. And so nonprofit organizations can now acquire telecommunications equipment, and that can be done in return for tax credits.

But similarly on a state-by-state basis, if we go to the next slide, if you look at housing policy as well—if anyone is familiar is the Bring It Home campaign, "It" being information technology. One of the groups we work with very closely, One Economy Corporation based in D.C., is leading this campaign to amend the legislation in various states as it relates to how affordable housing is built. So if you're familiar with the process, you know that RFPs are issued where developers respond to those RFPs. Well nowadays in many states—in fact 29 plus the District of Columbia—those responding to the RFP would either be required, or would have incentives, to include broadband infrastructure, or perhaps wireless infrastructure, in the infrastructure for the buildings that they're proposing to construct for low-income families. And so that opens up an entirely new realm of opportunity when we think about affordable housing being equipped with the infrastructure for providing broadband. And in some instances the cost for that provision is being built into the operating cost for the building that's ubiquitous to the residents that their rent is actually paying for a broadband high-speed Internet connection. Next slide.

And so the example that I'll share today, in my brief time, is the one that we did in Roxbury at a housing development called Canfield Estates. At Canfield we essentially worked with residents and established both a computer-training program at the community technology center on the premises. In addition to that, we were able to raise funds and provide families there with computers in their homes at a subsidized rate. That was coupled with an online Web-based community building system, or application, that allowed residents to both communicate amongst themselves, but also gain access to information concerning resources and assets within their community. Eventually, and I'll talk about this in a moment, we were able to convert what were originally broadband connections to the home with a wireless installation that allowed residents to get online for free. Next slide.

And so the project itself has been featured in CNN.com and a variety of other venues for being one of the initial low-income communities to receive wireless. We did this back in 2000, 2001. Next slide. Here are a couple of digital photos of the housing development. It was demolished in 1997, then rebuilt as townhouses. It was formerly a medium-rise development. Next slide. This is the front of the building. The next slide gives you a view of some of the wireless antennas above the roof of the community room. Here are some photos of happy Canfield children doing happy technology things. Here's another look of some of the youth in the development. Next slide.

Just a quick snapshot of some of the activities that were conducted. Again, originally we had wire connections to the home. We went wireless. That opened up the possibility for more residents to get connected to their homes, many of whom took advantage of the opportunity for subsidized computers. Residents were involved in both interviewing their neighbors to get an idea of the kinds of needs and interests they had and wanted to see addressed through this initiative. That was coupled with an asset mapping initiative, where one of the central themes of the project was looking at ways to leverage and identify existing resources in the community that could then be leveraged and mobilized. And by that I'm talking about the skills and capacities of the residents themselves, how can we map those capacities—local nonprofits, churches, schools, other institutions that are community based. That was also followed down the road with a post-assessment where residents were interviewed to understand how this overall initiative had changed their lives and compare that data to the original assessment to both do a program evaluation, and also share the findings of the research, which I can perhaps discuss during the Q&A.

Here are a couple of quick looks at some of the products, I suppose, of the project. Let's look at the result of the asset mapping, where residents were looking at identifying resources in the neighborhood. Next slide. Again, the mapping of residents capacities was then converted into a Web site that residents then had access to to identify someone in their community who might provide babysitting, or know how to do plumbing, or have an interest in something that they might share—sewing, cooking, etc. Next slide. Some of the examples of projects that were undertaken for the youth and seniors during Black

History Month—creating Power Point presentations, a community newsletter that was distributed electronically, a security-tips discussion forum where, if anyone saw suspicious activity in the neighborhood, it could be posted online and made available immediately to all the families in the neighborhood. And lastly, in underemployment, a Cisco Network Academy where residents were being trained in how to design and manage computer networks as part of a training program for employment, but also for the network development itself. Next slide. Here's a look at the newsletter. Next slide gives you a look at the Black History Month contest. Next slide gives you a look at the Security Tips Forum. Next slide gives you, finally, a quote from one of the residents that to me summarizes the difference it made in residents' conceptions of themselves, as well as their community and the possibilities that they could then see for the aforementioned. She says, "The project has changed my life in more ways than one. A good example of this is that I have found enough courage to teach myself html. Had I not had this opportunity I might still be looking to muster up the courage. I know that technology is key to the future, and I know that I personally could do anything with it that I put my mind to."

So that just gives you a snapshot of how the project has affected the lives of the residents. And perhaps during the discussion we can get into more detail. Thank you very much.

Matthew Rantanen: Hi, I'm Matthew Rantanen. I'm the Director of Technology and Web Services for what is the Southern California Tribal Chairmen's Association, and we started a project back in 2001 called the Tribal Digital Village.

So I'm not going to talk to these slides. This is visual to my jabbering. I'm just going to let them run, hopefully they change about every 15 seconds, and it will tell me when I need to stop. I'm a visual person, so I thought I'd bring pictures. Pictures help me a lot.

So, I'd just like to say that the way that this started out—Southern California Tribal Chairmen's is 18 of the tribal leaders of the federally recognized sovereign nations of San Diego County. They've been together for 33 years as a nonprofit organization to gain strength in numbers against federal grants for welfare, commodities, housing efforts, things like that. And in 2001, Hewlett-Packard was giving away Digital Village grants. And there was an opportunity there to match that funding to the technology that existed from another project running out of UCSD called the HPWREN (High Performance Wireless Research and Education Network) project with Hans-Werner Braun, running out of an NSF grant to bring education over a network, and to bring it back to UCSD and to hop some reservations. People realized that that opportunity existed and to bring that together with a bunch of money and all the tribal leaders, we could create something that was going to make a difference.

So in comes the Tribal Digital Village. It was created in 2001, like I said, and it was funded by HP through 2004, March. And that funding has obviously ended, and we're out running on our own now. We created a high-speed wireless network using Wi-Fi

technology, point-to-point, hub-and-spoke method. As you see some of the things on the screen there (refers to PowerPoint). We use a lot of solar power. We're in the middle of nowhere. Reservations in San Diego County are in the mountains, in the extreme areas geographically. It just so happens that's the coolest place to put point-to-point wireless because you can see everything in the world. These are some of our relay towers and backbone nodes that are supporting the network. We have quite a bit of bandwidth piping through these things, and we support 65 community buildings on 18 different reservations, and 14 tribal administration buildings are included in that. What that does for the tribal administrations is it allows them to reconnect the three original tribes that were in San Diego County as they were prior to the reservation movement. They are divided into 18 different reservations now, dividing family lines, dividing friendship lines, and culture.

So I wanted to touch on a few thing regarding benefits and successes. We've tribally designed this. It's tribal owned and operated. It all exists on tribal land, so we're not dealing with rent. We're not dealing with city codes, county codes for dealing with things. So we've got a lot of freedom there. And what it's done for some of the departments on the reservation—we look at the EPA departments where people are trying to better their living situation in their community by changing the things that have happened in the past—pollutants and things. And they've gotten grants online. They're getting the ability to apply online for federal funding and for assistance to help their community, to help their people understand. We're doing things in education and culture where there's a huge language preservation movement in the tribal reservations that are down there because there are very few tribal native speakers that are left. There are actually more historians and linguists who know the language, than the actual tribal members. And so we're trying to bring that back to the people through the technology. We're trying to reconnect the tribes, reconnect their culture, give them online tools, access to resource centers. We distributed about 1,100 computers with the HP project. And so there are several opportunities for people to come out into the community and work.

That last picture was the Shadow Project that we created. At the very beginning of this, kids went out with GPS units, topographical maps, and then hiked all the peaks in San Diego County that were tribal, and did line of sight surveys for the initial project. That project, they actually built a relay site. They actually programmed Web sites and learned how to manage Web assets. I taught them the Web side of things, and Michael Peralta, my network technician person, taught them all the stuff. And that was built by them. So we're taking the youth into this because we know that the youth is our future. We're bringing them in because the Indian kids, when they go to regular high schools there's sort of a culture gap there between the people. There's a technology gap. So when the Indian kid goes home to do his report, and he comes back to school and it's handwritten and there's a picture taped to it, versus high technology, access to Internet, all the resources you can get, all the photos you can get, and printed out on nice color printers.

We had to fix that. We had to bring those two things together. Where everybody else had this benefit, these kids need this benefit. So we brought them in.

We're fairly high profile as you see there. And I'm here today, so that's pretty good. We've really increased the graduation rate at high school. I don't have exact numbers for you, but just from personal experience— my wife—her daughter is now at the Academy of Art Institute in San Francisco, and she is in fashion design. And about a year and a half ago, she was in trouble and not going to be passing high school because of the classes she had missed. But through the online connections and the Cyber High programs, and the things that we run out of the resource programs, she was able to make up classes, graduate on time with her graduating senior class, and now she's in college. And her tribe is actually paying her tuition, which is totally cool.

So as far as community involvement, the tribal reservations they all gave a representative to represent their tribe and bring this information back and forth. And the community youth through the Shadow Projects have come together. And what we've done is try to build something that is going to keep moving. So this building here runs the network. And the last shot you saw was the one that runs High Res Digital Solutions, which was part of the equipment grant out of Hewlett-Packard. We grabbed that opportunity and said, we want a variable data digital press. We want to start a printing press business. There's only one other in San Diego. Why not take care of this, make it a sustainability model, bring money back, bring education opportunities, training opportunities to the people, and basically come full circle, having brought the technology in and then bring the money back in out of the community and keep it local within San Diego. And just so you know, we have training at those facilities—Cisco, for A-Plus, for Microsoft Certified Software Engineer classes. And we're trying to bring that community up to speed. So that is a snapshot, mini-picture of the Tribal Digital Village. So that was four years in five or six minutes. Thank you.

Hannah Sassaman: So I also have a slide show. It's similar to Matthew's in that we just get all of our energy at Prometheus Radio Project from the folks who come out and build stations with us, and who are now participating in some of these wireless projects. So there aren't going to be any charts or graphs, just my weird little captions and some wonderful people.

I'm Hannah Sassaman. I'm an organizer with the Prometheus Radio Project, and we're a group that works with communities to build radio stations in the United States and around the world. For so many communities who can't tell their own stories to each other, having a community radio station is the fight of their lives. Each time Prometheus helps to build a new station we gather people together through something called a "barn raising," which I'll explain in a little more detail later. But every time people come together to build a station a community of activists is galvanized, super energized, to support it and to work effectively on a policy level to win more noncommercial, low power FM stations. So these groups have inspired us to ask a new question.

What can we do as a community to help build communications tools for folks in big cities primarily, who are currently prevented from using the FM band that Mark Cooper was describing as this band where there is an artificial scarcity. And so, we want to help to work at Prometheus to build tools for communities to tell their stories to each other and to demonstrate the importance of communities owning their own media. And so one answer that we've come up with, that our activists have pushed us to, is using Wi-Fi, is using wireless. Next slide.

Unlicensed spectrum, which is not yet claimed by the government or corporations that can profit from it, can be used in a variety of appropriate and effective ways. So today I'm going to talk a little bit about one community that has invited us to work a little bit with them in North Lawndale, in Chicago, to help them get onto the airwaves using this barn-raising model, and some of the inspiring policy successes that have already been born from the energy in that model. And later this afternoon you'll hear more about those battlegrounds where things like this can be very helpful. This is Michael Oh, who is a wonderful organizer working out of Boston, and this is a station that we built in Portsmouth, New Hampshire. And originally we thought our link from the studio to the transmitter wasn't going to work, that they weren't going to be able to lay out the copper line to make that connection between their studio and their distant transmitter, so we actually built an effective wireless studio transmitter link. We didn't have to use it eventually because the phone company came out and laid down the copper wiring, but this was an incredible thing for us to learn.

What's a barn raising? When people come together to build new radio stations, the event infuses the low-power FM with amazing energy. The station becomes a powerhouse of strength, growth, and community support in organizing on the local and national level. So two or three times a year, we organize hundreds of volunteers to come together and build a new station from the microphone to the antenna—the entire thing, over the course of one weekend. Next slide.

We sleep, or we don't sleep actually, under tables in the studio. And we have over 40 workshops that turn eager volunteers into experts with a soldering iron, with the production studio, with tuning transmitters, with learning how to get community donations, with getting press, with everything you need to get a station born and running smoothly. When we build Radio Consciencia in Florida, for example, with the Coalition of Immokalee Workers—next slide—we got engineers, volunteer lawyers, accountants, people from all over the world came out to this. Radio Consciencia received a donated console from a local station worth over $5,000, from WMNF. Volunteers from Chicago, from Berkeley, from Canada formed incredibly tight relationships with that station, and are now planning to go down there later this winter to help them move their studio to their new building.

And now let me talk a little bit about what that station did for that community. The station helped this organization, the Coalition of Immokalee Workers, who are farm workers in Southwest Florida, raise the attendance at their local organizing meetings from 30 people, that they would knock on doors, go door to door to get to come to the meeting, to over 150 people came to their local meetings. Local workers wait outside the station for hours to give shout-outs to their friends in the indigenous languages of Guatemala and Mexico in Zapotec and in K'iche. Now because of this station as part of their major organizing, they have actually won their campaign against the Taco Bell Corporation, who is one of the major purchasers, just this week. They had been fighting Taco Bell as the major corporate purchaser of the tomatoes they pick, to pay them *un centamo mas*, one penny more, per bucket of tomatoes they pick, and to assume corporate responsibility for indentured servitude and slavery in the fields of Southwest Florida. And we're very honored that this station was a great part of that organizing. Next slide.

The conclusion, just for this, is barn-raisings work. They are able to develop long-term successful support locally for a station, and they create a hotbed of policy organizers, people from CIW came up to the FCC on February 8, and were able to very strongly convince commissioners and staff how important real local radio is.

So how does the barn-raising model apply to communities pursuing wireless as a movement-building tool and as a way to make sure that the new wireless network is strong and supported by local folks? The case study I'd like to talk about is the Center for Neighborhood Technology's in North Lawndale in Chicago, which we had been invited to participate in along with Free Press. Next slide please.

With great excitement…this is Roger. The picture isn't so great, he's possibly the nicest guy you'd ever meet in the universe, and he's standing up there on the old Sears Tower in North Lawndale where they have a wireless node broadcasting wireless all over the neighborhood as one of their beginning projects. So we'd been invited to work with the Center for Neighborhood Technology. They're a 25-year-old sustainable business organization dedicated to making the home city that they're in—Chicago, Illinois—incredibly sustainable for their communities that live there. North Lawndale could never have a legal low-power FM radio station, or almost impossible for them to get one because of current regulations, that I can maybe talk about during question-and-answer, preventing cities from pursuing low-power FM stations. But by broadcasting high-speed broadband Internet connectivity from the old Sears Tower, and repeating this signal from the roofs of homes and community service organizations, already—and they've hardly begun—there are 20 families receiving free Internet access using donated and rehabilitated computers, and receiving content produced by local community partners. In this historically black community, community partners are looking forward to doing a barn raising this spring, building 50 repeater nodes—next slide please—early this June. Those are some of the nodes. And I have an antenna—hold on a second—similar to what they're using with the Tribal Digital Village, which can shoot wireless in one direction almost a mile away or more. They're building a mesh network,

just like Mark Cooper was describing, in Chicago, which the more families, the more homes, the more businesses that come online, the stronger that network will be, the more pathways communities will have to distribute content that they make themselves. It's so exciting. I helped to make this; it's really not hard if anyone wants to learn how. So early this June we'll be coming together to do this mass build, getting hundreds of folks online to take back their airwaves.

Let me describe a little bit of the problems that community members have been telling us about in North Lawndale that can be ameliorated by this network. The city of Chicago is shutting down bus lines in that neighborhood, leaving students without a consistently reliable way to attend their high school and college classes, and if they need to access the Internet to do some of their work, travel to get to a place where they can use it is arduous and long. Community members in North Lawndale who have tried to buy and rehabilitate property themselves have faced rebuffment; they've been rebuffed by developers locally, who have then been selling property to outside developers for a pittance. Next slide please.

Kids and their allies in North Lawndale are producing amazing music and local news at a collectively run art space called the Crib Collective, for example. That's another space up there that's a little outside of North Lawndale—Street Level Youth Media. They're also producing content, but they don't have really dedicated ways to distribute it. They have some relationships with the local community access station, but they aren't able to share it with each other in the ways they'd like to. Over 55% of the community's residents have interacted in some way with the criminal justice system. There's high unemployment, and 45% of the households are below the poverty line. And SBC, the local incumbent broadband community provider for things like DSL, is charging incredibly high prices to families and businesses that want to get online. And so members of this community in conversations with the Center for Neighborhood Technology determined that they wanted to build a community Internet network that they could control, that would benefit them.

And so, here are some examples of some of the community partners. The North Lawndale Employment Network is a group that provides job training and placement for ex-offenders. They want the wireless to be able to train folks to troubleshoot that network and to be some of the first responders to build it, some of the folks who actually put it out. This is incredible job training for some of these folks. The Carol Robertson Center for Learning is a multi-cultural nonprofit partnership among parents, youth, and community, and they teach a variety of classes from childcare to GED. They really want to reinforce the lessons that are taught in those classes at home, but they don't have widespread computer distribution and connectivity. So that's really, really hard for them. Next slide please.

The Neighborhood Technology Resource Center depends heavily upon the skills of Rogers—basically, one neighborhood technician—to make sure everything runs

smoothly both there and with the initial build of that network. So Rogers is really looking forward to this full build, these 50 nodes, so he can get a little bit of help; some other folks can help that. And there's a bunch of organizations in town, again, that want to distribute content, including the Crib Collective and the *North Lawndale Community News*.

