

# IS THE BROADBAND STIMULUS WORKING?

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HEARING  
BEFORE THE  
SUBCOMMITTEE ON COMMUNICATIONS AND  
TECHNOLOGY  
OF THE  
COMMITTEE ON ENERGY AND  
COMMERCE  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED THIRTEENTH CONGRESS  
FIRST SESSION

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FEBRUARY 27, 2013

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**Serial No. 113-9**



Printed for the use of the Committee on Energy and Commerce  
*energycommerce.house.gov*

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U.S. GOVERNMENT PRINTING OFFICE

80-019

WASHINGTON : 2014

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For sale by the Superintendent of Documents, U.S. Government Printing Office  
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## IS THE BROADBAND STIMULUS WORKING?

WEDNESDAY, FEBRUARY 27, 2013

HOUSE OF REPRESENTATIVES,  
SUBCOMMITTEE ON COMMUNICATIONS AND TECHNOLOGY,  
COMMITTEE ON ENERGY AND COMMERCE,  
*Washington, DC.*

The subcommittee met, pursuant to call, at 10:03 a.m., in room 2322 of the Rayburn House Office Building, Hon. Greg Walden (chairman of the subcommittee) presiding.

Members present: Representatives Walden, Latta, Shimkus, Gardner, Pompeo, Kinzinger, Long, Ellmers, Barton, Eshoo, Doyle, Matsui, Welch, Pallone, DeGette, and Waxman (ex officio).

Staff present: Ray Baum, Senior Policy Advisor/Director of Coalitions; Sean Bonyun, Communications Director; Matt Bravo, Professional Staff Member; Andy Duberstein, Deputy Press Secretary; Neil Fried, Chief Counsel, Communications and Technology; Debbie Hancock, Press Secretary; Heidi King, Chief Economist; Brian McCullough, Senior Professional Staff Member, Commerce, Manufacturing, and Trade; Gib Mullan, Chief Counsel, Commerce, Manufacturing, and Trade; Andrew Powaleny, Deputy Press Secretary; David Redl, Counsel, Telecom; Charlotte Savercool, Executive Assistant, Legislative Clerk; Roger Sherman, Democratic Chief Counsel; Shawn Chang, Democratic Senior Counsel; Margaret McCarthy, Democratic Staff; Patrick Donovan, FCC Detailee; and Kara van Stralen, Democratic Special Assistant.

### OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. We will call the Subcommittee on Communications and Technology hearing to order. Our hearing today is entitled, "The Broadband Stimulus: Is It Working?"

Good morning, everyone. I want to welcome our witnesses today for this hearing, which will look at all these issues related to how the stimulus money was spent on building out broadband.

I am just going to tell you, at a time when President Obama and his administration is threatening to lay off meat inspectors, FAA controllers, TSA agents, throw Head Start students out of class, and cut teachers as the best way to deal with the sequester, our subcommittee will look at how parts of the Obama administration have allowed millions, perhaps hundreds of millions of dollars in overspending, overbuilding, and waste in their rush to spend the 7 billion in broadband stimulus money for underserved and unserved areas of this country.

To be sure, some of the money may be being spent as intended while other awards have been revoked and the money returned to the Treasury. When this bill was rushed through this committee, my Republican colleagues and I raised questions about how prudent it was to spend the money before the broadband maps were completed showing where it was spent, where would be appropriate to spend it in unserved areas. They wanted to get the money out the door before the maps were drawn. Republicans pointed out that the private sector was investing an order of magnitude more extending service all across America. For the government, which borrows 40 cents of every dollar it spends, to get in this game seemed unnecessary.

Today, we know that the private sector has spent \$65 billion a year on broadband for the past decade, but the government meanwhile can't find the money to cover veterans who have to wait in line 2 years to get their claims for benefits approved because it says it doesn't have the funds.

So the Obama administration's priority was to fund routers designed to support more than 200 simultaneous users to a library in West Virginia housed in a single-wide trailer with just one internet connection. Here is a picture of that library. To put this in context, even accounting for 100 times growth in the number of internet users at the library, routers capable of handling 100 users each cost at least \$16,000 less than were purchased. \$16,000 less.

The NTIA and RUS likely made some good choices. In many areas of the country, the money may have been spent appropriately, probably was. And that is a good thing. That is what we would all want. After all, if the money was going to get spent, then we would all hope it would get spent appropriately.

However, approximately \$611 million of the funding covering 42 projects has been revoked, relinquished, or suspended. Advocates of the law said it needed to be rushed through Congress to infuse money into the troubled economy and that the funding would go to shovel-ready projects. Yet we know even in West Virginia some of these routers are sitting idle for 3 years. Yet 4 years in to the program only 60 percent of the broadband funds have been put to use. And of the 553 projects funded, only 58 are finished or in the finishing stages, even though all were originally supposed to be completed by next September.

Allegations of overbuilding persist. Indeed, a spate of national stories in recent weeks have pointed to the \$100 million EAGLE-Net grant in Colorado as a quintessential example of overbuild. According to the New York Times, the currently suspended project built a third fiber connection—a third fiber connection—to an 11-student elementary school in Agate, which the school said it didn't want or need, instead of to rural mountain communities desperate for access. The Department of Commerce Inspector General and the state auditor have both recently concluded that West Virginia overspent hundreds of thousands or even millions of dollars on enterprise-grade servers for small libraries with only a few computers.

By contrast, the private sector has built out broadband to 96 percent of the population last decade and 70 percent of the country now subscribes. The number of Americans with broadband at home grew from 8 million to 200 million between 2000 and 2009. Another

20 million signed up by 2011. There was no need to reinvent this wheel. Doing so is not only inefficient; it is counterproductive. First, overbuilding provides “seconds” or “thirds” to some parts of the country before others have even had “firsts.” Second, it unfairly subjects to government-subsidized competition businesses that have invested their own funds.

