NTIA Conference

Keynote Remarks

Deb Socia:	Thank you all for coming to the Digital New England, a summit for Regional Broadband Leaders. I'm really thrilled that I'm going to be introducing our lunchtime keynote speaker, but first I do want to take a moment as you finish your lunch to tell you a little bit about the organization I lead, Next Century Cities.

We are a bipartisan city to city initiative of mayors and city leaders dedicated to insuring that all have access to fast, affordable, and reliable broadband. And although we formed less than a year ago we now represent a diverse group of 118 communities ranging from small rural towns to major urban areas, and our members are pursuing a variety of broadband models to help them reach their goals. As I mentioned earlier many Next Century Cities communities are represented here today. Thank you all for being here and for being such stalwart advocates of high speed access for all.

If you are interested in having your community become a member please see me today or check with us at NextCenturyCities.org. We do help our members in a wide variety of ways including elevating community voices, working for policies at the state and federal level that promote broadband infrastructure and competition, and we devote many hours to promoting knowledge sharing through regular members calls, newsletters, events like today's summit, webinars, and so forth. Honestly though my favorite part of the job is connecting people to people. I love it when somebody calls and says I have this struggle in my community, here are the demographics, the circumstance we find ourselves in, and I can say I know three towns that had the same problem. They solved it in three different ways, why don't you talk to them and see what they have to say, or connecting them to national experts like Chris Mitchell who can help you think about your process and what options are available to you, and particularly around issues of municipal broadband.

I did want to mention to you that upstairs at the press conference they did mention that they have hired two of the vendors that they have hired are actually sponsors today. First they mentioned that they worked with Tilson's through the process, then they hired GWI NextGen, so I wanted to share that information with you since Jim didn't mention it earlier.

It's now my honor to introduce our keynote speaker, Larry Strickling, Assistant Secretary for Communications and Information at the Department of Commerce, and Administrator of the National Telecommunications and Information Administration. As you heard earlier Larry is a technology expert with more than two decades of experience in the public and private sectors, and his focus at NTIA includes leading initiatives to expand broadband internet access and ensure that internet remains the engine for continued innovation and economic growth.

I am going to ask Larry to please come on up and share wise words so we can learn a little more. Thank you so much.

Larry Strickling:	Thank you Deb, and as I said this morning I couldn't be happier with the turnout we've got today. The fact that we've got so many of you who came not just from Maine but from many

other states up here in New England, it's just a great testament of how important this issue is that we're talking about today.

Before I get started on the subsequent remarks I do want to take a minute just to thank the folks who put this together. At NTIA Aimee Meacham and Barb Brown, if you're here stand up. And of course the terrific leadership of Deb Socia along with Chris Mitchell from Next Century Cities, so please stand. And of course I want to thank our special guests this morning Senator King and Susan Crawford, as well as David Edelman from the White House, who you'll get a chance to hear from this afternoon on a panel on the Broadband Opportunities Council.

This week and more specifically Wednesday September 30 is an important milestone for NTIA because that's the day, the official end date of the $4-billion Recovery Act Broadband Program. As people will recall this was funded with money from the 2009 Recovery Act and we used this money to fund about 230 projects across the country, and these projects have built critical network infrastructure, they've opened or upgraded public computer centers, and they have established broadband adoption and digital inclusion programs. Additionally we invested $300-million through our state broadband initiative program which allowed states to organize their own activities to plan for broadband as well as to collect the data we needed to establish the national broadband map.

Six years ago when we started this program we made a promise to communities across the country who received funding from us, and our promise was that the Obama Administration's investment in broadband would create jobs, stimulate economic development, spur private sector investment, and open up new opportunities employment. Most importantly it would improve lives and today I'm proud to say we delivered on those pledges.