Now why is a barn raising especially helpful for this kind of community wireless network? Next slide please. It can really strongly affect the policy fights around municipal wireless for the city of Chicago. CNT and the folks in North Lawndale have already been incredibly successful in using their community model to influence the city of Chicago as it chooses and plans to pursue wireless. They've met with the Chief Information Officer of the city, Chris O'Brien, a number of times. And just on Tuesday, through leadership of this project, they were able to get the city to commit to looking into municipal telecommunications and to open a task force, to actually pursue it. That's a huge step for the city of Chicago, the third biggest city in the country. And Mayor Daley has a lot of leadership on the National Conference of Mayors and the League of Cities, so we're really looking forward to their enthusiasm that's being inspired by North Lawndale.

A barn raising can only capitalize on that good will on a political level. If you have a big outpouring of energy with a lot of community members coming in, and a big press push, and a lot of policy folks coming down, it can really raise the momentum level. It's been very successful in the past. Next slide please.

Because of this build we can get lots of local volunteers and techies interested in forming networks of their own, and supporting the new network at CNT. We're really looking forward to March 23 when the local N-TEN conference is going to be coming to town, and community partners and local volunteers will come and build a lot of these nodes. Next slide please.

And how can it inspire other communities? Prometheus is touring and speaking now on wireless barn raisings, and helping more communities building community wireless networks. We're working with CNT to document this process for fights in other cities. And we're hoping to engage more directly in municipal planning of wireless projects like in Philadelphia. And we're hoping to work in San Francisco as well. Last slide please.

Because digital broadcasting is the future, we want to work with communities who want to get onto this spectrum now, so when corporations try to claim it, there's someone already there. We want to squat this spectrum, and when government tries to regulate it, there will be incredibly just cause in regulating in favor of us, in favor of our communities. Thanks.

Adam Werbach: Ladies and gentlemen, socialists have seized San Francisco. So you learn as a public commissioner very quickly that the first thing you should not do is

embarrass the mayor. So I received an early e-mail leak from one of the downtown business interest groups in San Francisco with this headline. "Socialists Seize San Francisco." Rally the troops. Take down the mayor because he's a socialist. And I called him up, and Mayor Gavin Newsom—this is San Francisco politics so he ran as sort of the right wing candidate. He barely won over a Green candidate. This guy was a hotel owner; he owns wine stores, so to be called a socialist, you really don't want your commissioners making you be called a socialist. So I called him a little bit trepidaciously, and said, Mr. Mayor, you're about to be called a socialist. He said, okay, two things. If you think I'm concerned about being called a socialist, you obviously missed the gay marriage battle. Number two, they're overreaching, and as soon as people start connecting and over dramatizing what we're doing here, talking about building a municipal broadband network, getting public sector to expand rather than contract, they'll begin to lose.

There is a saying, sort of a Finnish joke. I'm told this is the only, or most famous, Finnish joke. There're two Finnish warriors, they come over a bluff and they enter this valley, and there's two of them versus 40 opponents. And one turns to the other and say, We're screwed. And the other one says, Yeah, it's going to take us all day to bury these people. That's called *si su*, that's the Finnish word for it. And I want to suggest that we're at a moment of *si su*, where we actually are about to win, and we need to look at that sort of optimism.

So I'd like to share with you one particular battle in San Francisco, where we are trying to basically do exactly what Mark has asked us to do, to treat the spectrum as if it were water. Next slide please. This is San Francisco. This is a mesh network. This is a park, where there is no wireless. These are the people who are now opposing building a community wireless network. Interestingly, Comcast and SBC, who are the two monopolies who control and exploit people in San Francisco for $50-a-month cable access, are not in front. In fact, they are just people. They fund all the rest of these groups to actually be in front for them. Next slide. So here at the lovely domed Beaux Arts San Francisco City Hall on Tuesday—next slide—we had a battle. This is government television blown up. Consumer rights people say, yes, we need to have community wireless. And this is the Pacific Research Institute. Pacific Research Institute is, as anyone knows from the environmental world, a think tank that constantly says environmental regulation makes no sense, etc. They are now having a major new program on spectrum, mainly because it's their most lucrative new area of research, and completely funded by SBC and Comcast. Next slide. This is the Committee on Jobs which said building a community wireless network in San Francisco will cost thousands of jobs. This was quickly rebutted by the Communications Workers of America, who spoke next and said, we work—there are 6,000 of us who work for SBC and Comcast, and we believe not having competition puts our jobs at risk. Next.

This is the Chamber of Commerce. In her hands are seven pages of the Yellow Pages. She dramatically ripped them out and said, passing a municipal wireless network in San

Francisco would be like ripping seven pages of business out of the fabric of the family of San Francisco. Now walking into this, we didn't actually have all the votes. That got us all the votes. A member of the commission asked, so how many of those businesses actually provide high-speed Internet access? And she said, well, two. And how many of them would actually benefit from free or low cost wireless? And she said well, we have 18,000 business members. And he said, now it's time to ask them what they think. Next slide.

This is SF land. I just want to very briefly say the most exciting thing, at least for me personally, is the extraordinary upwelling of support by individuals who are just going out and doing it. You've met some of them here today, and these are some brightest people in the world. But here's someone saying, well yeah, we can do this. This is possible. And every technological fact that was offered by the opposition was actually countered, not by Utility Commission staff, but by citizen volunteers who said, we know better. Next slide.

That's me. Next. San Francisco on Tuesday passed and approved getting into a new business, which is the provision of municipal telecom services. Like hundreds of cities across the country, we're putting what we think to be facts on the ground showing how cities can actually do this themselves and make it work. I want to share, just to be brief; I just want to share three lessons I think I've learned in the environmental movement that I think can be applied here. If it is true that they are overreaching, it is time now to think big and start small; think globally, act locally. It's these individual projects all over the place that are actually just going to take the market. Second, service and quality matters, and it's the part where I'm most worried right now. We have a great promise with this new technology. We're getting the access we need, but can we actually deliver? Can the public sector do as well or better as the private sector? We cannot be an inferior choice. And third, we are in a race. As Hannah said, to squat the spectrum, that matters, but we are in a race. And what goes forward from this room, this small band of rebels here in this room, really matters. If we win, and if we continue moving forward, it will be extraordinary. If we slow or falter right now, the opportunities that present themselves today will be forever foreclosed. So with that, I look forward to talking to you afterwards. Thank you.

Emy Tseng: So now we'll move on to the question-and-answer session. And actually I would like to start out with a question. So for all of you, what is the importance, or why do communities need to own and control their own network, their own communication infrastructure? In your personal experience, what are the benefits of that versus going outside for service provision?

Hanna Sassaman: I can start with that really quick. The communities that we've worked with all around the world often are dealing with great oppression and lack of ability to tell their own stories in the communities in which they live. For example, the Coalition of Immokalee Workers is just a really fabulous example. This past winter,

when the hurricanes went through Southwest Florida, a number of these workers were hired by local contracting companies to clean up the streets, which was great. This is great work for them, especially in this part of the year. But one of the companies just did not pay the workers, didn't pay anybody. And so, if these folks hadn't had a radio station, it would have been very difficult for them to organize, for them to come together to demand their pay from this company that had defrauded these workers. Because they did have this radio station, they were able to get 300 of the workers to come that night to the Coalition building. They were able to get the president of the corporation, called the Balance Corporation, down from his headquarters, and he gave them that night $57,000, the money they were owed. So it's the fight of their lives. These are workers who are completely without rights because they don't speak English, many of them. Because many of them are immigrants, they are not afforded the rights that many of us take for granted. If they own their own media they can demand those rights.

Randal Pinkett: I would just add, I guess the way I think about it is, and I think this is even changing over time, but there's an economic component to ownership. When I look at the experience in Roxbury or other areas where we've worked, the networks that have been implemented are creating opportunity for people to get trained in how to manage those networks, for people to have jobs on an ongoing basis, and even for instances where we're looking at affordable housing as I mentioned in my presentation, when you think about $40 for a DSL, or $39.99 a month for cable modem, the networks we're implementing are costing residents either nothing, or they're costing them a nominal fee, say $3 to $4 a month once you spread the cost of the connection across the multiple units that it's servicing. And so when we think about the economics there, there's money saved, and then to the extent that the community owns the network, they can put the money back into the community either because there's money freed up, or because they're the ones that are generating the revenue that can then be earmarked for the issues or purposes that they deem important.

Matthew Rantanen: I just want to say that these kinds of networks and stuff for the tribal communities, it allows them to take control of their futures and not be dependent on what does or does not exist for rural underserved communities.

Adam Werbach: In San Francisco, you cannot get a high-speed wireless connection in Bay Shore or Hunters Point, the largely African-American neighborhoods in the city. This will make that happen first.

Mark Cooper: Let me invoke a speakers' privilege and answer the question as well. I think it's absolutely important the oppressed, the underprivileged, the underrepresented, the lefty loonies in San Francisco, they're very important, okay. But this movement will win not because of those communities who benefit most, but because there's a much broader dissatisfaction with the media system in this country. The last election showed a tremendous desire to participate and speak. The bloggers are driving the journalists nuts, right? So I think that the ability to control your own media will succeed as a complete

revolution in the First Amendment in part because these special communities are there, but also because there's a deep-seated desire to change this system, and, as I say, the opportunity. These are important communities, but we need to think about that broad base as well.

Comment: Basic question: How do citizens access this? How do they learn to use it? How do they get educated? How much time do you have to spend on that?

Randal Pinkett: I can start. In many communities nowadays, you find community technology centers; you find training programs. There was an entire movement through the nineties primarily under the Clinton Administration to establish technology programs in low-income communities. Those dollars have dried up, but the infrastructure still exists and there are intermediary organizations like the Community Technology Centers Network. There are best practices that are being shared at conferences and convenings. There's a whole infrastructure that includes libraries, churches. It includes schools where their labs are being utilized in the after hours. And so, I would argue that nowadays, particularly in the urban areas, you'd be hard-pressed to find an area where you can't find a technology training program, even in the wake of the federal disinterest and drying up of funds.

Matthew Rantanen: This is actually where we spend most of our time, other than building the network. It's community resource centers that exist at each tribal location that allow community members to come to those places on the reservation to use the facilities and to benefit from the technology. We also hold trainings there, and at our headquarters office, we're holding Cisco Academy training, as well as A-Plus training, and then just general Internet-use training. But we are building an audio and video studio currently that will produce online content that will be accessed so that people can train themselves online culturally and technology-wise. And there was one more point I wanted to make about that, which escapes me.

Randal Pinkett: It goes without saying, the biggest challenge we've seen in that regard is literacy. You can't tackle technology-training issues without addressing the literacy issue at the same time.

Hannah Sassaman: The way that they're addressing it in North Lawndale is that the Center for Neighborhood Technologies and Prometheus and Free Press, as groups that have some resources to gain, are going first to the community organizations that are strong in North Lawndale that are excited about using this technology to help them better accomplish their missions. And then when those groups are activated, when they have the training and the resources, community members that already have relationships with those various organizations, for a wide variety of needs that are served by those organizations, go there first. So it's not like we're coming in as an outside organization and developing an infrastructure. Just like we were hearing from Randal, there is an infrastructure that exists where communities share resources and work together to solve

problems. It's by giving this network to those organizations and helping them understand it, and helping them to use it, that makes it possible for community members to become literate and active in owning their network.

Mark Cooper: If Sasha Meinrath from CUN and Free Press were here, he would make the following point: This technology is simpler than a washing machine, and it will get simpler and simpler over time. The hardest part about installing this kind of node—you need a PC and you've heard about ways to raise it—is to take the two screws out of the back of the PC and slide the Wi-Fi card in. Once you have done that, you turn the computer on, put your CD-ROM in, and it runs. And one of the things that makes this so potent is that this isn't even off the shelf technology. This is out-of-the-garage technology. You run these networks with discarded PCs. You upgrade them for a couple of hundred bucks, and you deliver service for pennies on the dollar. So it's not magic anymore, or it's magic the way we mere mortals love magic—you plug the washing machine in and you turn it on. That's where we are and that gives you speech. So on one level the human capital skills that they talk about, which are needed in these communities, are all that is needed. You need nothing else to make this technology accessible to everybody.

Matthew Rantanen: And on that note the Tribal Digital Village is working with Free Press and with Q Wins Project with Sasha to actually bring these wireless mesh technologies through the end of our hub-of-spoke technologies and build out the community to the tribal home, build out this network to the tribal home, and give them access at their homes.

Sasha Sassaman: And in North Lawndale that's the technology we're using. It's only that technology.

Comment: I'm Joan Shigekawa from the Rockefeller Foundation. My question is about the overall strategy. Do you accept the hypothesis that there's a tipping point in the city-by-city strategy in moving this forward? Where is the tipping point? Where are we now? And where's the leadership group in the city-by-city national strategy? Then I have a second question that's about global strategy.

Hannah Sassaman: Well, I could talk a little bit about how it works in Philadelphia. If we're going to posit that a strategy, that the one that Prometheus is positing, is that community groups that take back this technology and use it can then influence the decisions of cities to choose to deploy these networks and to choose to be leaders in these networks. It worked pretty well in Pennsylvania this past fall. The state of Pennsylvania when they were hearing about the fact that the city of Philadelphia was planning to build a municipal wireless network, Verizon and Comcast went a little crazy. They went to Harrisburg and tried to ram through legislation called House Bill 30, which would defeat the ability of the city to do it. It was community groups that work on media issues like Media Tank in Philadelphia, and we helped a little bit with that, as did Free Press, and

community organizations that were already using wireless that spearheaded a very successful campaign, a 10-day campaign, because that's all the time we had to try to defeat the legislation, which ended up protecting Philadelphia's right to build that network, although we lost it at least for now for the rest of the state. What that did was it activated Diana Neff, who is the Information Officer in Philadelphia, who's really the spokesperson and the main architect of Philadelphia's plan. And so I would say that community engagement is necessary with the municipality, and Adam can probably speak to that as well. If the community engages directly with the municipality, they can encourage the municipality to build a network, which actually serves communities, and they can encourage that municipality to speak to fellow municipal leaders at conferences and in other situations.

Adam Werbach: The good news here is that there is no leader to this. This is happening all over the place. You actually see the people who are presenting to you today are actually the most important leaders in this. There are lots of others. There's a group called Muni Wireless, which maps a lot of what cities are doing right now. The fact that it's leaderless is probably why it's going to succeed. No one's going to get in the way and provide rules and tell people how to do it. And that's actually why I think we're at the tipping-point moment with this. The challenge is that our D.C. allies are actually holding the line for us and that our state-by-state battles are happening as well because in 19 states right now we are forbidden from doing municipal wireless and **[inaudible]** could actually be prohibited as well.

Mark Cooper: (off mic)

Adam Werbach: The challenge right now is that we want—some of us want—to expand the public sector. And there is actually a battle over this, which is a separate other battle that's conflated with it. The good news is that there are things like—the American Waterworks Association is having it's meeting in San Francisco. The mayor—there will be a number of mayors who are actually going to talk about taking municipal water utilities and making them wireless facilities. There is a push on those sorts of things.

Matthew Rantanen: The best example is: Go out and do it as a community, get it done, and then hit the wall with somebody who's got an issue with it. Show a great example of how this works, and more people will adopt it. Just on the spectrum issue, I know that spectrum is free, but currently there are people trying to govern it. And at the world level, to go to your next question without having heard it yet, the US FCC took the example of Tribal Digital Village to the Geneva Wireless Summit a few years ago and used that to the world to say, keep unlicensed spectrum in the world because this is what you can do with it. And the African vote swung the world decision, and they changed their vote because it was very similar situations, tribal situations, where people had been separated where they wanted to reopen lines of communication. And there was

unlicensed spectrum at the world level using a local example from little Southern California.

Comment: Vince Stehle from Surdna Foundation. Just two kind of separate points. One is on the rhetoric we're using and the rhetoric we need to develop. On the program *NOW* on PBS a couple of weeks ago, that we all probably saw, the fellow from the Cato Institute was making this point that it's just unfair for the powerful cities to compete against the poor, oppressed corporations that have to be taxed and all that, and cities are not taxed. So it seems to us a lame argument, but I think we need to counter it directly that there's not some God-given right for corporations to make money at the expense of the citizens. There's a right of the citizens to have the service according to their needs. Anyway, I think that's a rhetoric point that we need to sharpen. The question is how do we organize community organizations, large nonprofit organizations to be responsive and participate in this? And other people are organizing, in particular municipalities, and that's an important venue obviously, but the YMCA might be a broadcasting giant if they wanted to be.

Comment: Marcia Warren Edelman from the Native Networking Policy Center. I just want to ask a question of the four of you because obviously these are amazing success stories, and I applaud you for all your efforts, but as I know from working with a lot of tribes that a lot of times the challenges define the action taken after the identification of an issue or a problem. And for a lot of our tribal communities, it's just getting the community aware that they either have the right to demand more, or they have the right to access the technology that they want in order to do what they want to do. So I'd like to hear what your particular challenges were in getting your projects off the ground, and where did you see some of the bottlenecking in terms of resource limitations and how did you overcome those?