So in conclusion, promoting broadband is a laudable goal. But there are many laudable goals in our government. And when the government is borrowing 40 cents on every dollar to fund government services, we cannot afford them all, especially if the private sector is succeeding without government involvement. From what we now know, the government has spent millions if not hundreds of millions on equipment it did not need and on stringing fiber to areas that already have it. Republicans won’t tolerate wasteful government spending, and it appears we have uncovered millions that fit that category. If the Obama Administration was going to spend this money wisely, it would have targeted it to the 4 percent of the country where there is no economic business case to be made for private sector investment. Increasing stories of overbuilding and waste suggest the administration has failed to adequately do so.

And I understand as result of our work and other audits and investigations, there may be deals in the works to actually reclaim some of this money or at least make other adjustments. My suggestion to both Colorado and West Virginia, if the money wasn’t supposed to be spent the way you spent it, the federal taxpayers deserve to have it all back.

And with that I recognize the gentlelady from California.

[The prepared statement of Mr. Walden follows:]

#### PREPARED STATEMENT OF HON. GREG WALDEN

At a time when President Obama and his administration is threatening to lay off meat inspectors, FAA controllers, TSA agents, throw head-start students out of class and cut teachers as the best way to deal with the sequester, our subcommittee will look at how parts of the Obama administration have allowed millions—perhaps hundreds of millions—of dollars in overspending, overbuilding and waste in their rush to spend the \$7 billion in broadband stimulus money for underserved and unserved areas of the country.

To be sure, some of the money may be being spent as intended while other awards have been revoked and the money returned to the treasury. But when this bill was rushed through this committee, my Republican colleagues and I raised questions about how prudent it was to spend the money before the broadband maps were completed showing where the unserved areas were. Republicans pointed out that the private sector was investing an order of magnitude more extending service all across America. For the government, which borrows 40 cents of every dollar it spends, to get in this game seemed unnecessary. Today, we know that the private sector has spent \$65 billion a year on broadband for the past decade, but the government makes veterans wait years to get their claims for benefits approved because it says it doesn’t have the funds.

So the Obama administration’s priority was to fund routers designed to support more than 200 simultaneous users to a library housed in a single-wide trailer with just one Internet connection. To put this in context, even accounting for one hundred times growth in the number of Internet users at the library, routers capable of handling 100 users each costs at least \$16,000 less than what was purchased.

The NTIA and RUS likely made some good choices. In many areas of the country the money may have been spent appropriately. That’s a good thing. After all, if the money was going to get spent, then we would all hope it would get spent well.

However, approximately \$611 million of the funding covering 42 projects has been revoked, relinquished, or suspended. Advocates of the law said it needed to be rushed through Congress to infuse money into the troubled economy and that the

funding would go to shovel-ready projects. Yet four years into the program, only 60 percent of the broadband funds have been put to use. And of the 553 projects funded, only 58 are finished or in the finishing stages, even though all were originally supposed to be completed by September 30, 2013.

Allegations of overbuilding persist. Indeed, a spate of national stories in recent weeks have pointed to the \$100 million EagleNet grant in Colorado as the quintessential example. According to the New York Times, the currently suspended project built a third fiber connection to an 11-student elementary school in Agate—which the school says it does not need or want—instead of to rural mountain communities desperate for access. The Department of Commerce Inspector General and a state auditor have both recently concluded that West Virginia overspent hundreds of thousands or even millions of dollars on enterprise-grade servers for small libraries with only a few computers.

By contrast, the private sector has built out broadband to 96 percent of the population in the last decade and 70 percent of the country now subscribes. The number of Americans with broadband at home grew from eight million to 200 million between 2000 and 2009. Another 20 million signed up by 2011. There was no need to reinvent the wheel. Doing so is not only inefficient, it's counter-productive. First, overbuilding provides "seconds or thirds" to some parts of the country before others have even had "firsts." Second, it unfairly subjects to government-subsidized competition businesses that have invested their own funds. This potentially divides the customer base from which the company can recover costs, jeopardizing its business and the jobs it created. Third, it puts the federal dollars at greater risk, since the subsidized entity must similarly compete with the existing private businesses.

Promoting broadband is a laudable goal. But there are many laudable goals. When the government is borrowing almost 40 cents on every dollar to fund government services, we cannot afford them all, especially if the private sector is succeeding without our involvement. From what we know now, the government has spent millions on equipment it did not need and on stringing fiber to areas that already had it. Republicans won't tolerate wasteful government spending, and it appears we've uncovered millions that fit that category. If the Obama administration was going to spend this money wisely it would have targeted it to 4 percent of the country where there is no economic business case for private sector investment. Increasing stories of overbuilding and waste suggest the Obama administration failed to adequately do so.

# # #

**OPENING STATEMENT OF HON. ANNA G. ESHOO, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Ms. ESHOO. Good morning, Mr. Chairman, members of the committee. And to our witnesses, welcome.

I didn't have this in my prepared remarks but I can't help but say so. What is the answer, sequester? I think that, number one, the President of the United States, with all due respect to the Chairman, is not the purchasing agent for this program. So let us keep things in context.

I think the title of today's hearing—"Is the Broadband Stimulus Working?"—I believe that it is. Are there some issues that we need to discuss? Do we need to do serious oversight of everything to track taxpayer dollars? Of course we do. That is the responsibility of the Congress. The investments made in broadband infrastructure are having, I believe, a profound impact in local communities around the country.

The Chairman said that approximately \$611 million of the BTOP and BIP funding covering 42 projects has been revoked, relinquished, or suspended. The fact of the matter is, is that the terminated BTOP projects have spent approximately \$11 million representing 0.3 percent of BTOP funds. Should we track those down?