In terms of the numbers, here are the numbers. Our broadband grantees deployed together more than 114,000 miles of new or upgraded infrastructure, most of it fiber. They connected nearly 26,000 community anchor institutions such as schools, libraries, hospitals, and they installed or upgraded more than 47,000 personal computers in public access centers. Our grantees on adoption managed to enroll hundreds of thousands of people as subscribers to broadband services. The economic numbers, while still early, reflect the impact that this program has had. We commissioned an independent study from a firm called ASR Analytics and we released that report in January of this year. Bear in mind it only really represents about a two year picture from the time we provided the grants to when ASR was able to collect data. But interestingly in those communities that received broadband grants compared to those that didn't there was 2% greater economic growth in just two years, which could account for up to $21-billion in increased annual economic activity in those communities.

These projects in the aggregate have created 22,000 long term jobs which represents an additional $1-billion of additional household income. We've seen tremendous decrease in prices where anchor institutions were able to take advantage of these investments. For example, ASR studied libraries and the sample libraries they looked at prior to our program were paying on average $233 per megabyte and they were getting 3 megabyte per second service. Those libraries who were able to take advantage of Recovery Act funds in this sample at the time ASR surveyed them a few years later were now paying on average $15 per megabyte and they were on average receiving 20 megabyte per second service, again just the impact in just a few short years of our grant money.

By the way let me ask, how many of you worked on a Recovery Act project? If you did stand up, let's see what we've got in the room here. That's pretty amazing; give these folks a round of applause.

With our infrastructure projects, one of our major goals was to prime the pump for private sector investment by supplying critical middle mile infrastructure that local providers could then use to deliver affordable broadband to homes and businesses. That is why all of the networks built with Recovery Act dollars are subject to open access rules that allow any other carrier to interconnect with these networks on fair and nondiscriminatory terms, and we also encouraged our grantees to connect directly to the key anchor institutions in these communities due to the higher bandwidth needs of schools and libraries and hospitals.

Here in Maine the Three Ring Binder project is a great example of how this worked. The project an example of a public private partnership has been supported by the Maine State Government, the State University system, and a group of telecom carriers. Today in the audience I know we have Dewey Allison here, Dewey stand up, there we go, and of course assisted by Josh Broder, over the course of the project.

This Three Ring Binder used about $25-million in Recovery Act funds to build an 1100 mile dark fiber network across the state, consisting of three interconnecting fiber rings, 13 local carriers are now leasing that fiber to bring broadband to rural communities that in many cases previously only had dialup service. We just learned at lunchtime of the city of Sanford who announced that they have plans to build a 32 mile municipal broadband network which will utilize and extend the Three Ring Binder network.

The project also connected community anchor institutions across the state through Network Maine, it's now delivering 10 gigabyte connections to ten campuses of the state's public universities to support big data driven research and collaboration with other major academic institutions around the nation. The project also turned on a 10 gigabyte connection to the Jackson Lab, a genetics lab, so that it could exchange extremely large gene sequencing data sets with the new facility in Farmington, Connecticut, clearly a major success story.

Nearby in the State of Massachusetts we have another example of a public private partnership laying the foundation for broadband expansion. The $45-million grant to Massachusetts Technology Park is delivering affordable high speed internet to 133 communities in rural western Massachusetts, and today I know we have Pam Goldberg who you heard from this morning, and Eric Nakajima from Mass Tech. Folks, if you're here stand up and be recognized.

This project built 950 miles approximately of new fiber and connected over 1200 community anchor institutions before its completion in January of 2014. For this project as well as a separate project we funded in Massachusetts, the Open Cape Project, the state provided project matching funds and in building on the success of the projects the state is making available funding to 45 communities to support their community broadband projects, including the town of Leverett which I think we'll be hearing from later today.

In terms of the pump priming nature, we all heard Monica Webb this morning from Massachusetts Wired West finding ways to utilize this middle mile infrastructure to expand that last mile into homes and businesses which is necessary to ultimately be successful with these investments.

In addition to infrastructure and the economic development that comes with it, our program also focused on inclusion issues. How do we make these capabilities available to all Americans, so NTIA funded $250-million of sustainable adoption grants and as we consider what's needed for broadband today we cannot lose sight of the fact that adoption is just as important as expanding access. Once the facilities are built we need for people to subscribe to use the services, and today only about 74% of Americans subscribe to broadband service. Now in Maine, Maine beats that national average at 78% but we see that the adoption rates are very much subject to rural urban distinctions as well as socioeconomic distinctions, so we have much work to do.