Matthew Rantanen: I guess I'll start since the tribe association there. Our biggest bottleneck was educating the tribal leaders—each of the 18 tribal leaders—as to what this could provide their community. Once we got through that hurdle of individually going to every reservation to get them on board with this project, and delivered like a resource center and an example of this technology in use to better the community, then it was like somebody broke the dam and everybody came running at us. Now it is nonstop phone calls and how do I get more bandwidth, can you hook up my next community building—I've got a temporary building coming in, can you temporarily hook up this building? More connectivity, more connectivity. When are you coming to the homes? And the floodgates are open now. So it's just really that initial education hurdle and then realizing that tribal communities don't have the infrastructure. The copper that's laid down by the old telcos is junk. You get 28.8 tops in our area. It rains and it doesn't work, probably because the casings are cracked and it fills with water. We have a lot of issues like that, and they just don't have any future plan to take on the monetary responsibility to provide this service to tribal communities, especially in the San Diego area where the geography is so intense in the mountain areas. Most people think it's just

a beach, but I've got a lot of pictures. I think you saw one where they're standing in the snow at the top at 6,400 feet. So you realize geographical limitations are a small thing, but the lack of infrastructure is just an obvious thing you need to work around. The education is the big key.

Comment: David Haas with Grantmakers in Film and Electronic Media, but also the board of the William Penn Foundation in Philadelphia. I didn't want to take away from the community-based model, which I think is really exciting, but I wanted to go back to the municipal idea. And also, thinking about maybe a pragmatist's point of view, which may not be in the spirit of today. But can you tell me more—I'm very intrigued about the chamber of commerce in the fact that you have a broad group, and in some of the discussions in Philadelphia have talked about business opportunities that arise with free wireless in the city. And not that that should be the goal, but one of our concerns that we find in the nonprofit sector is the economic viability for businesses. Is there any area there where small businesses can find this an opportunity as well? Not that that is necessarily the mission of our thrust, but pragmatically at some level that would be an interesting discussion. Has that come up in San Francisco?

Adam Werbach: Well truthfully we beat ourselves up by not turning those people out. It's so obvious that the people in those seven pages, 95% were allies, but they were completely unorganized. In Philadelphia, the Bay Area, the businesses are actually being hatched there that are creating technologies that are being sent around. So I think there's a huge need to bring them together much more effectively as an effective voice. Unfortunately, they have been co-opted by fears of the public sector. So this government as an unfair competitor argument comes in, and the Chamber of Commerce basically has free reign to use that on behalf of small businesses who could actually use the government coming in there. I just want to raise it as a challenge I think we've fallen down on.

Comment: Orlando Bagwell, Program Officer at the Ford Foundation in media. I think, Adam, you said something about, can the public sector do as well as the private sector? And that was a big issue. And I wanted to unpack that. On one side, it seems to be part of that service. On the other, we would be offering a utility that can be used. My question is also about content. It's a two-tiered question—talk about those three things and the challenges of that. But also talking about public sector, how does this connect with the larger public media sector and are there opportunities there for those kinds of alliances, especially on the content side?

Adam Werbach: Well, let me mention briefly, and then Randal should probably talk since you're actually doing some of the deployments for the public sector, which I think would probably be good to mention. If we had good content, a lot of these problems would solve themselves. So to be really clear, the content drives what people want to use, so I think that's right. The more we can have content explode in the margins—and Mark and I were talking about this last night—if there's great content, then it will find a

way. It will seep through the cracks and get there. So that's sort of question number one, and I'd say, yes, let's see if we can put an emphasis on funding content that goes out through the margins in any way possible, or that connect from the big pipes to the small pipes and look for opportunities there. In terms of provisions of services, what the public sector does very well is basic services. So for example, your water pretty much—unless you live in Georgia—when you turn the tap on the water, comes out. We don't really sell bottled water, high-end services. Maybe we should, maybe not. You can actually say the private sector can take that on, but the public sector does very well with these basic utility services, and I think that's the place we need to speak out and actually articulate it. Truthfully, we work very closely with the unions. We need to figure out how that's going to work so this can actually be done cost-competitively in a way that builds new businesses, builds new jobs. So there's a lot of complications and unfortunately, I don't think we've been serious enough about investing in implementation. So my fear is, we're going to get all these projects out there and then the spark plugs that got them started are going to move on to something else, and they're going to go away. That's why it's actually one of the reasons I like the municipal model because bureaucracies are actually incredibly good at doing the same thing over and over and over again.

Randal Pinkett: I would just add very quickly two points. One, I think the points that Adam's made are good points. Wireless is essentially still in its infancy. There are really no recognized standards. Each vendor—Cisco, Proxam, you can go down the list—have their own proprietary standards for how they're doing large-scale wireless installations. Unlike water, or other utilities, where again, the technology that supports the delivery of water or electricity is very standardized. So that suggests two things, one that there are cities that are taking the lead in trying to work out the kinks of how they do this on a large scale. And I think as time progresses, it's going to get progressively easier. But back to Adam's second point, we have had significant challenges, and this answers the question earlier about challenges in community-based models to sustain wireless networks. It's not cookie cutter, and depending on the context we find ourselves trying to do an installation, whether there's public housing, affordable housing, community, nonprofit, there's a myriad of considerations. And we're just now learning how those archetypes look to say here's a situation where we know how that model plays out. And that may change over time. But the fact of the matter is, there's this 80-20 rule that 80% of the cost goes into maintenance, support, ongoing recurring costs. Someone's got to pay that, and there has to be something there to sustain it, otherwise, again, you revert back to a utility model.

Emy Tseng: And I'll just join in just to reiterate. One worry I have about the movement, per se, is there's a lot of talk about which model is best. We don't know. It's too early. In fact the challenge isn't so much the technology, the technology is forging ahead. It's really figuring out what the organizational models are so, you know, Vince talks about competition. Part of this you can put in a market context; it's allow all the options and see what works out.

Hannah Sassaman: I wanted to address the content question really quickly because you brought that up. Prometheus totally comes to this from the idea of content because what excites people about radio is, of course, the power of the technology, but also what are they going to hear on it, what can they make on it? And we can't build low-power stations in Chicago. We can't build them in Philly or San Francisco, but the broadband connectivity that is predicated by the CU wireless model, which Urbana-Champaign and North Lawndale are using, allows for huge amounts of content to be distributed and for structures for finding that content similar to the One Economy model that Randal's talking about. Basically you turn on your computer, you get a Flash page that comes up—the rap song that kids did last night at the Crib Collective, the video that the other kids did at the Street Level Youth Media Center, the newsletter that your grandmother put out. This is redefining content distribution for a community model, and that draws Prometheus to it, and that's what we're hearing from our activists, from our organizers, is that they have content that they want to distribute. And also I'd like to go further to say that content will find a way. I think that's very true, and I think it will find the money as well. If this content is valuable enough to communities, and they know it's coming from a community center that they value where their kids are safe after school, and when they're working with each other to build skills for competing in the world and for creating something that is super relevant, super appropriate for their community, then that is going to be a sustainable model. People will pay money to that organization to help support its deployment and its distribution of this connectivity. And we're seeing it happen already. I really believe that this is a new medium for the media we create.

Comment: (off mic – then comes on)...especially when you're developing, say, the example of the Roxbury interconnected community. Are you having opportunities to partner with some of the nonprofits, maybe large or small, that really have value in terms of this content?

Randal Pinkett: We've seen over the course of our work the evolution or the merger of the community technology movement, which really was looking at how do you get residents engaged with the nonprofit technology movement, which you're looking at organizational capacity building for nonprofits. When you think about innovative ways of leveraging this kind of infrastructure, one of them, particularly for underserved communities is ways that nonprofits can now engage their stakeholders in new and innovative ways. And so online case management, newsletters, events, calendars, ways of case managers communicating with their clients—there's a whole litany, health practitioners using e-Health. There's a whole range of services provided by the nonprofit sector that can now be channeled through what is now a new mechanism of communicating and interacting with their constituencies that I think is still largely untapped. And it is incumbent upon us as we're doing these installations to be connecting with the organizations that are already connected with the residents, but aren't combining what we call online with offline, so you're making the face-to-face connection, but how you're augmenting that using online techniques.

Matthew Rantenen: At the tribal level, the biggest obvious advantage is that there had been 18 different separations done from three original tribes. So opening the lines of communication or creating a new line of communication for them to use, that is content in itself or an ability that they have. But there is an online web portal that has been designed for this community that brings all of the resources for those communities into one local launching point for the Web, as well as, like I said, the audio and video studio that we're creating. And we're teaching the youth how to use those systems and then to put that on Web so that it's served to the community, so parents can see what their kids are doing in school; they can see what they're doing in after school programs. A lot of the sovereignty issues, the cultural preservation, the language movements that have gone on like that.

Comment: Michael Calabrese with the New America Foundation. I just want to make a couple of comments on Orlando's comment on content. It's also important to remember how this will facilitate community content in the sense that, for example, essentially you can keep the bit flow within your community. I know that Sasha Meinrath from the Champaign-Urbana Wireless Network used the example at a congressional forum that was had on this. He said if we have a community television station over the Internet, or if we have local video or anything, when we put it on the Internet, it goes up through Chicago and then back down to the community. Whereas when you have a mesh network, you can cache all of that right in the community. So if you want to have streaming video, or for example, on a more ambitious level the One Cleveland effort, in Cleveland, which is building a television radio, and Case Western University and other organizations are all getting together to create this massive community network, that content can just flow directly at symmetrical high-bandwidth. So you don't have to worry that Comcast has said already that it won't allow you to upload at high speeds because it doesn't want you to compete with their cable television content. You can get symmetrical high speeds with that content right in your community network, and it's much more efficient and you're protected.

The other one was on the question of the tipping point, and one of the things that we do is map and profile some of these community and muni wireless efforts. And I must say, we shouldn't go too far. We've gone from zero to 30 in two years, but we have a long way to go before there's a tipping point. There is good evidence, though, that we're on the way. And I think the best evidence actually is not, with apologies to my friend Adam, who I love—we wouldn't so much showcase San Francisco. What we're doing is bringing the Red State examples to Washington and taking them around. And so for example, one of the best is in Scottsburg, Indiana. There's a very conservative Republican mayor, Bill Graham, who found out that a number of companies were going to be leaving Scottsburg, Indiana, and that would have put a big hole in the local economy. And so he went to the telcos and the cable companies and said, no way, we're not building out. It's not cost effective for us to build out to your small town in rural Indiana. A fiber network would have cost $5 million. So what they did is they went to their municipal water utility and using the water powers and the light poles, they

basically built a wireless network for $100,000, and they're about to build it out to the entire county. There are 600 subscribers. They've paid for the whole thing. They're adding jobs now instead of losing them. And when the preemption bill came to the state legislature in Indiana a couple of weeks ago who came and spoke was this Republican mayor. And that was it; the bill was dead, because here was this Republican mayor saying we saved jobs in our community by doing this. So I really think it's in places like that—it's in places like Granbury, Texas, and Corpus Christi, Texas—where they built this thing initially for public safety, a muni wireless network. They built it for public service, for meter reading, and then it was leveraged; now they're leveraging it for residential and business. And so I think it's going to come in through a lot of those doors and then we really will reach that tipping point.

One last thing is what David mentioned about business. Very important. I saw a report recently, I forget who did it, but that more than 100,000 businesses in New York City that lack access to high-speed, so-called broadband, the low-speed we call broadband, because of course cable doesn't put television out to business areas where there are factories and warehouses and so on. And also they're too far from the telephone switches for DSL. So there's huge number of businesses that need to somehow need to be organized and once they're brought forward this will really go fast.

Comment: Sarah Stranahan, Threshold Foundation. And I was interested in the 80-20 statistic and the cost of maintaining these systems, and Adam, I think you comment about service and quality matters, and kind of tying that to the question of how we engage the nonprofit community in terms of ongoing financial support, and here I'm focusing more on the community experiments and the municipal experiments, that it seems to me is anyone measuring any of the secondary effect in terms of access to education, jobs, healthcare. These are fundable silos where you have a large investment from the nonprofit community already, and if we can make the case and gather the data that community wireless is actually a strategy to improve service in these core service areas, I think it makes it easier to enlist the nonprofit sector. And I'm wondering what efforts are we are making to collect that data and document those secondary effects?

Hannah Sassaman: Well, just really quick, the Center for Neighborhood Technology as part of the grant they received—they got a TOP grant to do this project in North Lawndale, Technologies Opportunities Program. They received money to not just build this network in North Lawndale, as well as other communities across Chicago and Illinois, but they're also documenting exactly what you're describing, which is how it impacts access to education, unemployment rates, the reintroduction of ex-offenders into the job market. And so this will be one part of the Best Practices information that we'll need to gather in order to make this duplicable model on both the community and municipal level.

Randal Pinkett: I'll just say real quick, good community wireless projects, or maybe even good community technology projects nowadays, unlike the 90s, do not define

themselves that way. They define themselves as health programs, as workforce development programs, etc., and the technology is a tool to lead to those outcomes. That wasn't the case 10 years ago.

Matthew Rantanen: At the tribal level a lot of these programs—I'd say 90% of the programs that we have that are benefiting from this wireless—existed pre-wireless, pre-connectivity. They're just much more enhanced now and much more thorough as far as getting the resources to the people with the technology.

Adam Werbach: There's a lot more to say. I just want to warn against boosterism. This doesn't cure cancer, at least not yet. And in an experience with the solar world, we over-promised what solar could do, and actually got a lot of people out in front of the industry and the actual existence. This is moving; it's actually expanding; it's great. People are figuring out how to use it, but there are still a lot of gaps. When I talk about service and quality, that is going to be a battle for years and years, forever actually. And to talk about quality content, that's something that a lot of people in this room are not going to be working on. Others will. And my hope is that some of the bigger experiments can actually invest a lot on the content side and the ongoing service maintenance side, so we can figure out how those continue to go. If not, ultimately, if my grandmother, or somebody's grandmother turns it on, it's not going to matter to her; it will be cool to us.

Comment: Jeff Chester, the Center for Digital Democracy. This is a little bit of what I'll be briefly talking about, but clearly from my perspective the content people need to be a part of, in an integrated way, these incredibly dramatic changes. A huge pipeline for production and distribution, including revenue generation, has emerged, not just with wireless, but with cable, the telephone company entry, and even public broadcasting and digital television—a huge pipeline for distribution. There is a beginning conversation. There are people like Alice Myatt. There are people at AlterNet and others who are talking to program makers to take advantage in a very conscious way. And if we don't facilitate, I think, the creative and strategic participation by public interest content makers broadly, from the news side to the culture side—national and local—to program this pipeline, it's another strategy of our content, will be there. They won't be able to take it away, that we will not make the advances in short term that I think we can make. But this conversation is beginning. And just very briefly, one of the interesting things about wireless, Joan, is it's not a Red State-Blue State issue, which is good for us. As Michael was saying, you have all of these Republicans all over the place in Kentucky, Louisiana, that realize it's the most cross-effective way to deliver services. However, there is a very sophisticated campaign against this, and if you go to townhall.org, if you go to the Heritage Network, and you type in wireless, or Wi-Fi, you will see a list of 100 organizations similar to Pacific Research Center that have gotten funding from SBC and others to undermine this movement. Thank you.

Comment: Hi, I'm bringing a different point of view. I'm Roxanne Greenstein from American Express Tax and Business Services. How can corporate communications companies, who have the most to lose from this movement and fear the movement as several of the panelists have spoken about, be influenced to recognize the future and find a new role for themselves?

Mark Cooper: The simple fact of the matter is, that there are only two corporate interests that have anything to lose in this matter—the telephone companies and the cable companies. All other corporate interests have a strong interest in cheap, high-speed communications. It facilitates their business. In the end, in San Francisco, it's this technology. And you've heard the numbers—it is one one-tenth the cost on a megabit basis. And so, if you're a business and you understand that consumers will be spending one tenth for the transportation of this and have nine more dollars in their pockets to buy your stuff, you're better off. Now the problem, of course, is at their club, it is the socialists who are being tarred and the big SBC and Comcasts of the world can get their club members to not see their own economic interests. So Adam is right. We have to work very hard at making sure that all of those businesses—we have some allies. Intel is on our side frequently. Microsoft is on our side frequently, because they understand that in order to sell chips or software, the more money that remains in people's pockets, the better off they are. So that there is a shifting set of a alliances, but there are only two businesses who lose by this deployment—the telephone companies and the cable companies, who are committed to wire that....(off mic).

Comment: My name is Harold Feld with Media Access Project. I want to answer that question and then go to the others, especially since there is just about no need for me to do my opening talk on the next panel. We've covered all the ground now. But just to take a couple of points. One, in point of fact, even those two companies don't lose. The study that was done by the Federal Municipal Energy Association of Florida, which they just put out in a letter to Governor Bush—they did a study and found that where you had municipal networks deploying, you had more competition. And that experience was replicated by the telecom companies. Even SBC and the other guys, their Bell South and these other guys, could come in and give service because the municipality had invested in the infrastructure. The analogy on this that I use is the New York subway and your bus system, which is, why should a city have a subway and bus system, particularly New York? If I go out to 42nd Street right now I can get a cab, I can call a cab service. Did the subway put these guys out of business? Hell no. The subway brings people downtown. The subway goes places where a car service or a bus service, where a taxi wouldn't be caught dead. And you have a highly complex—extending over hundreds of miles—public transportation system that is heavily subsidized, and everybody gains, including the taxi drivers and the car services. Because if we didn't have that we would have laws that would require the taxi drivers to serve the people they don't want to serve. Because we're not going to forget about them because if you forget about them every now and then, they have a tendency to rise up and burn down the city. So they remind you sometimes that you can't forget about them. So the problem here is that these

companies are lazy. SBC, Comcast, the rest of these guys, like having the monopoly.
They don't want to hustle for a living. Who can blame them? I wish I didn't have to
hustle for a living. But when they have to do it, they can do it, and they will sell the
services that they actually want to sell and make lots of money at it. They just need to
stop trying to regulate and start trying to compete.