Sure we should. But let us keep things in context. I mean it is kind of like down boy. We don't need hair on fire here.

And additionally, approximately \$200 million in previously suspended BTOP grants are now back on track. So thanks to BTOP funding, the rural Iowa Telehealth Initiative is enabling Iowans living in rural and medically underserved areas to receive the affordable healthcare they need. In Oregon the Monroe Telephone Company has used BIP funds to bring fiber to the premises to more than 2,300 residents, 29 local businesses and 7 local institutions. And at the College of Menominee Nation in Wisconsin, BTOP funding has enabled the reservation to open a community technology center where previously only dial-up internet was available. These are real-life stories in real-life States in real-life communities of how the Act is working.

As we have discussed in oversight hearings throughout the last two Congresses, there are always challenges along the way. I have never seen a program in a Republican administration or a Democratic administration or a Republican Congress or a Democratic Congress that doesn't have issues. They are sticky wickets. Life is not tidy. But it is our responsibility to track all of that down.

I don't think the solution is to attack the overall merits of a program. Instead, as I said previously, rigorous oversight by NTIA, RUS, and the Inspector General of these respective agencies is necessary to ensure that the projects remain on track and achieve their intended goals. There is no doubt that we have much more work ahead of us because something that still dogs us is the following: 19 million Americans remain unable to obtain a broadband connection. This is not a source of pride to our country. So should we blow up what we have set out to do? I don't think so. I don't think so.

The problem is particularly pervasive in rural and tribal areas where between  $\frac{1}{4}$  and  $\frac{1}{3}$  of the population remains without access to broadband. The BTOP and BIP programs are helping to tackle these challenges, and with this subcommittee's continued focus on broadband, we can and one day, I think, be able to meet the challenge, be the envy of the world in availability and speed of service.

I am very grateful to each of the witnesses for your commitment to expanding the deployment and adoption of broadband nationwide. And in particular, I would like to offer a special thanks to Bruce Abraham and Joe Freddoso who have traveled to Washington, as many witnesses do, to share the successes of the BTOP program. And I don't know. Do I have any time remaining?

Do you want 14 seconds, Ms. Matsui? You are fine? OK.

With that I will yield back the balance of my time.

Mr. WALDEN. Gentlelady yields back the balance of her time. The chair now recognizes the gentleman from Texas, Mr. Barton.

**OPENING STATEMENT OF HON. JOE BARTON, A  
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. BARTON. Thank you, Mr. Chairman. I apologize for being a little bit late, but I am here. So that is good.

The American Reinvestment and Recovery Act was signed into law in 2009. I didn't support that Act at that time. That law drastically increased spending. It also created some opportunities in my

opinion for wasteful spending. It appears that both the Broadband Technology Opportunities Program, which most people call BTOP, and the Broadband Incentive Program, which most people call BIP, have fallen victim to the hated government waste.

During the time that I served as ranking member of the full committee, I questioned both the National Technology and Information Administration and the Rural Utility Service Corporation over their ability to carry out the Broadband Initiative. When executed correctly—and I want to emphasize correctly—I believe that both BTOP and BIP are programs that can add value to the lives of our citizens. The goal of these programs are to “provide access to broadband services to consumers residing in underserved areas.” Yet, it doesn’t appear to me that the results so far have achieved that goal.

The complaints of overbuilding, we hear from the carriers and the facts that we see regarding the actual number of projects, which is abysmal in my opinion, that have been completed, leads to me to believe that this is a program that needs to be reviewed very strongly and perhaps restructured.

And with that, Mr. Chairman, I thank you for your time and I yield back.

Mr. WALDEN. I now recognize the vice chair of the subcommittee, Mr. Latta.

**OPENING STATEMENT OF HON. ROBERT E. LATTA, A  
REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO**

Mr. LATTA. Thank you very much, Mr. Chairman. And thank you very much for holding the hearing today. And I also welcome our distinguished panel of guests for testifying today.

High-speed broadband has become a necessity of life. It has already transformed our economy and the possibilities for the future are endless. I represent not only rural areas of the State of Ohio but also suburban, and I am keenly aware of the importance that broadband deployment plays in economic development and the nexus this access has to job creation. I feel very strongly that the country’s free market private investment approach to broadband expansion has been very successful. It is outstanding that the private sector wired and wireless broadband providers have invested billions each year since 2002 through 2011.

While there are many positive stories of BTOP and BIP projects, including several in the state of Ohio, the stories of waste, fraud, and abuse are alarming. As with all of our government programs, taxpayers deserve thorough oversight of the billions of dollars spent on these programs.

And with that, Mr. Chairman, I yield back. Thank you.

Mr. WALDEN. I now recognize the gentleman from Colorado, Mr. Gardner.

**OPENING STATEMENT OF HON. CORY GARDNER, A REP-  
RESENTATIVE IN CONGRESS FROM THE STATE OF COLO-  
RADO**

Mr. GARDNER. Thank you, Mr. Chairman. And thank you very much for the time to hold this hearing today, and thank you, Mr.



Strickling, and the other witnesses today. Mr. Kirchhof from Colorado, thank you for being here.

I guess I had some prepared comments yesterday that we were going over to talk about this morning's hearing. And then I spent an hour yesterday listing to a Legislative Audit Committee in the Colorado State Legislature. It is a bipartisan committee, equal amount of Republicans and Democrats on this committee where the end statement by a leading State Senator, a Democrat, was this: the more we hear about EAGLE-Net, the more questions we have.

I just read some comments from constituents that I have before we get into this about EAGLE-Net. And that is the subject of this hearing. What is happening, what is going on, and why do we have so much overbuild in Colorado out of \$100 million at a time when this government is trying to scrape money together?