Through our adoption programs we have learned important lessons about what works and what doesn't. An important takeaway is the digital literacy that's fundamental to sustainable broadband adoption. Our grantees around the country have demonstrated that successful digital literacy training must be tailored to the specific needs to the community and the individual, and based on our grants we now have developed a portfolio of innovative approaches to offering this training.

Both sustainable adoption projects and public computer center projects are now reaching people who may never have even turned on a computer and that's a group that includes disproportionately lower number of low income Americans, senior citizens, and members of minority groups.

One project that we all like to refer to, it's one of our favorite ones is the work that Susan Corbett, Susan where are you, and Axiom Technologies have done up in Washington County, Maine. We talked about reaching people who perhaps haven't turned on a computer so she reached out to blueberry farmers, fishermen, and nurses, I think were the key three, which makes up in large part the economic strength of Washington County. Through her program particularly with respect to nurses, she's been transforming Down East Community Hospital, a 25 bed critical care hospital in Machias, which has been connected by the Three Ring Binder, but she's transforming it into a teaching facility for nursing students. Students there are taking classes through a nursing college in Lewiston, 200 miles away, through the Distance Learning applications, and the grant has also paid for a state-of-the-art teaching mannequin that's been used to train nursing students in Machias, even though it's controlled by the instructors in Lewiston.

As we move forward beyond these projects we recognize that more work needs to be done to assure that no one is left behind in this digital revolution, and of course our target keeps changing. When we started the Recovery Act program in 2009 the FCC still defined broadband at a speed less than 1 megabyte per second. Today the FCC recommends download speeds of 25 megabyte per second. At that rate nearly 51 million Americans don't have access to a wired broadband connection.

As we continue to work this problem we have to expect that this need for speed will continue to increase, so we're going to be constantly chasing a goal that's going to get larger and larger as people become more and more familiar with the technology and more dependent on it.

Even though the Recovery Act Grant Program is complete, President Obama has continued to emphasize the importance of broadband that over the past several months he has outlined a series of initiatives aimed at closing the digital divide and fostering investment in our nation's broadband infrastructure.

In 2013 President Obama announced a bold new initiative called Connect Ed which will connect 99% of America's students to the internet through high speed broadband within five years, and the

architect of that program David Edelman is here and you heard him this morning and you'll hear from him again this afternoon. Since the President's announcement there's been more than $10-billion of total value committed to this effort, including FCC funding for schools and libraries, and more than $2-billion in private sector commitments.

Earlier this year the President announced his plan to expand high speed broadband to more low income families across the country through Connect Home. This pilot program is launching in 27 cities and in one tribal nation and will initially reach over 275,000 low income households. Through the program internet service providers, nonprofits, and the private sector, will offer broadband access, technical training, digital literacy programs, and devices for residents in assisted housing units. And then last March the President created the Broadband Opportunity Council made up of over 25 federal agencies and in setting this up he directed the council to determine what actions the federal government could take to eliminate regulatory barriers to broadband deployment, and to encourage investment in broadband networks and services.

I was privileged to co-chair the council on behalf of Commerce Secretary Penny Pritzker, and last Monday the White House released the council's report which describes concrete steps the 25 federal agencies will take over the next 18 months to eliminate regulatory barriers and to promote broadband investment and adoption.

Interestingly one of the first things we learned after the council was convened was that for many of these agencies broadband had never been considered to be part of their core mission. So an initial part of our task was for each agency to look internally at their own policies and programs to explore what sort of flexibility they had to do more on broadband. The council also solicited stakeholder input on ways that the federal government could do more to incentivize broadband investment, and we heard from more than 200 parties, and I'm sure some of you in this room contributed to that public comment process. We found the feedback incredibly important to shaping the report and we appreciate the contributions of everyone who filed comments.

The report frames four key themes around the recommendations and there will be a session on this later this afternoon so I'll just go over the highlights and you'll have a much more in-depth presentation of this on one of the panels this afternoon. But the four themes were as follows.