Comment: My name is Charles Benton of the Benton Foundation. I'm really glad that
you raised the question of bringing business in as did David also. Again, there's a lot
more knowledge in this room than I have for sure in a big a way. But if you're thinking
about the telephone companies and the cable companies, the public service in those two
entities is Universal Service, POTS, Plain Old Telephone Service for the telephone
companies. And in the '96 law it says that the POTS, Universal Service, needs to be
redefined in terms of the new technologies and broadband in particular. So the Universal
Service tradition that is there—the billions of dollars that have supported underserved
communities with Universal Service, I think we ought to be thinking about that and
seeing what role this might play to get us to the tipping point, which was Joan's point
earlier. So that's the first point.

The second point is the cable folks. The public service tradition there is PEG. We all
know it's weak and marginalized. But I remember vaguely—it was 20 years ago, when
the cable act was being talked about, when there was the same kind of enthusiasm based
on a few models that we've heard about up here this morning, and idealism about what
PEG could do at the city level, and empowering people with new video technologies and
the small handheld stuff—first 3/4 inch and then 1/2 inch, etc. And how we could take
the media back from the big corporations—this was all 25 years ago in cable. I
remember all this conversation and all this enthusiasm about this. And I'm just
wondering what lessons we might learn from what didn't work 20 years ago, 25 years
ago, from cable that we can apply to this new technology. And in fact how can we get
these cable guys, and in talking to them, and especially with Randal now in charge of the
Association for Community Media. We've got a friend in the court, so to speak, who
already understands a lot of this, and I'm just thinking about these two entities and trying
to think about public service media and the public service traditions that have
traditionally been there and what this all has to do with what we've heard today.

Matthew Rantanen: I just want to say that as far as Universal Service is concerned, two
of our reservations don't have Plain Old Telephone Service, none whatsoever. They have
not delivered that, so we're going to beat them to the punch. We're going to deliver
Voiceover IP to those reservations—Voiceover Internet Protocol, phone over the Internet
basically. So we're going to deliver phone to these reservations before Universal Access.
They didn't even deliver copper to these reservations. It does need to be redefined, but
they're dropping the ball and haven't even finished their job yet.

Emy Tseng: And I want to address this in terms of things that I talked about and Mark
talked about, which is that the programs like PEG and also Universal Service depended

on set-asides and favors from the companies providing the services, so it's really going to the commercial sector and saying, you need to set aside, whether it's funds for bringing telephone service to underserved communities, or a part of your cable, some of your cable channels. But the point is you always have to go to them. You're asking them to seed some of their infrastructure, or some of their funding to meet these public interest goals. The difference with this is that it's actually about communities and municipalities owning and having control over the basic infrastructure itself, as opposed to asking favors of the people who own and deploy the infrastructure.

Hannah Sassaman: I really liked the way Mark described it with the ocean analogy. If a company is going to demand its own path through the ocean—I really like that—if they're going demand their own path through the ocean—basically if a municipality is going to put together a network and they're going to get these contracts and have this whole service out, I would say it would be, and this is just an idea, it should be more the responsibility of the municipality to think about what Universal Service would mean for that municipality. And of course we're thinking 10, 20, 30 years in the future, if we're going to stop using these different ways of guaranteeing lifeline services. If phones are going to go away, which I don't know if they will—if they're going to go away, then we think about transferring it to municipalities. If communities though are providing content to each other, creating an infrastructure that they can use together, I would say, yes, I agree with Emy there. That's something that communities are choosing together and owning together, and so they can decide on their own what the things that they want to guarantee to each other are. But it wouldn't be something like Universal Lifeline Service. I would say that would be more the responsibility of a city that was cutting a $25 to $50 million swath through the ocean to get its connectivity to its residents.

Emy Tseng: Or also just because of the way that these programs work, we think of Universal Service as going—I mean, right now it doesn't go to consumers. It goes to the companies. Certain companies pay other companies to provide the service, so one of the things to consider is a more direct pipeline to community organizations, or whether to consumers or community organizations who are actually really deploying the services.

Mark Cooper: The PEG question and some of these content questions, these are tough questions, and they really do require us to think hard about them. And let me relate a story because I do this speech out in the country. And I gave this speech in Colorado and someone came up to be afterwards and said, you know you're talking about this new model and let me tell you my situation. They have a PEG channel, they don't have a lot of content on it. Comcast lets us in there for one hour at midnight, into their studio to try to produce content, and it's killing us. So I asked him, who are you? And he said, we're volunteers, we've been doing this for 20 years. And my answer was, form a cooperative and raise your own money and buy a camera. I mean the cameras are not that expensive. And it had never dawned on him to seek a true autonomous source of production. He was still dependent on the cable company for access to that site, and hadn't broken out of that mode.

But let me get to the question of content because it's a really interesting debate. We have this problem in America of production values. The American people have been weaned on these incredibly high-level production values, and everybody kind of thinks that if we can't get those production values no one will watch. What I have observed, though, is the richer the local content of your programming, the lower of the level of demand for production values. And so we do see people all over producing stuff, so that if it's a really good debate about the school board, it doesn't have to look like a presidential town hall meeting. And people will listen a lot better to that kind of stuff. And so this question of content is a thousand flowers. If we get these pipes open, you will find people will watch all kinds of stuff, as long as they aren't still dependent. They have always been dependent and that was the first answer.

The other thing was this question of, hey there's an open mic. And everyone is afraid to say who gets to speak at that mic. And this is a real bone of contention. But I said to him, if you form a democratic cooperative and democratically decide how to use the mic, is that so terribly different from the pure direct democracy of when the mic is open. And he actually understood that there may be democratic ways to get new kinds of content on that program that meet people's needs. We need to think broadly about all the things we can do with all these possible....(off mic – very hard to hear)

Comment: I'm Branda Miller, I'm with the Lynn Blumenthal Memorial Fund. I actually wear several hats as a funder, I'm also a professor. I'm working in Troy, New York, fighting Time-Warner, trying to get a community media center there, having a terrible time. And I'm a media maker. And I see the issue of content as being essential to this discussion. I'm also working with a HUD grant in Troy, New York. We've had everything. We've had the greatest negotiator, Sue Buske, on which we've spent over $100,000. And I'm going back to Commissioner Copps' issue and the essential need to bring it into a big tent issue. People are so inundated by homogenized consumer culture that they actually don't even know what they don't have. And so we're constantly being defeated, and when you bring up the PEG access model from 20 years ago, what I think is essential for us to look at, and I think what we can see in most of the models, these extraordinary models presented today, is whether it's cable, whether it's wireless, whatever the newest technology is, we need to keep looking back at what isn't changing, which is the education piece, the community organizing piece that produces content. There's no doubt, yes, that content is there, but isn't just about giving a person a wireless connection, or a microphone, or buying a camera and saying go form a collective. What I saw in each of your formulas was the community technology center, community media center piece of the formula. And I'm wondering if you on the panel could give us some strategic advice about how funders could facilitate the support of that piece of it, which is at the essential core of our success in this movement.

Randal Pinkett: As I mentioned before, there is a level of maturity that we've seen in the community media center/community technology center movement that has gone from

one that was largely focused on access and training to one that is more focused on outcomes and impact. I think to your point, good philanthropy or good funding strategies along those lines asks the question, first, what are you trying to accomplish in your community? And second, [who] is willing to pony up the soft dollars or the overhead dollars or the capacity building dollars, what ever you call it, the 80% that I referred to before? The problem with that is that funders who step into that arena say, look we don't want to fund staff, we don't want to fund overhead, we don't want to fund support, we don't want to fund maintenance. And they isolate the programmatic piece, and it undermines the initiative. And that bar is only raised higher. When we think about philanthropy without technology, we have overhead, we have capacity costs. Throw technology in the mix, it just goes up again. And to the extent that we don't honor the need for that, we're doing a disservice to the initiatives themselves.

Matthew Rantanen: Just want to follow up. Amen.

Adam Werbach: You're asking for funding strategies in this area. We need pilots. We need lots of tests that we can measure and test over years and years and years. I can give you a model of things that work. I think the best examples are probably corporate broadband networks, the type of content they produce for junior-level executives to help sell their products. It's been very effective, it's growing, and Cisco actually licenses the software as a way of attracting sales staff to these networks. And these are networks that are watched by something like 100,000 people at a time. Which is significant. You can figure that CNN on a good day is getting 300,000 viewers if there's not a new event. There are some good models, and I think, we should be funding pilots to match them and grow.

Harold Feld: Two things. One is, all of the pieces of this are important, and I want to echo what was just said about the frustration in the ways these things are funded. Jonathan Lawson, when he was here two weeks ago, made the excellent point that the right wing is ascendant because they pursue a very different funding strategy. They fund around goals, not specific programs. They look for things that push the envelope, rather than safe things that have worked before. And they focus on groups that they know and believe and trust, and they scatter a lot of money around, and when they see what's working, then they put more into that. And they do general support. They don't do, give me the video, tell me the documentary you're going to do, and don't fund the rest of the organization, as though that could exist in a vacuum.

The other point I want to make is, you can have all the great content in the world, and if you don't have a pipe to distribute it, it doesn't matter. There are more documentaries that are made in this country than you could ever show on all the VCRs in the world. And there are lots of problems that need to be solved on this front, and the very unfortunate thing in the funding world has been there's just been this idea that somehow we must have content first in order to make it worthwhile to build a distribution system. And to me that's just nuts. If you build a distribution center then you can worry about

content, particularly since one of the things we have discovered, particularly during the last 10 years of the Internet, is people are pretty clever about deciding what they and their friends want to see and want to do. I don't think any foundation in the world could have figured out Podcasting, and it happened because some people I never heard of thought this would be cool, and other people started to do it. And the people follow. BBC on the content thing is now putting its content online for anyone to get. So you build a pipe and people are going to have access to all this rich BBC content because people see what works and the publicly oriented people who actually want to get their content out rather than commoditize it say, wow, another distribution panel for us to share our stuff. Let's figure out how to do that.

Comment: (Sarah??) I wanted to respond to Charles's question, which I thought really cut to the heart in looking back through history. And I'm going to use Adam's analogy with solar, and I listened to Amory Lovins after the oil crisis tell us how we could be oil independent. And we could be oil independent, but we're not. And we're not because it takes more than the technological capacity and the vision. It takes political will and policy change. And it also takes funding the beta projects. And one of the things, I'm so happy to hear David talk about GFEM as being in the intersection between content and policy and distribution. We fight for space, we fight for PEG access, but we don't fund PEG volunteers working on the ground, and we don't fund their capacity. We fight for low-power radio spectrum, but we don't fund the people who are applying for low-power radio stations or their capacity to deliver good content. Who takes responsibility? Where is the responsibility? Where is the accountability for actually organizing the funding to have the follow-through so that we create policy space, we build out the capacity of that policy space, and then actually demonstrate what's possible and build momentum that allows the political pioneers and the technological visionaries to move forward. So it seems to me we are part of the problem there and could do better.

Comment: Alberta Arthurs, National Video Resources, which worries about distribution of content and products made by artists and filmmakers and so forth, and has been frustrated for years in so doing—so all this is very exciting. I think my question I anticipate this afternoon, but I'm struck, as a kind of newcomer to this kind of conversation, I'm struck by the extent to which we are talking about geography as a way of organizing ourselves. And especially when we get into the question of content, where it comes from, how we provide it, how it relates to our social issue needs and messages, geography is not going to provide the answer to this. If it's very local I think we're going to miss some opportunities. So I hope we'll talk about that, maybe it is this afternoon.

Adam Werbach: Well, I think this is a fascinating subject. One thing we've seen with the social-values research recently is that demography is not necessarily destiny anymore in the way that we look at values. Geography perhaps may be. We actually have a lot of data that shows that people who live near each other have the very similar values. Or they have identities they map to people who are just different from them but in different places across the world. That geography is destiny, which actually works. It's one of the few

places you can actually find pockets of similar social values across the country in groupings. It's an easy way for us to hit it. The harder one is to say, okay, I'm a blank, blank demographic group, and the person I relate to actually lives in Poughkeepsie, how do I find a link directly to them. The programming is a hope to do it, but that's actually much harder for us right now.

Comment: (Alice Myatt) Which brings me to the point that I wanted to make, because I think we also have to be very, very conscious of the fact that we have a significant generational change, and you have a generation that is very, very well-versed in media-making and in what's happened over the last 10 years in terms of children's and young adults' adaptation of technology, and using that technology, and their media literacy, whether or not one agrees with their values set is another question, but they are totally fluent in media and making media that reflects their localism. So I think that it's really, really important that we understand that. I also think it's important to get back to the question of how we support the content service and maintenance and being able to come up with models for support within those communities. And it needs to be organic, so it needs to be the community supporting it. I think that there's a role for the foundations to play in developing models and test cases and coming up with a meshing of the business community and the local community to develop the ability to be sustainable.

End session

Becky Lentz: This afternoon we have quite a provocative set of speakers, and I want to let you all know that what you have here with us in the room are pretty much the experts on all these issues. And I'll just say, they don't always agree with each other, which is a very interesting thing to witness and to see these dialogues and debates carried out in real time. So I just want to say you might hear some vigorous, polite back and forth, and that's a good thing. This is a democratic space, so we want everybody to speak their minds. I've also asked them to listen, and really urge you to get feedback from them for us about what the funding community could be doing to really help out.

Our morning panel established a big vision—the ocean metaphor that Mark talked about. And to guide our conversation this afternoon, we've asked Alice Myatt, who's sitting at the end of the table, to keep our conversation moving along. And Alice as you know is a long time veteran of broadcasting and the philanthropic fields. She's served as vice president of programming for PBS, and prior to that as program officer for media at the John D. and Catherine T. MacArthur foundation, where she administered grantmaking for documentary film and television, community outreach related to media, community-based media art centers, and public radio. So Alice currently serves as consultant to the Media Works Initiative, which is profiled in your packet, which is a donor-affiliated group that connects funders with individual media producers and advocates to protect and increase the capacity to contribute to participatory democracy.

Alice Myatt: I first want to thank Becky and David for having these convenings. I've been very fortunate in that I've been able to attend all three, and it has actually been my introduction to policy. I come from the content arena, and I was intrigued by this morning's discussion. And I think that we all have to keep in mind that we're talking about the medium and the message. And we just have to keep reminding ourselves of that.

During the first briefing, which was on intellectual property rights, Jamie Love said something that actually turned on a light for me. He said that we're only talking about two things. We're talking about access and livelihood. And it's important to remember that whatever constructs we come up with, we have to remember that the audience or the public needs to have access to information and knowledge, and that media creators have to be able to make a livelihood in providing them with that access. I think the other thing that I was struck by when I was first asked to moderate this panel is the body of work that these folks have done. Freedom ain't free, and you need a group of people who will do battle and make sure that the public has access to the information.

And so we have a panel this afternoon of warriors. And these warriors have been out on that ocean doing battle to make sure the ocean remains there, and that it is not polluted so there is no ecosystem in that ocean. First, we have Harold Feld. Harold is senior vice president of the Media Access Project. He and his colleagues have had tremendous success in organizing coalitions, in fighting the good fight in the courts and against policy-making bodies such as the FCC, all with the goal, as they say on their Web site, "promoting the public's First Amendment right to hear and be heard in the electronic media of today and tomorrow." Harold is a brilliant lawyer, a brilliant writer, and I dare say, a brilliant speaker, who can bring clarity to some of the most arcane media policy issues.

Next we have Michael Calabrese, yet another brilliant lawyer and brilliant writer. Michael Calabrese is vice president of the New America Foundation. He directs New America's Spectrum Policy Program, which includes their effort to improve the management of our nation's publicly owned assets. Most recently the New America Foundation has taken an active role in generating discussion around the digital future of public broadcasting.

Jeff Chester, while not a lawyer, he is a brilliant and prolific writer. Jeff is executive director of the Center for Digital Democracy. Based in Washington, CDD is committed to ensuring that electronic media serve the public interest. Jeff has worked tirelessly over the decades, helping to create institutions like the Independent Television Service, and leading successful campaigns on behalf of children and media. And in the interest of full disclosure, I'm working with Jeff right now on the medium and the message and making sure that independent media makers are a part of the discussion around policy issues.

Josh Silver is with the Free Press. He's executive director. He also co-founded Free Press with Robert McChesney and John Nichols in 2002. It's one of the leading national media reform organizations with a full-time team lobbying Congress and the FCC, and a field staff working to increase grassroots support of media reform efforts. Josh, too, writes extensively on media policy, campaign finance, and other public policy issues.

And lastly, we have Marcia Warren Edelman. She's co-founder and president of the Native Networking Policy Center, whose mission is to ensure equitable and affordable access to and culturally appropriate use of telecommunications and information technology throughout Indian country. Marcia is an enrolled member of the Santa Clara Pueblo in New Mexico, and serves as board of directors of the Native American Public Telecommunications. It's a nonprofit organization that supports and develops Native, educational, and public telecommunications programs and services.

So we're going to start first with Harold.

Harold Feld: I'm going to apologize in advance for a couple of things. One, I woke up with a hoarse throat this morning, and I thought, oh damn. The other thing is that I really have to run right out of here because if I don't make the 2 o'clock train and get home before Shabbas, my wife's going to divorce me.