One constituent, PC Telecom, having overbuilt nearly 100 percent of PCT's fiber-optic facilities in Colorado, and we have another company in Colorado. All of C-Com's network information was available to EAGLE-Net in advance of their overbuilds. We have another company, private company in Colorado. Blanca was more than willing to offer NTIA reasonable terms that would have saved them an estimated \$20 million, but NTIA, with full knowledge that Blanca served almost every community institution in its service territory, chose instead to duplicate their high-speed internet services.

These are private sector jobs. At a time when the White House, at a time when all of us talk about creating middle-class jobs, good-paying jobs, we have a \$100 million grant that went to the State of Colorado that is putting at risk private sector jobs, the very good, middle-class-paying jobs that we are trying so desperately to create and preserve.

In the Denver Post yesterday there was a story, 96 million out of the \$100 million has already been tied up in this grant, yet only 25 percent of the more than 220 K through 12 school districts, libraries, community colleges and other educational institutions that are supposed to be wired into the network are actually connected. At the hearing yesterday, the representatives of EAGLE-Net couldn't tell us who they served, who their members were, how much has been built, how much money they have. When a non-partisan audit committee says the more we hear, the more questions we have, something has gone dramatically wrong. And the fact is, when we hear statements from the intergovernmental entity itself that they don't know, they can't provide the answers, but they have spent almost all of this and are 25 percent completed, this isn't working.

Mr. WALDEN. The gentleman's time has expired. The chair recognizes the ranking member of the committee, Mr. Waxman.

**OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA**

Mr. WAXMAN. Thank you, Mr. Chairman.

Today is the Committee's seventh oversight hearing regarding the Broadband Technology Opportunities Program, or what we call BTOP, and the Broadband Initiative Program, or BIP. I may not

agree with the chairman's conclusions, but I commend him for his diligence. When we ask questions as part of our congressional oversight, it helps protect the taxpayers.

I would like to welcome all of our witnesses. In the case of Assistant Secretary Strickling, welcome back. To our other witnesses, we appreciate your willingness to share your perspectives. I am particularly pleased to have two grantees who can speak directly to the success of the Broadband Recovery Act Programs. Bruce Abraham is here from North Georgia Network, a project that is bringing economic and educational benefits to rural areas of his state. And on behalf of Mr. Butterfield, I would like to offer a special welcome to Mr. Freddoso, who has worked extensively with Mr. Butterfield to bring broadband to unserved and underserved areas of eastern North Carolina.

Oversight of BTOP and BIP began as soon as the ink was dry on the Recovery Act. Indeed, Congress built oversight into the very structure of these programs by providing millions of dollars to the Inspectors General at the Departments of Commerce and Agriculture in order to conduct vigorous audits and reviews of the programs. We knew that NTIA and RUS had a daunting task—investing taxpayers' dollars both quickly and wisely in a manner that was fair, open and transparent to the American people. Assistant Secretary Strickling and Acting Administrator Padalino, your agencies are meeting this challenge.

The projects funded by BTOP and BIP are transforming communities across the country. We all recognize and applaud the billions of dollars in private investments that has delivered broadband to millions of Americans. But as demonstrated by the overwhelming demand from applicants when the programs were launched, public investments are also needed to connect persistently unserved and underserved areas of our Nation. Without these investments, some Americans would be excluded from today's digital economy.

As this committee's continued interest in the broadband program indicates, we expect NTIA and RUS to be careful stewards of public dollars. Assistant Secretary Strickling, NTIA has been a model of transparency and accountability. As you stated in your testimony, the majority of BTOP projects are meeting and exceeding their project timetables. And we have every reason to expect they will be completed on schedule.

Acting Administrator Padalino, as I have said before, I believe RUS still has work to do on this score. The GAO recently recommended that your agency collect more reliable data to assess progress of BIP. I am interested to hear what your agency is doing to respond to the GAO's recommendations, and in particular, what steps you are taking to make such information publicly available.

I am also disappointed that the Office of the Inspector General from the Department of Agriculture is not testifying today to update the Committee on its work to ensure BIP funds are being well-managed.

I thank everybody who is going to be testifying today, and I want to yield the balance of my time to my fellow Californian member from Sacramento, Ms. Matsui.

Ms. MATSUI. Thank you, Ranking Member Waxman, for yielding me time and I thank the witnesses for being with us today.

Throughout the BTOP process, I have advocated for broadband adoption and digital literacy grants for urban underserved and anchor institutions. In addition to adoption, I believe digital literacy will be even more important as more and more Americans rely on their mobile devices, Smartphones and tablets for their daily communications.

In my opinion, the BTOP program has laid a foundation for advancing our internet economy. It has connected more than 11,000 community anchor institutions to high-speed broadband internet services. As a result of the State of California's Broadband Adoption Grant, community colleges like Los Rios Community College are now able to provide training and digital literacy skills for local residents in my district of Sacramento. Additionally, a BTOP grant allocated to the California Emerging Technology Fund will initiate an innovative program that provides computers to low-income middle school students in Sacramento. While I continue to strive for universal broadband adoption, I do believe the BTOP program has provided a path towards helping to close our Nation's digital divide.

Finally, I would like to ask unanimous consent to enter into the record a letter from the Schools, Health, and Libraries Broadband Coalition.

Mr. WALDEN. Without objection.

[The information appears at the conclusion of the hearing.]

Ms. MATSUI. Thank you, and I yield back my time.

Mr. WALDEN. The gentlelady yields back her time.

I think that covers the scope of opening statements so we will proceed into the questions. I request—oh, I am sorry. That is right. We are so eager to get into our questions.

Mr. STRICKLING. I know you are anxious to ask me questions, but I—

Mr. WALDEN. If you want to waive your opening statement, we can just get right at this. You are right. We are going to go to opening statements.