1. Modernizing federal programs to expand program support for broadband investments.
2. Empowering communities with tools and resources to attract broadband investment and promote meaningful use.
3. Promoting increased broadband deployment and competition by expanding access to federal assets.
4. Improving the data collection analysis and research on broadband.

Once these are implemented we believe that these recommendations will make a meaningful difference to communities seeking to expand and enhance their broadband capacity. For example, more federal funds will be available to support broadband projects and local governments will have new tools and resources available at their fingertips to bring broadband to their communities.

Let me go through just a couple of the specifics and then you can get additional detail this afternoon.

In this first bucket the recommendations look at modernizing federal programs to expand program support. Not all federal programs today fully reflect the changing conditions that indicate a growing need for broadband, and in some cases programs that could support broadband deployment and adoption like specific guidelines to promote its use. We asked agencies to clarify whether their programs supported broadband investment and as a result agencies have now committed to 13 actions which will clarify or open up additional options for federal funding for broadband, totally up to $10-billion. Now not all of that is going to go to broadband but that's the size of the programs that are impacted by these recommendations. Examples of this include the Department of Housing and Urban Development's Community Development Block Grants, the Department of Commerce Economic Development Assistance Programs.

The second set of recommendations relate to empowering communities with tools and resources to attract broadband investment and promote meaningful use. While federal leadership is essential many decisions about broadband investment are in need to be local. They're made by local governments and partnership with industry and guided by state law, but to address some of the gaps the council recognized the need for federal agencies to provide communities with targeted easily accessible resources that share best practices from their peers around the country. NTIA Broadband USA effort has already been working with communities around the country and we have heard time and time again the challenges facing these communities to identify sources of funding and to know where to turn within the federal government for answers to their questions. One key action in this report which NTIA will spearhead will be to create a portal for information on federal broadband funding and loan programs to help communities identify resources as they seek to expand broadband access. This portal will help communities find broadband related policy guidance, key agency points of contacts, and best practices. And today, I'm pleased to report that we have released at least a paper copy of our first effort in this regard, the Broadband USA Guide to Federal Funding of Broadband Projects.

I know we had copies of this at the front table, I don't know if people got it, if not check with our team to get your own copy and I'm sure that it will be available online, and this will be to form the basis of this more elaborate online portal that we'll be creating in the next several months.

We also intend to work collaboratively with stakeholders such as yourselves to launch a connectivity index, which is envisioned as a public private partnership to help communities benchmark their connectivity. It might even, depending on what input we receive, turn into more of a certification program to allow communities to demonstrate that they've taken the actions to make themselves broadband ready and to attract investment and new residents looking to live in communities that provide those sorts of necessities to their citizens.

We'll be working with all interested parties to design and implement this program, and we certainly welcome all of your input on this effort as our planning takes shape.

The third set of council recommendations relate to expanding access to federal assets. Specific actions here include a commitment from the Department of Transportation to issue policy guidance to leverage highway rights of way for broadband. Additionally the White House Office of Science and Technology policy and the National Economic Council will also lead the creation of an online open data inventory of federal assets that can help support faster and more economical broadband deployments to remote areas of the country.

Then the fourth set of recommendations revolve around improving data collection analysis and research on broadband.

I think we all recognize the research in this area just has not kept pace with the massive digital changes that have permeated our economy and society, and so to address this issue the National Science Foundation working with us at NTIA will develop a comprehensive broadband research and data collection agenda, which will then allow federal and private funders to coordinate and prioritize future research plans in support of American competitiveness.

The recommendations of the Broadband Opportunities Council report represent an important next step in the administrations ongoing campaign to expand broadband access and adoption, but what matters now is that agencies implement these recommendations and continue to identify additional steps that can be taken and barriers to be tackled. We will welcome continued dialogue with all stakeholders in this ongoing effort.

At NTIA in particular we will play a particularly important role in insuring that the council's important work is carried out. NTIA's Broadband USA initiative will continue to work closely with communities seeking to expand their broadband capacity and through the council's report Broadband USA is committed, as I mentioned, to create a portal to serve as the main access point for federal broadband resources, but also to provide links to agency resources, policies, and grant guidance.