So I missed getting the title to Becky of my panel. The title that I actually wanted was, "Spectrum Policy: Why Horrendously Complex Problems Have Real Simple Solutions." As Mark put it, we don't need to understand the details. We can't understand the details. I'll go further, we must not get bogged down in the details. This is how the incumbents win, because they make this look like it's so complicated and it's such a tough problem, and we get divided and we start looking at different solutions. Forget that. That is not going to work here. What we need to do is, number one, figure out why we care; what our policy goals should be because of the reasons that we care; and then broadly, how to make them happen. This is not something that can be micromanaged. This is something that is going to be very dynamic and live.

Why we care. I think we talked about that a lot this morning. And the important thing to remember is there are as many different reasons why we care as there are people in communities. There is an economic case that is a pure free market; the Intel guys go in and make this case; Microsoft goes in and makes this case. When I was talking to a guy from Bloomberg News service, I was talking to him about this and after about 10 minutes he said, I'm impressed. We've been talking about this for 10 minutes; you haven't once used the word "digital divide." Well, duh, I am not going to let them pigeonhole me on this. I am not going to let them turn this into the kind of struggle where the incumbents are used to using all their traditional labels and tags. Good jobs at good wages—that's what I always say when people ask me what this is about in those fora. But the social justice and the social empowerment issues are critically important. The digital divide

issues are critically important. And we have heard from people a lot about that as well, and that also feeds into the economic argument again.

Which gets to the third reason I care. This is not charity. This is free people in a free society. One of the reasons that I do what I do for a living is that prior to the first time Jews came to the United States, at the time in the world they were not allowed to be citizens anywhere. They were wards and owned by the states and the places where they lived. When pirates dumped a bunch of them fleeing the Inquisition in New Amsterdam, where we are now, Peter Stuyvesant, the governor, tried to reinstitute that model and prohibited Jews from serving in the militia and required them to pay a special protection tax instead to level the paying field because they were receiving the service from the incumbents. A man by the name of Asher Lev said that he wasn't going to sit still for that and he invented civil rights advocacy. He became the first Jew to stand before a Christian jury of his peers and convince them that in this country we were not going to replicate that system. We were going to be free people in a free land. We have not always succeeded in making that promise true for everyone, but for me that is the most compelling thing about these technologies. Free people, free communities, not depending on the charity of big companies or the charity of government.

Alright, so now we know why we care. So what policies do we need? First, where people can directly speak through the airwaves, they should be allowed to do so. This is, as Mark said, and others have said, a basic free-speech and free-right issue. The fact that it has spin-offs for economic development—the fact that it has spin-offs for civic engagement and other things are also part and parcel of the promise of free speech. Where we must have exclusivity—and as Mark said, we have a little argument as to whether exclusive licenses will completely wither away, we need to make sure that those licenses are as widely distributed as possible with an emphasis on serving the un-served, the underserved, and giving voice to the voiceless. The big problem that we have now is that these big electronic voices, as Mark said, have been bought up, gobbled up in the marketplace, corralled. We don't have a good strategy or a good policy. Now this includes, and again I have a slight disagreement with Mark about the public obligations on licensees. Where the big powerful voices are controlled by these guys I think they have an additional obligation to serve the public as stewards of spectrum, which brings me to another point—spectrum auctions.

This is my big aphorism here. Spectrum auctions are the crack cocaine of public policy. Do not take a hit on that pipe. You get one hit of those revenues, and you sell your future for a bunch of magic beans. And when I hear people talk to me about how we're going to put 5% of the revenue from this in a trust fund and it's going to fund stuff, I'm thinking to myself, but they're magic beans! But this is not a fairytale and the bean pod doesn't grow up to a golden goose in the sky. You're left with a bunch of pea plants and the rest of these guys are living off the rest of the farm.

Alright, so how do we make happen what we want to happen. Number one, I'm a capitalist. Most of the people here are capitalists. But when I was in college, I took a course in Chinese history. I read a translation of Mao's Little Red Book, and there's a quote that I have thought of consistently throughout public advocacy: "The revolution is not a dinner party." Make no mistake, this is a revolution and it is not a dinner party. This is going to be a war of attrition on many fronts. If you want a good model think of the civil rights movement because it has a lot of very important lessons there. The first attempt at the civil rights movement was reconstruction after the Civil War. That was a bunch of people from the North coming in, trying to use force of arms, afterwards trying to impose what they thought people needed in order to be free, and it was a catastrophe. So they gave up after a very short time and left. And we lived with that national shame and tragedy and the legacy of that to this day. The second civil rights movement arose from the communities of color fighting for themselves and attracting allies from other people. It was not a struggle that you had to carry out alone, but it was a struggle that emerged from the community that was done strategically. Everyone likes to talk about Brown v. Board of Education. There were 10 years of litigation leading up to Brown. And even after Brown, we needed a Civil Rights Act. And even after the Civil Rights Act we needed the National Guard to desegregate schools. It's a long fight on many fronts.

So, okay, now I come to good news, bad news. The good news is that there are a limited number of fora in which we as actors can wield really effective and disproportionate weight as compared to forces arrayed against us. They are in Washington, D.C., Congress, the FCC. We will eventually get to a stage where we will use the courts. We have opportunities at the state and local level, and there are international opportunities as well that unfortunately I do not have time to talk about. But this is a world movement, which is the other thing that is important. And what we do in the United States can impact the world as we heard Matt talk about earlier. And what we do here in the United States we need to link up also with what is going on in the rest of the world. That is happening on a very casual level, a very incidental level, but there are some mechanisms that can be expanded in that area. The good news.

The bad news for this is that the incumbents are all over these fora. They know them very well. They are very well entrenched. They have lots of resources. Good news, we're right. Bad news, being right is not enough. This is one of the important lessons of public policy that I see so many people in public policy burn out on. Being right is not enough. You have to know how to fight as well as being right. But being right really helps, because the good news is that democracy can be made to work despite the fact that there are these enormously powerful incumbents, and we have been taught from cradle to grave from the mass media that they control that we are powerless consumers. The bad news is our muscles are out of practice, and we really need to start flexing them and building them up.

So, what are the needs we have in order to make this happen, in order to win? One, we need facts on the ground. I just came through a process at the FCC where we got out a very good order despite opposition from Intel, big company, the incumbent satellite association, the big incumbents. There were people I could go to—Matt was one of them, Sasha Meinrath and others—that were relationships that had been established by Free Press, building on a foundation that had been built on by New America Foundation, Michael Calabrese and James Schneider. And we put it together and we came and talked in the community, and we said, okay here's the opportunity, what rules are going to make it right for you? Alright, I said, now you have to go put that in writing and go file it at the FCC. Then, I, FCC specialist, come in and ride herd over this. I go back out to the community and say this is what staff are telling me, can you live with that? No, it's awful. Okay, what can we do to fix it? So, we talk. We have a collaborative model. We go back, we get community leaders who come in with a filing that says, this is what we've heard is going on in Washington. Here's how that would be awful for us. And we get everybody who's not sophisticated, but is deploying these things on the ground and has a Web browser. Hi, I use a system in whatever, and if you could expand the amount of spectrum in it, that would be great. That will do so much for me. And that moves people. Policy is made by human beings—another one of my big aphorisms. People respond to these stories. They respond to the facts on the ground. Congress responds to their constituents. And no matter how big your war chest is, every congressman knows at the end of the day he needs votes. Tip O'Neill once said, all politics are local. That's where this begins.

But we have other needs as well. One is that we need engineers. We need lawyers, if I do say so myself. I am the only lawyer filing on this issue at the FCC on the pubic interest side. I'm tired. We need infrastructure. What has been cobbled together now via the available technology, through the fact that we are working in a community that is used to collaborative efforts to work together, has been amazing, but it is a pittance compared to what we could do if we had even a tenth of the resources that the incumbents waste in a day on this issue. I mean, the revolution is not a dinner party, but it's damn cheap to cater. And it's really a tragedy that people are not putting money into this field at every level, in all fields—sociology to track the effects of this as people mentioned. Right now we're recording anecdotally. I've got one economic study out of Florida that I am using to great effect because it's an actual empirical study. Imagine if we had academic researchers who were being paid to do research in this area who could produce this stuff in a strategic fashion. And that is the other thing, it must be strategic. The Right has won in so many areas because they have been willing to fund strategically. And that's what we need to do. I'm not saying bad science or corrupt the process of study, but Goddamn it; when we're right, we should say it, and we should say it in the most effective way possible. Not in the language of academia, which is filled with qualifiers that academics understand and policy makers do not.

The good news is that, as Adam mentioned, we are indeed in a moment of *sisu*. We won in Indiana, as we heard this morning, the reddest state in the rust belt, in keeping a bill

from coming out of the state legislature because we were able to get people there and on the ground and interested. We won in [House bills] 3650, 3700. In 2000, before we were even this mobilized, we saved LPFM and its promise for the future. And we are now making great strides in reversing what the incumbents were able to throw on us at the end. So we can win.

The bad news is that the moment is now. It is not a year to consider and plot and plan. It is not two years from now or five years from now, or whatever conventional boards for fundraisers are used to thinking about. It is now. If we lose this, we will lose it for the foreseeable future. As I said, it was 100 years after reconstruction that we started to see a glimmer of hope for true civil rights in this country. We do not want to go 100 years before we see a glimmer of hope again of winning our rights in spectrum, and in communication and democracy. The major battles are going to be fought in the next five years. Everything after that is quibbling about the details. If we lose, our descendants will not forgive us and they will be right. Thank you.

Michael Calabrese: Harold is a tough act to follow. And we're lucky to have MAP in Washington as the law firm for the public interest movement. In fact, as Harold said, what's really coming together is an ecosystem on these issues that is increasingly working together. The five groups represented here kind of represent that ecosystem in a way. New America Foundation is a think tank, law firm, organizer—grassroots, and we really need that ecosystem funded on every level because we are increasingly—you can count on the fact that our funders are making us, Becky and others with whip in hand, work very closely together. So we're the folks. We kind of think of ourselves as a different kind of think tank in the sense that—actually my colleague on these issues just received his Ph.D.—but we're not heavy on Ph.D.s, but a lot on policy research. We reach legislators and the press and even the public. So we're the folks who did this Citizen's Guide to the Airwaves, the treasure map of the spectrum here. And thanks to Becky, who took a chance with us when we weren't even, to be honest, sure ourselves it would turn out as well as it did. And now it's kind of neat because we go into the Senate Commerce Committee, Intel, some places I've visited, and there it is on the wall, which is kind of nice because people are thinking more our way about this when we get the right information out there.

So we did this because, in the information economy, as you're probably getting a sense today, the most valuable resource is access to the airwaves. And what you're hearing about today is just one among many media and telecom issues. The world is literally going wireless. There are already 60 million more cell phone subscribers in the U.S., and the Internet is next. Within a decade or two at the most, wireless Internet access will be ubiquitous. Most Americans, or those who can afford it at this rate, are likely to have pervasive connectivity to almost any Internet application from voice to interactive video streaming, whether you're on a subway, at home, or strolling through Central Park. Indeed anything electronic, anything you can attach a chip to, you'll be able to monitor or

control from any place at any time. So everything's going to converge and it's all going to be wireless. So the control over the airwaves is going to be control over the media system, and you can be the content that flows over it. This is one reason that commercial access to the airwaves is already valued at $750 billion, just the licenses and the beachfront part of the spectrum.

But spectrum policy is far more important than mere economics, as you heard from Mark this morning. Free and open access to wireless networks will create platforms for individual expression, creativity, and political discourse, every bit as much as the unregulated printing presses did in the era of Tom Paine and Ben Franklin. It will be that radical a change. And open access community wireless networks will be the essential check and balance that prevents the owners of the fiber pipes from controlling the distribution of content and turning potentially creative "netizens" into consumers of one-way "advotainment." And to the extent that we can make private companies pay for their exclusive licenses—in other words, I also believe that licenses will wither away over time, but it's going to be a long time—and I think that these companies should be paying if they want an exclusive lane in the ocean, and we should earmark those funds as we did the E-rate to help finance the digital future of public media content.

For the past three years, we have been fighting this battle over the airwaves with the groups you've heard from here. The essential and still ongoing struggle has been to stop the effort by the current FCC to effectively strip the word "public" from airwaves, to convert temporary licenses into permanent private property, ownership of spectrum. This was a serious thing. When Michael Powell came in, he was convinced that he was going to achieve the final propertization of the airwaves, so that frequencies would be bought and sold like soybeans. The propertization of the airwaves is, in fact, an iconic conservative cause that dates back to the writings or Ronald Coase and Ayn Rand. The foundation work for the Coase theorem and his Nobel was actually about privatizing the airwaves, as a matter of fact. And it's an outcome that's worth hundreds of billions of dollars to the incumbent industry license holders. Mark mentioned the idea that I think is important to keep in mind, in which the FCC wants to ignore that spectrum is speech. It's actually—I can't help adding—it's even less than that in a sense. In fact the whole idea of the speech side of spectrum and how important it is—look in here there's an amusing cartoon guide. We got on a roll with the Citizens Guide and this cartoon guide to the spectrum says what if the government regulated the acoustic spectrum, the way my vocal chords are propagating to your ears the same way they did the electromagnetic spectrum, and we'd be in an entirely different world. In fact, what's interesting is spectrum, and it's important to keep in mind, spectrum doesn't actually exist. People laugh when Senator Burns, a conservative Republican senator, talks about that spectrum is a technology, it's not a thing. And he's actually absolutely right. All it actually is is the modulation of energy at a certain number of cycles per second, that's the frequency. And whatever you modulate it at, it travels in a certain way and we call it frequency. But there's no such thing as that frequency that you could own. David Reed, one of the kind of engineering gurus that we work with a lot on this, said that it's the same as saying that

you own the color orange. Because the color orange is just another frequency that's higher up the electromagnetic spectrum. Another way to think about it is it's, in a way, the modulation. It's just a way of addressing the envelope. It's like if you mail through the postal system a red envelope and you said, well I'm the only person who can send red envelopes through the mail. Well, why would that be, because the system can actually take all of it. And it's really important to remember too, because there's no reason to ration. The spectrum, for all intents and purposes, is limitless. It isn't scarce. In fact, even the way we use it today, it isn't scarce. We had former DARPA engineers measure from the top of our building over downtown Washington to the White House, and found that 80% of the prime airwaves—the ones that slice through buildings, so-called beachfront—it's empty in the middle of the business day because again, as Mark said, these big battleships or aircraft carriers are taking up all the space without reason.

So with respect to positive reform, the groups here have pursued two overarching goals. And both of these come into play in the DTV transition, which I'll get to shortly. One is to increase the public's return for commercial use of the airwaves, as I said, to the extent that licensing continues. The second is to roll back exclusive licensing. In the emerging wireless world, if we want broadband access that is affordable to all and free from content control, we're going to need more unlicensed airwaves, particularly in that beachfront spectrum. So all of these public interest goals are at stake in the current debate over completing the DTV transition. As you likely know, in the 1996 Telecom Act, Congress gave TV stations a second channel of spectrum at no cost for a ten-year period so they could, for a time, broadcast in both analog and digital. The idea is transition, then return the borrowed station and it would be all digital. Broadcasters were supposed to return at least 18 channels by next year—the beachfront spectrum that is so badly needed for public safety and unlicensed broadband. But instead, they're continuing to hoard it, to hoard a vast wasteland of unused spectrum. In fact, on those 18 channels, for example, those 18 channels are only used in an average of one out of ten markets, the rest of it lying empty when all of the wireless broadband has to be on a little sliver of what they used to call "the junk band." Indeed most PBS affiliates want to end the transition quickly since shutting off analog can reduce their budgets by 20%, and because they hope that the revenue from the allocating analog TV channels can go into a trust fund for the future of public television.

In terms of the debate that's coming up now, this is going to be a legislative debate that's happening this year. Last year, Senator McCain introduced a bill, and House Commerce Committee Chairman Barton a similar bill, that would set a hard deadline for turning off analog TV and for reallocating those channels for public safety and broadband. The legislation is likely to earmark at least $1 billion in spectrum revenue for a consumer assistance fund to pay for digital to analog converter boxes for the 15 million households, the 10% or 15% that still rely on over-the-air television. And our community needs to be sure that low-income households are protected in this transition. And that apparently will happen just for political reasons.

But there are three other—and with this DTV transition debate that's going to really conclude in the next one to two years—that there are three other important public interest goals at stake. First, there are the two goals related to the ongoing return to the public for licensed use. One is a new public interest obligation from commercial broadcasters that a coalition of these groups have proposed that would require stations to air a minimum of three hours of local, civic, and electoral programming each week on their primary, and also on their multi-cast, programming streams. The other goal is to capture the TV band auction windfall to fund the future of noncommercial media. We want to expand this Consumer Converter Fund to create a trust to help finance the multicast future of public broadcasting and noncommercial content more generally. This spectrum strategy is likely to be central to the future funding of public broadcasting, but it could also hopefully fund noncommercial content more generally and help to digitize the nation's cultural heritage as well. We've been helping to lead the Digital Future Initiative in collaboration with PBS, which is a panel that's co-chaired by Reed Hunt, former FCC chairman, and Jim Barksdale, former Netscape CEO, which is going to propose a number of funding options, including this spectrum auction trust for the future of public broadcasting. And it's going to be very important. As many of you might know, the public broadcasting just got on a voluntary basis from cable a four-channel multicarry promise. Of course, they're doing it to undermine the commercial guys, but that's fine. And there are a number of stations that are eager to become community content portals across multiple platforms. We've heard from Philadelphia, Cleveland, and other places. But the system, those channels in particular, and the system overall literally cannot afford to make the transition to digital with the resources they have now. Their federal money is flat, many of their subscribers are dying off or certainly aging, and there's not the money available to become these community content portals, or to have four channels where you can dedicate a single channel alone to public affairs.