And so I want to welcome Hon. Lawrence E. Strickling, Assistant Secretary for Communications and Information, and Administrator of the National Telecommunications and Information Administration—which is a mouthful—U.S. Department of Commerce; and John Padalino, the Acting Administrator of Rural Utilities Service (RUS), U.S. Department of Agriculture.

Mr. Strickling, we welcome both you and Mr. Padalino here and we look forward to your testimony.

**STATEMENTS OF LAWRENCE E. STRICKLING, ASSISTANT SECRETARY FOR COMMUNICATIONS AND INFORMATION, AND ADMINISTRATOR, NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION (NTIA), U.S. DEPARTMENT OF COMMERCE; AND JOHN PADALINO, ACTING ADMINISTRATOR, RURAL UTILITIES SERVICE (RUS), U.S. DEPARTMENT OF AGRICULTURE**

**STATEMENT OF LAWRENCE E. STRICKLING**

Mr. STRICKLING. Well, thank you, Mr. Chairman, and to you, and to Ranking Member Eshoo, and members of the subcommittee.

I am here today to update this subcommittee on NTIA's work to expand the availability and adoption of broadband in the United States. And I am pleased to welcome a new partner to the witness table, John Padalino, the Administrator of the Rural Utility Service, who has taken over for Jonathan Adelstein, and I look forward to working with Administrator Padalino in his new capacity.

Four years after the American Recovery and Reinvestment Act, I am pleased to report that our broadband efforts are delivering substantial and meaningful benefits across the country. Our grantees are delivering on their promises to create jobs, stimulate economic development, spur private sector investment, and open up new opportunities in employment, education, and healthcare. And they are exceeding the program's goals for deploying new fiber-optic infrastructure, constructing new public computer centers, and encouraging greater internet adoption.

To date, our grantees have deployed or upgraded more than 86,000 miles of broadband infrastructure. They are building more than 2,300 network nodes in 1,400 communities, and over 80 percent of these communities will receive speeds greater than a gigabit per second. Our grantees have connected almost 12,000 schools, libraries, and other community anchor institutions to high-speed broadband. Eventually, they will connect more than 20,000 community anchors in 5,100 communities, and more than 20 percent of these institutions will receive bandwidths greater than a gigabit per second. They have entered into more than 600 interconnections agreements with other companies and organizations to allow them to provide new or improved services to their homes and businesses that they serve.

Our grantees have installed more than 40,000 public computer workstations, provided nearly 10 million hours of training to 2.8 million people, and have generated over 500,000 new broadband subscribers. These projects are directly funding thousands of jobs and delivering training that has allowed thousands more Americans to find jobs of their own.

From the beginning of this program, NTIA has been cognizant of the need to design and administer this program in the most efficient manner possible. And indeed, our costs of administration are among the lowest of any comparable program in the government.

Similarly, the need to protect taxpayer funds against waste, fraud, and abuse and to ensure that the projects deliver their promised benefits has been of paramount importance to us. We have performed extensive and diligent oversight of these projects without micromanaging them. We have provided technical assistance to recipients to help them perform well and deliver the benefits they have promised. And this oversight involves a significant level of effort and requires hard decision-making at times when necessary to protect taxpayer investments.

The vast majority of our projects have performed well. You will hear from representatives of two of these projects in the second panel; Joe Freddoso of MCNC in North Carolina; and Bruce Abraham of the North Georgia Network. But as with any program of this size and complexity, we have had cases where intervention by us was necessary. Fortunately, because we work hard to identify

issues as early as possible, we have been able to get projects back on track.

One of our oversight tools is project suspension. We use it sparingly and only after efforts to improve performance with improvement plans or corrective action programs have not deliver the desired results. Over the history of this program—keeping in mind that we have about 220 some grantees—we have suspended a total of nine projects. But a suspension does not mean the project is lost. In four cases we worked with the grant recipients to get their projects back in shape and we lifted the suspensions after the grantees addressed our concerns. As a result, those projects are stronger, more successful, and more responsible stewards of taxpayer dollars due to our interventions.

And, Mr. Chairman, of the figure you gave of, I think, 600 million of projects suspended/revoked, those projects—those four projects—account for \$221 million, which means those dollars are back at work in their communities.

The North Florida Broadband Authority Wireless Infrastructure Project offers a prime example. Our oversight identified concerns regarding project management and vendor oversight. We froze distribution of funds to the project, conducted several site visits, and provided extensive technical assistance to the grantee. We lifted the project suspension once the recipient implemented management and vendor changes, and now, about a year later, that project is nearing completion and benefiting dozens of communities in rural North Florida.

Currently, we have three projects on suspension for performance-related issues. And this accounts for \$158 million of the total number that the Chairman presented in his opening remarks. We are working closely with the recipients and we are hopeful that they will get their projects back on track at which time we would be able to lift the suspensions and allow the grantees to complete their projects. One of those three projects is EAGLE-Net, which I am sure we will be talking about in greater detail through the course of the questioning.

There have been two situations where, despite our best efforts, we had to terminate projects. However, in those cases our early intervention allowed us to make the difficult decision to terminate before either grantee had spent much of its grant award. These projects account for \$139 million of the Chairman's total, but when we terminated, they had only spent about \$11 million of federal funds, which represents substantially less than even 1 percent of the total grant dollars awarded under the Recovery Act.

Mr. Chairman, I am grateful to this subcommittee for its efforts to ensure that NTIA has had the resources it needs to oversee this program. I look forward to answering your questions and to continuing to work together to increase broadband access and adoption across the country in the most effective and efficient manner possible. Thank you.