The message to all of you here is at NTIA we are here to help you, we've learned a lot over the past six years overseeing the portfolio of broadband infrastructure and adoption grants. We've learned that there's no one size fits all approach which will work. Every community has unique needs and challenges and through our Broadband USA initiative, we are now leveraging our knowledge and expertise to help communities in their broadband expansion efforts.

Do you need to sift through the labyrinth of government rules and regulations for grant programs? We can help. I just mentioned the report we issued today and there will be more coming.

Do you need to learn the best way to design and deliver an adoption program in your community? We can help. Our guide to broadband adoption or broadband adoption toolkit is available to all of you now in terms of providing field tested information on how best to provide adoption programs in your community.

Do you need advice on how to plan for and attract broadband investment in your community? Again, we can help. Our technical assistance ranges from workshops and webinars to more personalized one on one community assistance. Best of all, we're free.

Let us know what sort of help your community needs. Our team wants to help you accomplish your goals.

Thanks to all of you for being here today. Again, the size of the crowd I think is just outstanding and demonstrates how important this discussion has been. I look forward to the rest of the discussion and to working with you to expand broadband access and adoption, and support greater economic development and inclusion for all citizens in New England.

Thank you for listening.

Now I understand we'll take some questions if people have any. Anybody, any questions?

Question: Hi, Art Ware speaking. Can you go into more detail with regard to the council, in my words, intergovernmental council and what it's charged in doing, some of the outcomes and things that were in the report?

Larry Strickling: The Broadband Opportunity Council, what I would recommend is there's a panel starting this afternoon that's going to devote an hour, hour and a half to that. I think the important thing, the message I just want to leave is that as co-chair of the council along with the U.S. Department of Agriculture, and I know David feels this way speaking for the administration, we're all committed to making these recommendations become reality. There will be follow up from the White House directly and through the continued day to day operation of the council to make sure that we follow up and implement as many of these recommendations as we can before the administration ends. You will see if you haven't looked at the report itself that there are milestones projected for each of the recommendations. So each agency making a commitment has also committed to a timeline of making progress on each of the recommendations, and so one of the jobs for us will be ensuring accountability to meeting those milestones.

Question: Forgive me I asked a farmer related question earlier today so let me just continue with that one trick pony. It's been mentioned several times that perhaps the USDA is here as well, and obviously in rural communities there are more than just farms, but farms are a huge part of it. Can you tell me what role the USDA played in this initiative and where they see themselves playing in the future?

Larry Strickling: Sure, although Keith is here and will be on a panel that discusses that this afternoon. But just briefly the council was co-chaired by Secretary Penny Pritzker of Commerce, and Secretary Vilsack from the Department of Agriculture, and then day to day I worked with Lisa Mensa who's the Under Secretary of Agriculture for Economic Development. We were the day to day co-chairs of the effort. Agriculture was right there pulling with us every step of the way and remains actively engaged on these issues. You'll see in the report itself, and I'm sure Keith will cover it this afternoon, some very specific commitments that Agriculture is making to support the initiative.

Question: My name is David Hill from Chebeague Island out in Casco Bay, and we did not receive BTOP funding, we were told first of all our project was too small, and secondly we were too close to a served area being on an island and not recognizing that water in between. My question is, is this initiative developing resources for smaller communities that can't really group together and have smaller projects and smaller needs?

Larry Strickling: There is no new money involved in this in the sense of a new appropriation, we're not getting additional money from Congress to provide more grants along the lines of what we did back in 2009 and 2010. What we're doing is getting other federal agencies who have funding for other types of projects, like the Community Block Grant Program that HUD runs and getting them to accept broadband as a legitimate goal of funding in these programs. How that will then translate to specific communities with specific needs I think remains to be determined, but then that's part of the technical assistance that our team at NTIA is available to provide to communities to help them navigate their way through that and figure out that given your set of needs are any of these programs that are out there, do they match up with what you're looking for investment dollars for. In addition

we can help you in terms of identifying other possible sources of funding, and let me say, we're not in the business of trying to supplant very important consultants that are in this marketplace today, but I think we can be a front door for communities trying to organize themselves. When you get down into the very detailed planning that will be necessary to actually execute a project you'll probably need additional help from consultants, and there are many able ones here in the room today and around the country who are available to do that. But we think in terms of helping people navigate the U.S. Government and the funding opportunities in the U.S. Government as well as a sharing of the best practices that we've learned from what other communities have done we can have a lot of value here.