And then the final thing, which I'll end, which I know you're familiar with from this morning, is the reallocation of TV spectrum for community wireless and municipal wireless, and just affordable wireless broadband. We hope to achieve both a dedicated band for unlicensed access when the channels 52 to 69 are returned. We're pushing to have clear nationwide channels like the Wi-Fi band. But at the same time, another proceeding that Harold didn't go into in any detail, but another one, which again, our coalition proposed, and to our incredible surprise Chairman Powell, who's a bit of a tech guy, decided to go along with, is to open empty channels after the digital conversion, open channels below channel 52 to unlicensed access. So we want both of those. Expanding open citizen access on the TV bands could have a huge impact on the affordability, cost, and freedom of our broadband future, particularly in underserved areas. And capturing the spectrum auction windfall to finance a trust fund for the future of public service media would also be an appropriate return on this priceless public resource.

Jeff Chester: I'm Jeff Chester, Center for Digital Democracy. I want to thank Alice for those gracious introductions, and also thank Becky and David and the Ford Foundation

for hosting this. I'm not going to talk very much about policy, which I've done more or less for the last 20 years. I'm going to talk about market opportunity and necessity. And I'm going to talk about the need to consciously create a variety of program initiatives, so that this incredible huge opening that is occurring across the United States. It's occurring elsewhere but let me just focus on the United States. These huge, powerful, multimedia platforms that will deliver television and interactive content, delivered via cable, delivered via the telephone companies, delivered by Internet access, and yes, also by wireless Internet access, are now evolving rapidly.

We have the ability, and I believe we have the obligation, to ensure that as this new system rapidly matures—and believe me, all the battles on media ownership were less about owning more TV stations and more about taking advantage of the changes that now have in fact come into the being—we have to make sure that content is there. That public interest content, that could be news content, because there's clearly in my opinion a market failure, that has to be content-owned by persons of color, which basically in the cable and satellite realm, independent channels, don't exist. There has to be art content, cultural content, independent content, content created at the local level because these are local pipelines—content created at the national level. Huge gateways—huge, I hate to say, pipelines, have emerged to deliver all of this content. We have an opportunity to reinvent public service media, to revitalize independent media, and to take advantage of the changes going on in the commercial sector, to, for the first time I believe, or at least I'd wish to try out, bring revenues to their content providers and their allies, not only so they can make a living, which is a good thing, but more importantly so we can create more content.

Now why do we have to purposely create or foster this public interest content? Because I don't believe from what I see, coming from the commercial market, which is really what I like to do at the Center for Digital Democracy. What fascinates and horrors me and motivates me the most is the commercial vision. And if you follow the commercial vision and what is being planned to really take advantage of these huge pipelines, I think you will come to the same conclusion that I have, which is that we have to counter-program the system right away. Like others have said, I want people looking back 10 years from now to see public interest content, broadly defined, was part of these systems, whether it was cable or telephone company or Internet or wireless, from the very beginning.

A tremendous investment and work has gone on by the cable companies to deliver this torrent of content. As you know, the phone companies are investing billions and billions of dollars and will be delivering television and interactive content to millions and millions of people over the next few years. They're currently actually making content deals right now. Now what's going to fill up most of this capacity, from a professional basis unless we intervene, it's what I jokingly call for those who speak Yiddish or know Yiddish, digital *dreck*. Hate to use my old jokes, but if you look at the model, the vision that the big media companies have for the future, and why they have engineered these

huge openings. It's because they realize what they call the branding power of television, video, merged with the interactivity, the one-to-one marketing, what they also call personalization of the Internet, by combining those two—and that is in fact what the broadband system or the digital television system has been designed to do. It has been designed to facilitate the needs of advertisers and marketers to more effectively target individuals and discreet demographic groups, not only for the sell, but for what they call lifelong branding. And a good example of that, if you want to sort of get a glimpse of the future—I like to point people to our friend Rupert Murdoch's set top box software company. And it's called NDS. So go to NDS.com sometime. And just spend some time on the Web site and go to the areas Personal Television, Interactive Advertising, and you will see, in fact, what will be the pervasive application within the U.S. media system. This ability to literally deliver this very powerful video component laced with interactivity to get people to buy, to participate, to click on long-form advertisements, to engage in gambling. The brains of Murdoch's software are in his Sky service in the UK, and it's now being implemented in his Direct TV service, which he was able to buy last year. Comcast, for example, just bought a similar company. If you go to Liberate.com, sounds like an oxymoron, Comcast just bought that. These systems are being engineered to engage in what the television industry calls "T-commerce," for television commerce. That's the basic business model. Murdoch calls it—and you'll see this on the NDS site—"monetizing interactivity."

Now it's happening in Europe, first in terms of this interactive capability, but it's quickly being adopted here in the United States. The Video on Demand system, for those who have cable and satellite, is the first real glimpse of this interactive marketing infrastructure. If you want to get a sense of what interactive television looks like you can also go to the American Film Institute, AFI.com, and check out their enhanced video, which talks about the glories of "the great lean forward, a new era of active viewing," but it really means shopping. Now there's going to be good content as well, but for the most part a very powerful commercialized model is coming into place that networks have designed to facilitate the needs of advertisers and marketers. And we, I believe, have to purposely create and foster professionally developed and purposeful content to engage in what I decided to call the one-to-one marketing of democracy. Information addressing the core of society's problems and aspirations, diversity of voices, especially those left out of ownership of the major media. It's not going to happen automatically.

I always like to cite a little history about why we need to be conscious during these transitions. Eric Barnow was the great historian of American broadcasting. Some of you may have heard of him. He passed away about 10 years ago, but he wrote a terrific three-volume series on the history of broadcasting. He was the conscience of media historians at the time. And what he basically wrote about was that, because there wasn't the kind of advocacy and conscious development when we created the Communications Act in the 1930s, we have been left with this vacuous system. Some of you who have read Robert McChesney's first book might know that the broadcasters actually worked with the foundations, the Carnegie Corporation and others, to defeat the other foundations that

were trying to do public interest back in the 1930s. So here's what Barnow says about the 1934 Act, because I think it's very, very telling a lesson. Because in a way, it says we have gotten nothing from the current system, and I suggest to you that only by being active and conscious are we going to get anything out of this system. He says, "The Communications Act of 1934, reenacting a 1927 law with only minor changes, was based on a premise that had been obsolete in 1927 and by 1934 was totally invalid, that American broadcasting was a local responsibility exercised by individual station licensees." In other words what Barnow is saying, this whole idea of localism never really existed because the networks already took over radio and then television by 1934. There were no articulated public interest obligations imposed on the system. And I suggest to you we're not going to be able to get public interest obligations for the most part imposed on this commercial system.

But we can create these public interest programs, and we can distribute them in a serious way. And if you go to look at what they're doing in England, in revising the mission of the BBC, they spent two years in a well-thought-out, participatory process to re-envision public service media in the digital age in the UK context. It's really quite a model. So if you go to www.bbccharterreview.org/uk you will see what the British have done to articulate a broad public service media vision for civic society, for education, for inclusion, to take advantage of the expanded landscape. Well, I'm not so sure we're going to be able to do the same kind of conscious effort here in the United States with our current system, but I do know, as I said, that we have this opportunity to seize and take advantage of this expanded landscape. Now Brian Roberts is the CEO of Comcast, the country's largest cable operator. And Brian Roberts recently said a few weeks ago at an investors meeting that Comcast alone in 2005 will deliver or sell to its subscribers 1 billion Video On Demand programs. A system has emerged called On Demand, provided by cable, provided by satellite, that I believe enables program makers and activists, for the first time, to create and coalesce content, and provide it in a marketplace to generate significant revenues that then could be used to underwrite additional production. And then once the revenues were achieved, the program could be distributed freely over public broadcasting and other venues for those who can't afford it.

We need to take advantage of this new commercial system. Yes, there will be obstacles, and that's where the policy piece comes in and people yelling and screaming. But we have to make a good business case. We have to bring the content providers together. We have to work with the technologists who are working with innovative approaches to video distribution to program this new network, wherever there's a major platform, particularly a platform that can generate revenues. We need to be there, and indeed I intend to be part of an initiative that's going to do that because unless we create this public interest infrastructure, we will do a good job as Neil Postman said, "amusing ourselves to death," but we won't be making the kind of contribution our country needs in terms of programming.

Josh Silver: Sex. Okay, I said that for two reasons. One, I want to make sure everybody's paying attention. Secondly, because the idea of sexing up this movement and sexing up these issues couldn't be more important. And that's what I want to talk about. And when I said "sex" I thought more people would laugh, but that's okay.

I want to talk a little bit about this whole notion of what's absolutely critical to winning, and I think we all want to win, is this notion of having several key components in place. One, you have to have smart policy people. And as you can see just by being here, those of you who have been here at the other two briefings, clearly we have a lot of really smart policy people. We could use more. We need more lawyers. That's absolutely true, but we have good policy folks. We need more research. There's a senior engineer, former engineer, from the FCC that New America and others work, and he has a great quote. He said, "You've got democracy. You've got the public interest rap and that's great. That's really important because the whole future of the country depends on it, and yadda, yadda, yadda. But the incumbents, the corporations, they have the math. And at the end of the day at the FCC, the math is going to always win."

So it's really important, what you can see has happened, there's been reference to it a lot, is this idea that we need more math. We've got good, smart policy people. We need the math. And we need the ground troops. And that's what I want to talk about more than anything here. And that is this idea of how do you get not thousands, but millions of people, to care? How do you get them to care enough to hold a house party at their house, or call their legislator, or send an e-mail, or write an op-ed piece? How do you get them to do the very same things that with other major movements that have been successful, like the environment, you've managed to get tens of millions of people to do? And the answer to that is to be thinking about hooks. Now some hooks are pretty obvious. Everybody here heard about what happened with Sinclair and "Stolen Honor" coming up before the election, Armstrong Williams getting almost a quarter million dollars from the Department of Education to shill for the White House. We had our porno star Jeff Gannon from so-called *Talon News*. These are critique hooks that really piss people off and get them to say there's something wrong, and we need to fix it. And the trick now is to get away from, with all due respect, what many organizations historically, not ones so-much represented here, but historically have done, which is get on the phone and you call NBC News and you tell them to do a better a job at covering the Iraq War. Or you call them in 1996 when the Telecom Act passed and all these horrible things happened and ABC mentioned it and no one else even covered it in the mainstream news. You tell them to do a better job. We have to get a campaign. That stuff doesn't work, and everyone here agrees that we need to push people to policy. So that's the critique hook.

There's another hook that's equally potent at the right time. And that is what happened in 2003 with certainly over 2 million, nearly 3 million people, contacting the FCC and Congress, raising a total firestorm of opposition to the proposed lifting of ownership caps that was talked about. And there are others, like the regular old-guard removal of

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broadcast licenses to crooks, like David Smith from Sinclair, are giveaways of spectrum, such as in 1996 when billions of dollars worth of spectrum was given away quietly, allowed mergers like the ones that popped up and then went away for now between Comcast and Disney, things that really get people angry. And these are the kind of things that have to be capitalized on—we have to use strategically to bolster our numbers. Free Press is a couple of years old. We've managed to get about 150,000 people across the country, who take action on various things, or a percentage of which do. But those numbers of our group and others need to expand into the millions, and it needs to happen soon.

So I'd like to bring that full circle to what we're doing—not Free Press, but what the movement is doing with community Internet and spectrum issues. And that is, that what's clear is the only way we're going to win is if we get the public highly engaged locally and across the country, in addition to good work in Washington, to make sure this happens so we can promote this idea amongst millions of people that they should take up their own initiatives in their own communities to start community Internet pilot sites. That it can be done and they can do it. To get academics to promote that in their local universities. To get the public involved, I think this has been mentioned, but in over 10 states there's been hostile legislation either passed or that has been proposed that would block or hinder community Internet. And that would be represented by the darkened states. And this is horrific, and there's nobody in these states other than the corporate lobbyists who support this. And what's clear is that if we can't get people like Indiana—it worked because the people on the ground organized and got involved. And that's why that effort was turned back, and it's also why in the future when we do roll back other hostile legislation, it's going to always be the reason. And it's also why we didn't see it coming in Pennsylvania early enough, and if we had, I believe we could have stopped House Bill 30, which was a bill that passed a while back that blocked municipal broadband in Pennsylvania.

We need to initiate standard, tried-and-true grassroots campaigns like op-ed campaigns, like proactive meetings getting activists. Arm them with information and get them to fan out in their communities and meet with editorial boards, meet with local journalists. We the national groups need to expand our lists of journalists—both local and national journalists—so we can now start educating them about the reality. So if you look in your book, I thought it was very apt that the Ford folks put that article first about how badly the *New York Times* covered the community Internet story just very recently, because that journalist was not educated about the facts. We need to debunk industry. There was a great memo—I don't know how many folks saw it—that went out yesterday. A Verizon lobbyist who was sending a couple-of-page piece out to all the trade journalists in Washington and New York basically saying that all these pilot sites, these so-called successful pilot sites of community Internet across the country, how most of them were also dismal failures, which is patently untrue. And these guys are doing this stuff all the time, and we need to respond quickly. And a lot of work in that regard has been done well, but we need to do more of it.

We need to exploit something that came up earlier that David Haas commented on, this idea of chambers of commerce. One time I remember early on in the ownership debate when I was pretty green to media issues, having come out of campaign finance, and Jeff Chester said, you know, kid, the only reason we have a shot with media ownership is because the NAB has a conflict within. They're representing the biggest broadcasters and the mediums and smalls, and they have a conflict within that we could exploit and actually maybe get some traction. If it wasn't for that we wouldn't have a chance, and he was right. The same reality exists around pro-business with the community Internet initiatives, as was discussed earlier. And we need to exploit that by educating small and medium-sized, and even large businesses, about the benefits of these systems, so that the big chamber of commerce, the national, which is always going to be opposed to this because they're so in the pocket of telecom and cable, so that they can't get to them first.

So I just wanted to point out just very quickly (indicates Web site demo) that one of the things that's been really important is to be able to say, to keep on track on what's going on here. So Texas has a hostile bill. There it is. What can you do to stop this bill? And we just went out on Texas last week, what's the news on it, if you scroll down. This is the kind of stuff, pending legislation in other states. Who are the reform organizations that are active on this issue, and what are the relevant articles. This is the kind of stuff that's starting to happen and it's really working—groups like MoveOn that have 3 million members. Anytime the media reform community calls MoveOn and says there's something hot going on in Texas, you've got to send all of your tens of thousands of members, they'll do it. We just have to arm them with this kind of information and action items so their activists know what to do.

So just finishing up my really terrible first line that really fell on its face, I just want to encourage everybody to really be thinking always about how do we make these issues understandable to Joe Schmoe, who's working two jobs and just trying to keep food on the table. How do we frame things as pocketbook issues, about how cable and Internet access is going to actually increase their standard of living because they're actually going to be paying less for it. How do we create ways of framing the debate so that we cannot just respond to the opposition's rhetoric, but actually preempt it, and frame the debate in our terms, rather than their terms. And we do that, we can win.

Marcia Warren Edelman: I'm the final speaker of the day, and I'm so pleased to have been invited here. I want to thank Becky and David for having this forum and making sure that the Native voice was included in this very interesting and very timely issue. I also wish I could thank Harold because I think he summarized what I want to talk about in three major points. Why we care, policy goals, and how to make them happen.

For Indian country, these are particularly important as we are now entering into this issue at its nascent stage for Indian country issues in general. We haven't really been at the table. We weren't at the table for the 1996 Telecommunications Act. And we have an

opportunity today to really be involved as policy is being formed, and we're taking that opportunity and running with it. Why we care; let me give you a snapshot of our world. In this country, we have 562 federally recognized tribes. That means we have over about 4 million people living on reservations today—on and off reservations, about 50% on reservations and about 50% off. For those tribes we have eight Tribal telecommunications companies that are serving those communities. We have 32 radio stations in those communities. We have 36 Tribal colleges. Five television stations or Tribe **---?** broadcast services. We do have Bureau of Indian Affairs schools and Indian health service clinics that are connected in terms of Internet accessibility, but we can only use those during working hours. We can't get to them after hours.

So overall 67% of our homes have telephone access as compared to the national average of 95.1, I think is where we are. And 15% have Internet access. This is why we care. We have no access at this point. For our communities, for our basic services, basic 911 service is not available to a lot of our Tribal members. What that results in, literally, are people dying waiting for an ambulance to get to them because they had to go find a phone first that may have been miles away. I've heard stories over and over from people that I'm working with in Tribal communities whose relatives have passed away while they've been waiting to try and find somebody who can call for help. What this means on another day-to-day level is that our education services, and our healthcare services, and even Tribal government delivery services are at risk for not being done in a way that is appropriate for the needs of our community.