[The prepared statement of Mr. Strickling follows:]

**Testimony of  
The Honorable Lawrence E. Strickling  
Assistant Secretary for Communications and Information  
National Telecommunications and Information Administration  
United States Department of Commerce**

**Before the  
Committee on Energy and Commerce  
Subcommittee on Communications and Technology  
United States House of Representatives**

**Hearing Entitled  
“Is the Broadband Stimulus Working?”**

**February 27, 2013**

**I. Introduction**

Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee, I am pleased to be here to today to update the Subcommittee on the National Telecommunications and Information Administration’s (NTIA) work to expand access to and adoption of broadband in the United States. Four years after the American Recovery and Reinvestment Act, I can report that our efforts with the Broadband Technology Opportunities Program (BTOP) and State Broadband Initiative (SBI) are delivering substantial and meaningful benefits to thousands of communities in every state, the territories, and the District of Columbia.

The \$4 billion NTIA invested in roughly 230 projects to expand broadband access and adoption across the country, including leveraging over \$1.4 billion in non-Federal matching funds to enhance the sustainability of these investments, is helping to ensure that Americans have the resources and skills needed to benefit from the economic, educational, and civic opportunities the Internet makes possible. The projects range from large statewide infrastructure projects supporting the Internet-based economy of the future and jumpstarting economic

development in areas hard hit by the recession, to high-impact small projects to upgrade library public computer centers in remote rural towns so residents can access state-of-the-art skills training, to sustainable broadband adoption projects delivering comprehensive, personalized programs to reduce the number of Americans without broadband in the home.

## II. Success in Achieving Program Objectives

### a. *Exceeding Performance Goals*

Today, nearly two and a half years after NTIA met the Congressionally-mandated deadline to award all funds by September 30, 2010, I am pleased to report that recipients are delivering on their promises to create jobs, stimulate economic development, spur private-sector investment, and open up new opportunities in employment, education, and healthcare. NTIA's broadband recipients are exceeding programmatic goals for deploying new fiber-optic infrastructure, constructing new public computer centers, and encouraging greater Internet adoption. Through December 31, 2012, they have:

- deployed or upgraded more than 86,000 miles of broadband infrastructure;
- connected almost 12,000 community anchor institutions to high-speed broadband Internet service;
- entered into more than 600 agreements with third-party providers to leverage or interconnect with their networks;
- installed more than 40,000 workstations in public computer centers benefitting approximately 20 percent of the country's libraries;<sup>1</sup>

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<sup>1</sup> See American Library Association, First Report on "BTOP and U.S. Public Libraries" Shares Community Impacts, February 12, 2013, <http://www.ala.org/news/pr?id=12415>.

- provided more than 9.9 million hours of technology training to approximately 2.8 million users;
- generated over 520,000 new broadband Internet subscribers; and
- funded approximately 4,000 jobs each quarter for the past five quarters and enabled the beneficiaries of digital literacy training to secure thousands more.

On every metric against which NTIA is measuring progress within the broadband programs, grantees exceeded their targets in 2012 and are well on their way to meeting or exceeding their 2013 targets as well.

In all, NTIA's broadband recipients have spent approximately \$2.8 billion in federal funds and approximately \$900 million more in matching funds in meeting these metrics. Notwithstanding project delays caused by environmental reviews, complex procurements and severe weather, program progress remains strong with over 70 percent of NTIA's Recovery Act funding expended.

*b. Impacting Local Communities*

The numbers only tell part of the story. Another important gauge of the success of NTIA's broadband programs can be found in the countless stories from individuals and communities of how the broadband projects are transforming their lives. A good example is Maine, where a combination of NTIA-funded broadband projects is making tremendous differences in broadband access, economic development, healthcare, education, and digital literacy.

The Three Ring Binder project – one of the first awards announced in December of 2009 – which is supported by the Maine state government, the state university system, and a group of small telecom carriers, used \$25.4 million in Recovery Act funds to build a 1,100-mile dark-fiber



network across the state consisting of three interconnected fiber rings. Thirteen local carriers are now leasing that fiber to bring broadband to rural communities that, in many cases, previously had only dial-up service.

The Three Ring Binder project is also connecting community anchor institutions across the state. The University of Maine system will now be able to bring 10-gigabit connections to all seven university campuses to support big data-driven research and collaboration with other major academic institutions around the nation. The project is also turning on a 10-gigabit connection to the Jackson Lab, a genetics lab, so that it can exchange extremely large gene sequencing datasets with a new facility in Farmington, Connecticut.

Axiom Technologies is using a \$1.4 million broadband adoption grant in very innovative ways in Washington County, Maine. It is transforming Down East Community Hospital – a 25-bed critical-care hospital in Machias, connected by the Three Ring Binder project – into a teaching facility for nursing students. The grant paid for video-conferencing equipment that allows nursing students to take necessary classes through a nursing college in Lewiston, nearly 200 miles away. The grant also paid for a state-of-the-art teaching mannequin used to train the nursing students in Machias that can be controlled by instructors in Lewiston. The first group of nurses will complete the program this May. Shelby Leighton, one of the first graduates, is grateful the program allowed her to pursue her dream of becoming a nurse without uprooting her family. Leighton is confident she will find a local job with her new specialized skills after she graduates so that she can – as she put it – care for the community that raised her.

Axiom is also equipping local lobstermen and blueberry farmers with rugged wireless devices, broadband connections, and broadband training to help them manage extensive state data collection and reporting requirements. Axiom is developing software to move these tasks

out of old-fashioned paper-and-pencil logbooks and into the electronic realm. It is also teaching the farmers and fishermen – some of whom have never turned on a computer before – how to design websites, develop spreadsheets, and use programs such as Photoshop to advance their businesses. For example, Ellen Johnson, owner of an organic blueberry farm, took the training, and now has a brand new website to show off her blueberries, jams, and pies along with the website design and Photoshop skills to keep the site updated.