Question: Hi, my name is Mark Coletta from Axiom Technologies. Just a question about politics, how do you see the next couple of years shaping up? I assume a lot of what you've done is try to create some durability and some momentum around these initiatives so that whoever comes into the White House in the next cycle, everybody has their own sort of agenda and such, and we haven't heard a lot I don't think from many of the candidates that are out there right now, and I'm sure we will, but could you just give me some thoughts around how you see your agency looking forward beyond the next year or so?

Larry Strickling: I can't predict the future, but obviously we have at our agency a one shot infusion of dollars, necessitated by the economic downturn of 2008 which led to the Recovery Act. There has been no interest in Congress from that original infusion of funding to add to that pot of money, so we basically started with $4-billion in 2009 and we're now as of Wednesday we are down to basically zero, and we haven't given out a new grant since 2010. I don't see given where we're at today that changing for NTIA any time soon, but what we are trying to do is recognize that we have a lot of expertise in this space from the folks that have been working on this program for the last six years, and we want to find a way to continue to add value to communities trying to find their way through this situation. While we aren't going to be able to provide direct grant dollars, and again I don't see that fundamentally changing any time soon, if we can still bring our expertise to bear and hope communities sort their way through this and find alternative funding mechanisms, we want to do it. Now USDA continues to have a certain amount of funding each year and most of their programs have fairly rigid eligibility requirements and they tend to operate more with loans and not grants, but there is funding there and it's worth, particularly in the rural areas, people understanding what the opportunities are with that program. Again, Keith is here and I know a couple of the state directors from USDA are here today as well, so if you want more information from them please seek that out. I think overall this is a bipartisan issue, the idea of getting people in our country connected to broadband. I don't think there's any real disagreement over the goal, but there's clearly different views on the best way to get there and how much of this can you depend on private industry to do, and how much of it do you need some nudging from the federal government. I think what our program shows is that focusing as we did on the middle mile, I think was the right thing to do, it's been a good nudge and I think we're going to see the dividends from that over the years as more and more people emerge to take advantage of these open networks that were built.

I'm told I have a minute left, so we'll take one last question.

Question: Hi, Sue Woods, I consider internet access a health issue. You mentioned internet scoring or thinking about that, today we have workability scores which are a combination of open

data plus crowd sourcing. Do we have open data for internet capacity locally in communities? Do we even know that data, is it even available?

Larry Strickling: What's out there now, and I'm not sure if this is directly in response to your question, but through the National Broadband Map, we've been providing a national picture of broadband availability and that's been data collected by the states, but it largely comes from providers. I don't know if that's directly in response to what you're asking about or not. Do you want to give her the mike back, Aimee.

Question: It has to get down a very small DO code.

Larry Strickling: On the availability? Yes, so we take it down to census block and then in the areas, the rural areas with the really large census block we take it down to road level, so it's not like the FCC data that was based on zip codes which was far too broad I think to provide meaningful things. But even our data doesn't help with the situation somebody described, there being service on one side of the street and not across to the other side of the street, but as people are looking to see what's available in their community, they can get a sense of that and at least understand if there's competition and if so who the providers might be they could contact to try to resolve those kinds of situations. But the ability to get data at that level, very, very difficult to do in any kind of economically reasonable way. We did engage crowd sourcing on our map to get people to tell us when the data, as applied to a census block, still wasn't accurate for their particular location and that information was fed back to the states and helped them to continue to modify their data sets. The funding for that program is gone, that was Recovery Act money, it's gone. The national broadband map has now been moved to the Federal Communications Commission and I'm not sure what their plans are to keep it going for the future.

Well thank you very much, and good luck this afternoon with your discussion.

END