So our policy goals: access, access, access. We need to get on—to coin another cliché—the information superhighway. We need to be part of this digital economy. We need to be part of our digital democracy. We need to have our voice be part of the collective that the rest of the country enjoys to a great extent. What we're doing in order to make that happen. First of all, I want to thank the support we're getting from the Ford Foundation for the creation of the Native Networking Policy Center. You see our Web site here. What we've been able to do is put together people who have been focusing on this issue, the policy arena, together with the folks that are actually implementing the projects on the ground together with the policy makers in Washington, D.C., and on the state level to start a dialog and to start a discussion as to how we can collectively address these issues and form partnerships to address them.

I was speaking with Matthew earlier from California—and I'm so pleased to finally meet him because I've heard about the project for years——that in terms of the FCC, we've never seen them as an enemy. Maybe in the beginning we did when we didn't have access to talk to them internally in terms of policies. But today we enjoy a very good, strong relationship with the FCC, and we use that. Whenever we need to pick up the phone and ask a question, we will do so. Whenever we need to meet with commissioners, we do so. We have the federal government-to-government relationship, which Tribes as sovereign nations are guaranteed through the Constitution of the United States. So we've always dealt with the federal government on a peer-to-peer basis. We

go to D.C. We meet with Congress. We meet with the federal agencies. And that's what we are accustomed to, and that's what we demand. And I think if anyone wants to learn from that experience, we'd be happy to share how we've been able to do that. But I think that we come at it with partnership abilities. Because we know that there are limitations from the FCC in terms of the legislation that governs them, and limitations from our end as well in terms of getting our people to DC and having them be proactive in the process.

I want to point out something that just happened last week, which makes this discussion timely for me. And if you could scroll down a little bit. Through the Native Networking Policy Center we created the Native Networking Coalition, which is formed with the National Congress of American Indians, which is the oldest and largest Tribal government representative group in the United States. Forming this coalition means that we can now unify our voices into a set of provisions, which is what we're working on and started working on last week, that we can then take with us onto the Hill, to the FCC, and really bring the power of all 562 tribes, if we can do that, to the attention of policy makers and make sure that our issues are addressed in the next rewrite of the Telecommunications Act, which is what our focus is on this year and I'm sure in the years to come. I'm sure it's not going to be a wrapped up process at the end of this year.

We were able to get people from Alaska. We got people from Tribal colleges. We got members from the lower 48 tribes. We got the Native Radios. There's a new organization, and I brought some of their information, the Center for Native American Public Radio. And they're a brand new organization as well, trying to support the 33 radio stations in Indian country, which by the way are not commercial. All of them are public, so they're providing a public service. As well as CIOs and MIS directors, we had a lot of individuals who participated, who worked with us over the course of two days to really begin a process and put down on paper Tribal provisions that we can take forward. And we have a very tight time schedule. We want to get this finalized by June.

Now our obstacle is that we want to have Tribal legitimacy behind us, which means we need to go through the process of getting everyone to pass resolutions through their own Tribal Councils and to go through inner Tribal organizations that actually understand and work with this issue. So we're dealing on an educational level all the way from local to national. And we're trying to overcome the glazed-look syndrome, so as you're talking about making it accessible to people on the ground, we put it in the most basic terms that we can. Why should our Tribal leaders care? Because telecommunications and technology and media can be seen as tools to further the cultural goals of each community. We don't propose to tell them how to use the technology, or even suggest technology to use. It's up to them as sovereign nations to do that. What we want to do is provide information. We want to be a hub of information. And you can see, if you can scroll up a little bit, what we're trying to do in building our Web site and also in our outreach is to put in one place for Tribal leaders and for policy makers all the information that is available on telecommunications and information technology and media in Indian country.

Now you would think that would be some great amount. It's not. In 1998, I'll share with you, I started writing a report, which the Benton Foundation published in 1999. And I want to thank them because they were at the forefront of this issue as well. It's called "Native Networking: Telecommunications and Information in Indian Country," and I believe it's still available on their Web site. When I started that research, I was sure that I would find information out there on the state of telecommunications access in Indian country. I did not. I found one report from the Office of Technology Assessment, which no longer exists, and I believe maybe two or three other examples of at least some telephone penetration rates, but not much. There was nothing out there. When we did the report, and I'm talking about myself and Randy Ross, who was another co-writer, and Jim Casey, we put together what we thought would be more of a toolkit for policy makers, a brief overview of issues and some statistics, and some areas to begin looking at and how to address those issues. That document, I have to say I think, caught fire, not only with the Native community, but the policy makers as well. And I was pleased to have it quoted back to me a number of times before people realized that I'd actually written part of the report, which is nice. But it served as really a benchmark of where we need to go from here.

We've been able to get some statistics pulled out of the NTIA reports, but they're no longer doing those reports, and as you know the top program has been discontinued, which is a huge loss to Indian country because it funded about 25 or 30 projects in Indian country and increased broadband deployment, I think, by a great amount. The census figures, the FCC actually—and I should mention there have been three annual meetings now with FCC commissioners and Tribal leaders that the National Congress of American Indians has been able to put together for us. In one of those meetings, we requested that they update the census information, which is where we got the 67% telephone penetration rate figure. We don't have any way of measuring from the census how that figure is improving because they don't have particular questions on that that they can get from Indian country. So we're at a loss for information, so again, the need for more research. We need to build the public record. We need desperately to have comments filed with the FCC stating the views of Indian country on any issue that comes up and affects them. How do they know about this? They don't. We're serving as a hub of information, again, to get that information out with action alerts and phone calls because, as you know, and from statistics I've mentioned, a lot of people don't have Internet access. So we need to reach out to people on a person-to-person basis or through the inter-Tribal organizations to let them know when they need to rally and come and make their voice heard either through hearings—and let me show you a little bit of what we've done—we've outlined at least some of the more important filings and proceedings for people to take a look at because the FCC Web site is notoriously difficult to navigate in terms of getting those things. Okay, scroll down a little more. And we've listed Congressional hearings and legislation with a link to the actual testimonies that were given. And we've had a number of hearings on Tribal telecommunications access, which has been fantastic. I also want to

expand that after talking to Matthew to find out what's going on at a state-by-state level because I know the people are working on the ground to do that as well.

But we need to let people know that there are voices out there of people who are already approaching the issue and trying to make some headway and doing a good job at that. On our Web site we've got some telecom and technology in Indian country overview, because I can't tell you how many times I've been asked, can you give me an overview of what's going on in Indian country? That's it. We have a bit of media in Indian country part there. We've got Native Networking Coalition. Research and publications, and I'll show you how little there is. There are five reports, that's it. And the articles, not very much. Internationally, I've found a few things. By the way, I'm the one who does the Web site. And Web resources, Native organizations, we've got two and then us, federal government, FCC, NTIA. Of course TOP is no longer there. USDA is there because they have the Rural Utilities Service which funds the Tribal telcos. Senate and international. There's not a lot out there.

So the relationships that we've forged, we've worked very hard to achieve. And I think that what's happened is people look to us, and I'm talking about Indian country and the Native Networking Policy Center, along with NCIA and other partners that we have in the coalition, to provide information on direction, on where they should go, what priorities should be included in the next rewrite of the Telecom Act.

Now, what we're doing now is creating the coalition through this planning session. We're at the very beginning of this process. We're outlining some Tribal provisions. We're going to get that through by June, then our strategy is to take it on the Hill. And what we envision is that Tribes will have access. We have no other alternative. We must. We can't be left behind. Our individuals are at stake; our communities are at stake; our cultures are at stake. That's why we care, and that's how we're going to make it happen. And I know that one of the questions that Becky posed is, what can funders do to support groups like ours and everyone else? Fund organizations that are bringing people together. That's all I can say, because you know what? Everyone has jobs. Everyone on the Tribal level, community level—they have a life. They have kids they're raising. They have money they're trying to earn so they can make a living. There are groups like ours that love the policy work. And I have to tell you, I love the policy work. Tribal leaders may not understand it, but they know the impact on their communities. Let us help them and help us help them.

Alice Myatt: So, I think there are a tremendous number of things to think about. And I'm sure you all have questions. I guess I would throw out to the panel a question from this morning that Joan asked in terms of the tipping point. What would be the tipping point? Jeff?

Jeff Chester: It's all of this and I think we have to take advantage of all of it. It may sound trite. There's this incredible work all across the board that's going on. There's

more content being created. Young people are growing up in this environment. You have all these great people working on radio and Internet, and the technology and the market has matured, my point, so we can get our stuff out. I think if we purposely work—frankly I'm not sure what the foundations will do. We may have to do it without a lot of the foundations, but I'm hoping we can make a tipping point here.

Josh Silver: Well, I would just reiterate the populist message, which is the tipping point is when enough millions of people recognize that not just community Internet, but media issues at large are a bonafide issue in this country that affect their lives. So that all of these different, disparate media issues from those who are really concerned about ownership to those who are concerned about the terrifying amount of commercialism in our society, to those who are concerned about billboards in their communities, to those who hate their local radio and want low-power FM radio, and myriad other issues—that they realize that we're all part of the same movement in that we have to aggregate our numbers. And by doing that we can find a tipping point by having millions of people demand that media be on the agenda, not just of, say, a political candidate who's running for office. And currently, you're not going to find politicians who say, here are my main platforms and here are my positions on media. We're getting there, but we're not there yet. But also other organizations, environmental groups, civil rights groups, they all have to have media in the top tier of the issues they devote their activist energy to.

Marcia Warren Edelman: I would just say for Indian country we're getting pretty close to the tipping point. When I first started writing the report in '97, '98, no one literally had it on their radar screens. Today it's really not a fight to get people to discuss it. It's pretty much included in every inter-Tribal organization's agenda, as far as I know. Tribes on a tribe-by-tribe basis—it really depends on the Tribe leadership—you'll get anything from turnaround of one year per term of a Tribal chair to four years, so it really depends on who's in office. But I have to say it really resides with the youth and with the schools, and it's really youth driven. I think a lot of the kids are bringing it back home. They're demanding it. They want it. And so how the Tribe goes about getting it is a little more of a tricky point. But in terms of policy issues, on the policy side we really don't have to convince too many people in Congress of the importance of it, not the ones we're dealing with so far. It's just getting legislation passed and doing that kind of effort. And in the agencies they know it's an issue as well. So we're getting close. It's just making sure it's institutionalized as a priority.

Jeff Chester: I think if we focused and targeted younger people. Some of those younger people are here. But I mean teens and college-age students. One possible approach would be to use the emerging technologies around peer-to-peer. Some of the funders are funding downhill battles to refine this new, very powerful multimedia distribution tool that will allow people to offer millions and millions of people quality video content. If we program that, this is something I think we need to do in a conscious way, that both enhances our political values and our arts values, we could tap into a whole important,

generational constituency that will demand more of it, and that will then spill over into the other media environments.

Michael Calabrese: Let me add to that quickly, is that, what may be the way to the tipping point—or at least one of them in a broader sense—is that it use to be people, at least my age and older, when you think of the media it was those guys out there who spoke to us, and we were passive consumers. And I think when this new generation, when they start thinking it as we proceed on this digital convergence, we start thinking of media much more broadly across platforms. It's Internet competing with television with video on demand. When all of this is thought collectively as media then that will make a huge difference, a little like the, what Josh was alluding to, the environmental movement when 30 years ago or 40 years ago, hunters and hikers and people in the city with smog thought of these problems in silos as totally different things. Then all of a sudden they found a common ground, essentially referring to the same thing. And we need to have people—whether they're thinking of community wireless networks or about trash on televisionthinking of it as part of the media reform movement.

Comment: Antwon Wallis, Media Justice Fund. What initiatives do you see by creating a tipping point by engaging younger populations and youth populations? What strategies have you incorporated into the work you're doing inside the Beltway?

Josh Silver: One of the things we're doing is looking at—first of all, starting consortiums of teachers. We're starting with academics. In fact, there is a group of academics that will be at the National Conference for Media Reform on the Thursday prior to when the conference starts on Friday. And I should note, too, I brought brochures and encourage you, if you're a funder, to send them to your grantees or anyone else, just to folks you know. But we're starting there and also starting by trying to figure out how do we frame these issues in terms of language that's going to catch youth? Now some of the obvious ones are around things like music, making kids understand that access to being able to get music on a peer-to-peer level has a relation to the policies in Washington that we're duking out every day, and making them understand that. So finding those hooks, so there would be music— pocketbook, once again—that the kids can't afford to pay a hundred bucks for TV and Internet. So trying to frame it in those ways and then doing active outreach to university groups to try to get them to engage in the policy fights in a more meaningful way. But this is one of those areas that's under-resourced. Free Press does a lot of organizing, but it stretches us because this is very labor intensive.

Jeff Chester: On the content side, this is a mission that I'm just participating in that's being launched now. And AlterNet is participating, among other groups. And one of the goals—we're in part working with Alice—is to really identify content that's been created by young people and to make sure that that content is included in all the distribution plans, and to support their efforts for multiple content outlets. I think that's key. On the organizing front, in addition to the good work that Free Press and others are doing, US

PIRG, we're helping them, they've entered this policy arena. They have offices in 40 states, including state capitals. And on college campuses, they're going to begin organizing on the broad stream of media issues to bolster campus and other participation in these issues....(someone off mic)....We hope to map out the different things that are going on. It's just one of a number of things that are going on. And I think it's very important that we, as I say, be conscious about it and identify all the folks thinking about multiplatform content distribution in terms of the producers. All of the folks working on this incredible technology that not only makes Internet distribution possible, but allows us to incorporate powerful tools, social networking software that can build markets, that can build political relationships. So these things are happening and one of the things that we hope to do is to make a broad initiative and pull a lot of folks together like other people are doing. NDR said they're thinking of doing something similar. So a lot of good things are happening.

Josh Silver: And Antwone, talk to Ben Hubbard at the Center for American Progress, they're doing something too.

Comment: Vince Stehle, Surdna Foundation. I'm wondering if anybody's organizing or educating the blogs and bloggers around this stuff. They're obviously railing against the mainstream media and it would be a natural propulsion.

Josh Silver: Yes, we are doing that. And what we found more recently, around Sinclair, particularly Armstrong Williams and Jeff Gannon, in all those three cases the bloggers were all over that. And in fact we've created a list of bloggers that we now send our press releases as voraciously as we do all the trade and national and local journalists. But the other thing, too, is we're looking at things like creating an incentive, like a Blogger of the Year award around media to deliver at our national conference to create incentives, because those are the best investigative journalists out there right now. And they smell blood when they think of breaking a story, and there are a lot of stories to break. In fact, we're looking for more of the payola. Interestingly, the payola issue, i.e. Armstrong Williams getting money from the Department of Education, we really believe this is the tip of the iceberg. And it's Right/Left. There are a lot of real conservative groups that hate this just as much as liberals. And we want to try to find another one because we believe that this issue has a lot of legs.

Jeff Chester: In the strategy to enhance public service, to put broadly, and artistic media, including the blogosphere, as it's called, including prominent bloggers, is part of this from the very beginning. It's part of the conscious design, to reach out to all of the resources of the community to see if we can bring it together. This is something that Don Hazen, one of the people I'm working with, is working on.

Comment: Orlando Bagwell. I want to ask a question about the whole spectrum issue. I'm reading a lot about it and trying to understand it, and I'm confused in terms of what is looming out there. I think one person said that the sale of the spectrum was like crack

cocaine, or something like that. That it was an immediate euphoria of money, but in the long run a big loss. And I think Michael you were talking PBS's efforts to do exactly that, to raise revenue from the sale of portion of the spectrum. And it seems like in that whole discussion there's a discussion of set-asides, there's a discussion of sale, discussion of exclusive pieces. Could you explain it a little more, and then help us understand how you bring a public into that kind of discussion? Or how we find a way that the public can connect with this? And how do we create groups to figure out what the different interests are in all this and we can be involved and help that out?

Michael Calabrese: I can explain it some. I'm not sure there's one answer or even agreement here, so it would be good to get folks to jump in. But it's partly a short-term, long-term issue. So for example, most of us, or all of us are advocates for de-licensing, in other words opening more of the airwaves for the public for free communication because that's the only guarantee that we have at this point that these Internet providers, especially when you go to fiber, telcos and cable, have control of the pipes that they don't vertically integrate into content or discriminate between bits because Borders pays them more than Amazon, or because there's some political pressure from conservatives to shut down access to certain views that aren't appreciated, or certain content considered obscene or something. So we all want more unlicensed spectrum. So in the long-term, the bad thing about auctions—I think we virtually all oppose these one-time auctions. Although legally it doesn't create any ownership in those frequencies, the companies act as though it does. In other words, they still have a temporary license, like an eight-year license, but they say, Verizon will say, well, we paid $10 billion for these frequencies, so you can't ever take those away from us. Or you can't ever change the ground rules for using it. You can't allow the unlicensed folks, the community wireless networks, to spread their beds across our frequencies because we paid for that. So in the long term we want it all to be unlicensed. In the short term these companies are making hundreds of billions of dollars in profit off a public resource. So we think if they're going to insist on exclusive licenses, for as long as that lasts, they should pay something back. The traditional way was public interest obligations for broadcasters, which turned out largely to be a farce. So we're thinking, what most of us are supporting—I know Harold criticized it—but we agree to the extent that there are exclusive licenses they ought to pay annual user fees. I think the main criticism has come against these one-time auctions because they convey this sense of ownership. So we actually oppose the one-time, one-off auctions for that reason. But Congress is determined to get that money now because for the budget deficit, all they care about is what's in their five-year budget lingo. And so once again, if auctions are going to happen anyway, we want some of the money for good purposes because there is a market failure. There's a failure in those information markets, and so if those companies, if the TV band spectrum is coming back, if it's going to be auctioned anyway to the cell phone companies for wireless Internet, and there's going to be $20 to $30 billion generated thereby in the next five years, we think a good portion of that ought to go to make sure that the public broadcasting system and other noncommercial media makes that digital transition along with the commercial media.