Axiom is offering digital literacy training in multiple locations around Washington County, including 18 public libraries. Many of those facilities have new computers thanks to a \$1.4 million public computer center award to the Maine State Library to distribute more than 500 desktops and laptops across 107 public libraries statewide and equip 11 with videoconferencing equipment. In NTIA’s quarterly reports to Congress, we have highlighted dozens more success stories and have compiled even more on our website in the form of blogs, profiles, and recipient reports.<sup>2</sup>

*c. Jumpstarting Additional Private Investment through Open Access Policies*

Our broadband grants are helping to “prime the pump” for additional investment by public and private entities. In particular, the open access and interconnection requirements imposed on federally-funded infrastructure are encouraging last-mile and other broadband providers to tap into these predominantly middle mile networks to expand broadband services and speeds for American consumers and businesses. Across the country, providers have signed over 600 agreements with our grantees to use federally-funded networks to better serve their customers.

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<sup>2</sup> NTIA Quarterly Reports to Congress are available on NTIA’s website at <http://www2.ntia.doc.gov/BTOP-Reports>.

The Three Ring Binder project is a good example of how this works. One of the 13 local carriers leasing fiber is Pioneer Broadband, which serves Aroostook County, a poor, rural county of potato fields and blueberry barrens where Interstate 95 literally comes to an end. Pioneer is leasing capacity on the Three Ring Binder network to bring DSL and even fiber-to-the-home to a string of remote towns that had no broadband whatsoever until now.

Ohio is another good example. NTIA was able to fund \$140 million in linked infrastructure projects to Ohio Middle Mile Consortium partners ComNet, Inc.; Horizon Telecom, Inc.; and OneCommunity.<sup>3</sup> In addition to constructing over 2,000 miles of new infrastructure and upgrading 1,700 miles more, these awardees have entered into 63 agreements with other service providers, further leveraging the investments and benefitting communities with an urgent need for improved broadband capabilities.

Combined, NTIA's grant recipients are building more than 2,600 "points of presence" – or network nodes – in 1,500 communities. Over 80 percent of these communities will receive speeds greater than a gigabit per second, dramatically increasing the availability of truly high-speed broadband necessary for economic development, education, and research.

*d. Empowering States and Collecting Broadband Data*

In addition to its infrastructure, sustainable adoption, and public computer center grants, NTIA has become the leading source of public data on broadband access and adoption in America. SBI grants fund states to collect and verify broadband data in each state, territory, and the District of Columbia and to leverage knowledge of local needs to advance broadband technology and better compete in the digital economy. One example is in Utah, where a health

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<sup>3</sup> More information about these projects is available at <http://www2.ntia.doc.gov/ohio> and <http://www.ohiomiddlemile.org/index.html>.

information exchange company with approximately 200 employees lost both time and money at its rural call center facility due to frequent broadband outages. The company considered moving the rural jobs to a more urban location. However, working with the Utah Broadband Project, it used the Map to identify other broadband companies that could provide redundancy and were able to retain the rural jobs. A loss of 200 jobs in a small city with a population of 5,000 would have been significant. In Kansas, the Kansas Department of Commerce and Convergys Corp used the National Broadband Map to identify communities with the connectivity required for Convergys's home-based hiring needs. Convergys has hired about 200 workers and plans to hire more, providing much-needed jobs in small towns.

NTIA has updated the National Broadband Map five times since its original February 2010 release. It is America's first public, searchable nationwide map of broadband Internet availability, and it contains more than 20 million records collected from nearly 1,800 broadband providers. The map shows where broadband is available, the technology used to provide the service, the maximum advertised speeds, and the names of the service providers. It is the most extensive dataset of its kind, and it is being used by consumers and businesses comparison shopping for broadband service, economic development agencies enticing businesses to relocate, and policy makers determining where to focus funding. The next update is scheduled for this summer.

*e. Promoting Digital Literacy*

NTIA's *Digital Nation* survey with the Census Bureau indicates that a third of households – more than 100 million Americans – do not subscribe to broadband Internet access at home. In addition, about one in five households – 20 percent – do not use the Internet from

any location.<sup>4</sup> Although the U.S. has come a long way in broadband adoption over the past ten years, this data point is significant in light of the importance of broadband access to our citizens and our economy. Our survey results indicate that the reasons consumers give most often for not subscribing is that they do not need broadband or are not interested in it. Cost is the second most frequently given reason, followed by the lack of an adequate computer.

Digital literacy is fundamental to sustainable broadband adoption. Through our broadband programs, awardees are gathering a tremendous portfolio of innovative approaches that communities will be able to replicate for years to come. Both sustainable broadband adoption projects and public computer center projects are reaching people who may never have even turned on a computer – a group that includes a disproportionate number of lower income Americans, senior citizens, and members of minority groups – and teaching them how to navigate the Internet, set up an email account, write a resume, and even apply for jobs over the Internet.

A key learning is that we cannot solve the adoption gap by focusing on only one of the barriers. A successful program must address all the major barriers in a comprehensive fashion and be tailored to the specific needs of the community and the individual. Another key point is to take advantage of the opportunity to provide digital literacy training to also focus on workforce training, particularly in areas of higher unemployment. Many grantees have found a natural extension of the digital literacy training to also assist their communities to take advantage of the online environment to find jobs.

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<sup>4</sup> See Press Release, “New Commerce Department Report Shows Broadband Adoption Rises but Digital Divide Persists,” available at <http://www.ntia.doc.gov/press-release/2011/new-commerce-department-report-shows-broadband-adoption-rises-digital-divide-pers>. The full Digital Nation report entitled, “Exploring the Digital Nation - Computer and Internet Use at Home,” is available at <http://www.esa.doc.gov/sites/default/files/reports/documents/exploringthedigitalnation-computerandinternetuseathome.pdf>.