Jeff Chester: Michael, why don't I ride that. In fact, what Congress has done, and what the Office of Management Budget has done is that they've already sold that spectrum. They're counting on that money, right?

Michael Calabrese: No, it's not scored.

Jeff Chester: It's not scored?

Michael Calabrese: No. CBO won't score it because there's no certainty, this is like inside Washington, the Congressional Budget Office, the scorekeepers aren't counting on it because the auctions are likely to occur after the expiration of the FCC's auction authority. So in fact it's not in the budget. It's up for grabs.

Jeff Chester: So there could be a debate.

Mark Cooper: It's hard for us to say, and it goes back to the first meeting, but civil disobedience works, you see. And the young people, just like Hannah is squatting on spectrum, although she's not really squatting, she's just occupying spectrum they say she can. Harold now seems willing to have her squat on spectrum that she's not supposed to squat on and get sued and thrown in jail and then we'll see if we can get her off. I mean the point is that if we occupy some space and use the space that NBC has. If we set up to go in and out of their lanes without interfering, and I can actually do that, I believe the Supreme Court has to let me do that. That's my court case at some point. Harold tells me I'll need 10 years of little cases maybe. But the answer is that it's civil disobedience, because if we wait for Congress, we've got the constitution, and if we wait for Congress we may never get there. That's one form of civil disobedience that we're talking about. But the young people of this country have engaged in a magnificent display of civil disobedience in the last five years, and that's peer-to-peer downloading, folks. And I understand that the lawyers get very nervous because they think they're not allowed, it's theft. But the simple fact of the matter is they are downloading the equivalent of 3 billion albums a year of music because the record companies overcharge them and didn't let them buy singles. And so the record companies tried to shut that down and they failed. They shut one down, but it popped up again. And so what the record companies did last year is sold a 158 million digital singles for one dollar each, which they finally decided in the face of massive civil disobedience, which was a good word when I was a kid. Remember it was good to go out and protest, now it's become a bad word because it sounds like theft. So the answer is that self-help works. And when you've got this technology, and the important point as Hannah said was, create the reality on the ground or in the courts and make the corporation respond. It scares the heck out of some people, but sometimes there needs to be a wing of this movement that actually has that attitude. And in some places you're allowed to pat people on the back for civil disobedience.

Michael Calabrese: Along those lines, I should say, and we should probably do more with this, we had an event about a year ago that really upset people at the FCC. They

were just ballistic. We called it "FCC-ster" like Napster, and we had a guy who was an advocate for this. He said if the broadcasters and the Federal government are sitting on all of the best spectrum. If you're talking about the digital divide, the cost of deploying broadband drops by a factor of four where Wi-Fi operates now, you know when you're in Starbucks and the frequencies you're using. When you go down into the broadcast band or where the federal government has huge reserves of wasted spectrum, broadband deployment in housing projects, anywhere else, is a fourth as expensive in terms of equipment and all that. And so we said, why don't we just start using these frequencies? Because you can measure, as we did from that rooftop, all these empty TV channels. There's no Air Force base inside Washington, D.C., so that's all empty. And so what if we just went in there and started using the spectrum. Say, hey, it doesn't really exist anyway, as I said earlier. And that would be an interesting act of civil disobedience right there, which might start forcing their hand, if people are creating economic value on something that's wasted.

Matthew Rantanen: Show us how. We'll do it on the res [reservation] and get it running.

Michael Calabrese: Yes, you're a sovereign nation.

Matthew Rantanen: We'll migrate it out to the rest of the world.

Hannah Sassaman: I actually had sort of a devil's advocate question that I'd sincerely like to be educated on. I know that Copps, if he's able to keep his seat, in the next few years is interested in strengthening public interest obligations in a really big way, making them much stricter as well as making the license renewal process much more of a gauntlet to proceed through. Now, if we're talking as Michael was bringing up, of capitulating to a continued auction-based allocation system, I'd like to hear some ideas on models for strengthened public interest obligations and strengthened challenges that stations will have to go through for license renewal. And I'm not saying I agree with this. As someone who represents low-power FM stations, this is obviously a gauntlet that we'd have to go through, too. So it would be very painful in many ways for us. But if we were going to talk about a model that would dis-incentivize corporations from using the airwaves even for profit, because it was burdensome enough for them. They'd have to do so many good things for the American public in order to use that spectrum. I'd like to hear some models for that, some ideas from anyone.

Jeff Chester: I don't think that you're going to get anything out of the commercial system at all. And I actually have concerns about the pubic system, too. I don't think you're going to get any public interest obligations, and this is going back to Orlando's question, in a way here, which is like the commercial broadcasters are going to sit on this very valuable spectrum and license. What do they give back other than making a lot of money? That's the question. But I think that personally, and I did lead a campaign that was funded by some of the foundations here to impose the only content requirement they

have—the three hours of educational programming. I know how limited it is. I think it's impossible to get. Their heart's not in it, and besides, broadcasting is disappearing. The whole reason they got the digital spectrum was to become cable and satellite multichannel operators. Because in order to engage in T-commerce, the future mile of television, you have to have a return path. You have to be able to pick up those clicks about what people want to buy and shop, and you can't do it over the air. So we have disagreements. I've actually been trying to help the groups—Michael can tell you—to get something; however, I think that's where the wireless spectrum comes in. That's a public interest obligation. Open up the space, let the good people do it. And perhaps in terms of news content and other types of content, open up that video-on-demand stream so the good people who want to make the content can get it out. I think we have to think creatively about public interest obligations. The old model never worked. As Barnow said, it ain't gonna work in the future.

Comment: Brian Newman with National Video Resources. Getting back to where Orlando started the conversation. I think we got lost on it. Michael, you mentioned involving alternative voices in this conversation on the possibility of spectrum. What other ones are part of that conversation, because I'm not aware of them being part of it, and is that even possible in this current environment?

Michael Calabrese: I think this is going on in various different venues. At New America we've been collaborating with some groups for a long time. For example Newt Minnow and Larry Grossman have a proposal for Digital Opportunity Trust, which is also worth mentioning, which Senators Snow and Dodd are about to reintroduce, that will include a set-aside for public broadcasting within that. They've assembled a broad coalition, mainly of education and cultural groups and have been endorsed by the unions and some others. And then there's public broadcasting, which has been developing its own proposal along these lines. The stations group already has a proposal. It's based on their stations, the Digital Future Initiative. I think there isn't one place where this is happening.

Alice Myatt: Following up on Brian's question, is there an opportunity for other public interest media to become involved in these discussions? One of my main concerns is that there tends to be a very narrow definition of public media, and I think that just as you've heard in this rich discussion today that public media means many things, whether you're talking on a local level or a national level. By and large, particularly with the larger foundations, public media has been synonymous with PBS and NPR. And are there opportunities for other public media entities to become engaged in these discussions?

Marcia Warren Edelman: The microcosm of what we're working with on the coalition level, we've brought together groups that have never sat at the table with each other. We have Tribal telecom companies, which are in a unique position themselves because they share board members with council members. So not only are they companies, but they're also Tribal representatives working with the government, their own Tribal government.

So that's a little bit interesting. And then the Native Radio folks, and they're just a brand new group themselves. And I feel badly for them last week because I think they got completely taken over by the telecom discussions, and we'll be working with them to bring out some of their issues. And then the Tribal colleges which have their own connectivity issues, and really a main focus on technology transfer and trying to be part of the innovative research activities that larger universities are doing because that's where they see the future—in being part of the research and development of that technology and that will drive introducing that technology back into the communities. And just to let you know, all those different factors, even if one Tribal community has a Tribal telecommunications company and a college and a radio station, they usually don't talk to each other or work with each other or even share a network with each other. Even on the very basic level of a community, they aren't interacting. So bringing this coalition together, we have divergent issues. And the spectrum took up a lot of our discussion, and it's a brand new issue-area for a lot of people, ranging all the way from it's a sovereign right, we control that airspace and we didn't give it away so it's not for the federal government to administer, it's ours, to we don't want to deal with that right now in the telecom rewrite because it just invites litigation and we're not sure where we're going to go with that. So we're just beginning that discussion, but I think when you look at these different groups that have been working very independently from each other, the one thing that comes together in terms of the definition changing is that media and what we use the technology for is merging. And whether you talk to a group that's using wireless and broadband for Internet service, versus phone connectivity, it doesn't matter to them as long as they have a pipeline whether it's in the ground or in the sky. If they get their community members connected, great. Beyond that we don't want to step on each other's toes, and that's one of the first things we said in the coalition. We just have a do not harm policy. We'll work out those things internally. But it's very interesting to have pseudo industry, government entity with radio folks, and then just the basic CIOs and others that are involved with this issue. So we'll let you know how it's going as we go along.

Jeff Chester: I'll just respond to Brian. In your packet they were nice enough to include something from Ofcom, something that I suggested, and that's the regulator in Great Britain. And if you want to look, it's not a panacea, but if you want to look at a more serious process to review what the potential is for public service broadcasting, government-funded or supported public service broadcasting, look at those Ofcom reports. Look at the recommendations, which are very innovative and actually have applications here, and then also go to that BBC charter review. It's an interesting contrast to look at what they've done in the UK and what we're doing here.

Michael Calabrese: What Alice was referring to in terms of public broadcasting, what APTS has got going, the station lobbying group, and PBS as this other Digital Future Initiative process, has been mostly talking within the system. In fact I think some stations would think not even talking enough to the stations let alone to groups like independent producers. So, for example, the PBS panel I know heard from some folks

like Jeff and Josh and Common Cause, but not nearly enough, which is why I think it will be very important if this effort is going to go on to get funding, to get this new stream of funding for the digital future of public service media, that it becomes a public campaign. And in fact, there's a coalition of groups that includes—I know the three of our groups—here that have a campaign plan that we've proposed already to at least one foundation for a series of community forums where we can put some pressure. It's ultimately going to be the policy makers who need to decide it's going to be broader, the funding and support needs to be broader than just the traditional public.... **(talking over)**

Alice Myatt: For example, that Marcia has formed a coalition that covers all of Indian country should be very much a part of the discussions that are being held at New America Foundation because whatever the result is—if the spectrum is auctioned and if there's money after we pay for the war—we should be able to support the work there as well as Prometheus, as well as various public media entities. I guess that's following on Brian's question, that is something I think is very important. I think everyone has constituents that are particular to their organizing process, but at some point there needs to be that larger interaction and larger discussion so that we can in fact, as Jeff suggested that they're doing with the BBC, have a really serious conversation about the future of public service media in the United States where we're all a part of it because we're all the part of the public.

Josh Silver: And I just want to bring it back to around 30,000 feet. It gets back to this premise, which is around this issue alone, around spectrum, we're not going to get the kind of broad coalitions that we're actually going to need. So that's where again you get into ownership, which are the bishops and the United Church of Christ and the Parents Television Council and, at one time, the NRA and all these folks. And some of them become self-fancied media-reform organizations, or organizations that have that on their agenda. And then it's much easier for them to make that connection that here is a piece of legislation that's coming up that's good and we need to support it, or a piece of legislation that's bad and we need to oppose it. And that applies to all the other areas. Commercialism. Right now we just launched a campaign quietly that's going to go public in about a month with the Parents Television Council, National Organization of Women, and the Teachers Union, to fight back against advertisers who recently came out and said—I don't know if you heard it by Kraft and all these different companies—their universal right to advertise to children. It's so bogus. So these coalitions all come full circle to deliver a simple message, and supporting this issue helps advance the same set of issues.

Becky Lentz: I think this is something that the funders should be discussing together. Because I think there are some issues where we fund different projects because we have certain interests, and I think one of the things that we're learning today is that we can do harm. So we want to have some conversation about that.

Comment: Sara??? Harold said somewhat enigmatically that this will be resolved in the next five years. You guys talked about multiple strategies for reaching the tipping point. You talked about creating content to occupy new platforms, you talk about accumulating better research, empirical and math to influence policy, you talk about building the litigation trail so Mark can bring the free speech argument to the Supreme Court some day. You talk about building the base, broadening the base, getting the base to understand the message. All of the strategies probably might take more than five years. I think Harold also said that the broadcasters are reluctant to give back their analog spectrum. What's the problem with stalling? Do we really want to auction this stuff off in the next five years, or maybe we should let them hold onto it. Is one tactic to actually stall the return of the spectrum to be auctioned off, to allow the broadcasters to footsy-foot around as long as possible before they give it back. Is that something we should be thinking about?

Mark Cooper: There is so much pressure on that spectrum, so many people want it, that the Congress is not going to be able to not do something very quickly. The broadcasters are going to get off that spectrum pretty darn quick; they're just not going to be allowed to stay there. And the problem is you've got this fundamental choice between will it be auctioned or will it be available for unlicensed? And I wish the world were not an either/or. But once you auction it, they will occupy it and you'll have a heck of a time getting them out of there. That is the sense in which Harold talks about it's going to happen, it's going to happen now, and there's no way to avoid the issue. That is why he argues that we have to deploy all of our forces around in public interest visions in our view that reclaims it. We just can't wait. There are so many people who know how valuable it is both for speech and for commercial purposes.

David Haas: It's maybe against the trend or somewhat different, but with low-power radio earlier being opposed by public radio broadcasters and looking at the future now of some solution for public media that's more broadly defined, I personally fund grassroots media, I fund independent media, I actually fund public broadcasting, or what I feel are the better aspirations of public broadcasting. Is it hopeless to try and join forces and find common effort, recognizing that the broadcasters probably presume that it's not? I'm looking for some strategies to try to broaden the effort for public media, but with public broadcasting as an important part of it.

Jeff Chester: I think you could create, but it has to come from outside of public broadcasting, and for not very much money, a kind of discussion about what the goals could be for public broadcasting, just taking for example what the British came up with, and frankly identifying the constituencies that are interested in that. For example, PBS has not reached out to the children's groups. They're a powerful constituency to support the noncommercial children's programming of public broadcasting. So I think you could do it. I think you could do it, but it's very, very late. PBS has lost a lot of political support. They have made a lot of errors because of the Right wing pressure that they are under. But if folks in the funding community want to foster such a meeting I think

people still want to do the best with public broadcasting and not see it go down the tubes. Or as I said, I fear what they're willing to do because they're so desperate for the money is to give up news, give up all that stuff, and just be a digital curriculum service, which is where they're headed.

Comment: Charles Benton. Michael's waving about his Citizens Guide and I just want to say publicly, Michael, that Citizens Guide to the Airwaves was our inspiration for the Citizens Guide to the Public Interest Obligations for Digital Television Broadcasters. And thanks to the Ford Foundation for helping us with this. This is by way of responding to Hannah and just making my pitch and plea that we cannot let the broadcasters off the hook. They do have six megahertz of spectrum, plus another six which they were given, and they've just lost "multicast must-carry**"** [cable legislation] on February 10 by a 4 to 1 vote against them because they hadn't faced up to and dealt with public interest obligations. If they had done that they would have had the vote of both Copps and Adelstein, but they blew it. And the NAB had one of its biggest defeats in history. So let's be clear that there are obligations. We may not win this battle, but we shouldn't give up on it. Let's fight the fight on multiple fronts. Let's not say, oh this is old media, we're not interested in this. We're thinking 10 years ahead of time. No, let's do what we can here. We may not win the battle, but let's do what we can. Let's also think about the future. I'm absolutely for the future, but it's not either/or. I just want to make that as a very strong plea.

Comment: I'm Karen Helmerson. I'm director of Electronic Media and Film at the New York State Council on the Arts, and I have a question that hopefully can be answered now, but I throw this out as a future question as well. We're currently involved in an initiative at NYSCA at the EMF program to revisit the representation of my constituency. Alice brought up that term and I was really happy to hear that. I basically fund over 250 organizations in the State of New York and for a variety of reasons we're finding, for many of the reasons brought up today, it's important to revisit representation and all those organizations and their issues and their needs. So in this initiative, one of our intended outcomes is to provide a few recommendations for appropriate representation of many of the issues that are here. My question is, and it's dawning on me, we're in the planning process for this convening and all this thought is going into the issues and how we represent ourselves, and what do we focus on. And for the sake of efficiency it's occurring to me, where do I take this information once I've got it? And I'm beginning to feel a little pressured, in a good way, by today because I'm thinking, oh no, five years or ten years or two years, we don't have much time here. So do you think there's a place for this group to come and bring its findings where they can be acted on effectively? Because we are not the advocacy agent or the policy making agent at various critically levels. Or are there many places? Or is there something that funders can do to help ensure that there is a place where this type of information can come to from the field so that it can get to where it needs to go to be acted on quickly?

Comment: I'm Karen Manicelli with the Benton Foundation. I just want to put forward that there are efforts, including the Media Reform Coalition, to have a centralized, coordinated archive of the kind of data that you're talking about, so it's widely available to all nonprofit groups. Hear Us Now, the Consumers Union Web site for consumer advocacy around media issues, is also trying to be that kind of library.

Michael Calabrese: There is a more, as Karen just mentioned, there's coming to be a more nationalized Media Reform Coalition, and so certainly through that you could get it to the attention of all the advocates, all the leading progressive advocates. But beyond that, as far as decision-makers, it would depend what topic, because everything is so siloed in some ways.

Becky Lentz: wrap up....& thanks.