Digital literacy includes skills that many of us take for granted. But for those stuck on the wrong side of the digital divide, not having basic digital literacy can be a significant barrier to employment. Many job listings are only posted online these days and many employers only accept job applications online. Even further, today's job market demands a basic knowledge of computers, software, and the Internet. The California Emerging Technology Fund, through a \$14 million Recovery Act investment, has helped over 2,600 people find jobs by providing digital literacy training. Combined, the more than 9.9 million hours of technology training to approximately 2.8 million users through NTIA grantees is helping equip Americans for the skills necessary to compete in the 21<sup>st</sup> century.

In addition, NTIA, in collaboration with the Department of Education and other federal agencies, created [www.DigitalLiteracy.gov](http://www.DigitalLiteracy.gov) to provide librarians, teachers, workforce trainers, and others access to resources and tools to teach computer and online skills necessary for success in today's economy. We continue to assemble materials from grantees and other leaders in the field and have made these tools freely available to anyone, anywhere, anytime. The portal now contains more than 500 resources (e.g., videos, tutorials, and lesson plans) to help prepare more Americans for today's jobs.

### **III. Monitoring, Oversight, and Technical Assistance**

Ensuring projects deliver their promised benefits and protecting taxpayer funds are of paramount importance to NTIA. NTIA proactively performs extensive and diligent oversight and provides technical assistance to recipients tailored to their needs. Such oversight involves a significant level of effort and requires hard decision-making at times when all else fails to protect

taxpayer investments. We appreciate the bipartisan support shown by this Subcommittee to ensure we have the resources needed to do so.

*a. Providing High-Quality Oversight and Customer Service*

The technical assistance, oversight, and outreach activities that NTIA has conducted since the last time I testified before the subcommittee include the following:

- An additional 3,000 check-in and conference calls conducted with recipients to monitor progress in achieving outcomes (over 6,000 total to date). This is the primary means of identifying and proactively addressing project issues such as milestone deviations, cost overruns, local approval or equipment delivery delays, and management challenges;
- Continued site visits (NTIA has now visited projects representing a total of 94 percent of program funds);
- Webinars and drop-in calls for awardees to provide guidance and share lessons learned on a variety of topics, including sustainability planning, mobile technology in schools, regional interconnection among recipients, and providing services to veterans;
- Four new fact sheets on sale/lease restrictions, Indefeasible Rights-of-Use, fiber swaps, and clarifying match documentation;<sup>5</sup>
- Monthly recipient newsletters published and as-needed emails generated regarding training, lessons learned, project closeout and answers to frequently asked questions.

*b. Acting Early to Address Issues that Arise*

A primary goal of NTIA's rigorous outreach, oversight, and monitoring is to proactively identify issues as early in the process as possible and resolve them promptly. NTIA utilizes tools such as technical assistance, Performance Improvement Plans (PIPs), Corrective Action Plans

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<sup>5</sup> These fact sheets are available at <http://www2.ntia.doc.gov/ManagementResources>.

(CAPs), Award Suspension, or Award Termination to highlight concerns, provide opportunities for recipients to get back on track, and protect taxpayer investments. We use these tools and technical assistance to get projects back on track as quickly as possible.

NTIA has suspended nine BTOP grant recipients for performance related issues at one point or another during the program.<sup>6</sup> In four cases, totaling approximately \$229 million in grant funds, we were able to work with the recipients to get the projects back in shape and lift the suspensions after the grantees addressed our concerns. As a result, the projects are stronger, more successful, and more responsible stewards of taxpayer dollars due to our interventions. The North Florida Broadband Authority wireless infrastructure project offers a prime example of where NTIA's oversight and technical assistance successfully enabled a project to get back on track after encountering initial obstacles that hindered its performance. Our oversight efforts identified concerns regarding project management, vendor oversight, and ongoing sustainability. We froze distribution of federal funds to the project for a month beginning in September 2011, helped the awardee navigate through the Corrective Action Plan process, conducted several site visits, and provided extensive technical assistance to the grantee. NTIA lifted the project suspension about a month later, after the recipient implemented management and vendor changes. Now, about a year later, the North Florida Broadband Authority project is nearing completion and benefiting dozens of communities in rural North Florida.

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<sup>6</sup> This number does not include the seven public safety BTOP grants that were partially suspended May 2012 following enactment of the law creating the First Responder Network Authority (FirstNet). Passage of the Middle Class Tax Relief and Job Creation Act of 2012 last February created FirstNet to build, deploy, and operate a nationwide public safety broadband network. As a result, NTIA partially suspended seven BTOP 700 MHz public safety projects to avoid activities that might lead to added costs or stranded investments. Once appointed in August 2012, the FirstNet Board quickly engaged, spoke with the BTOP awardees and their vendors, and conducted site visits of each project. On February 12, 2013, the FirstNet Board adopted a resolution determining that the seven projects could provide substantial benefits to FirstNet. See <http://www.ntia.doc.gov/press-release/2013/firstnet-board-charts-path-forward-btop-public-safety-projects>. NTIA will act expeditiously to lift the partial suspensions upon receiving notification that each awardee has reached agreement with FirstNet on the terms and conditions of its spectrum lease and each project details a reasonable path forward.



Three broadband infrastructure projects are currently suspended for performance-related issues, representing \$158.9 million of taxpayer funds. NTIA staff is working closely with these recipients, and we are hopeful that they will get their projects back on track so NTIA can lift the suspensions and the communities they target can receive the benefits promised by the projects.

*c. Acting Decisively to Protect Taxpayer Funds When Projects Fail*

In many cases, recipients get their projects back on track. For two projects, however, NTIA's strong oversight led to termination of their awards with minimal expenditure of public funds. In each case, NTIA stepped in and took action quickly once it had identified concerns. Among the first actions NTIA takes in such circumstances is to prevent awardees from further drawing down federal funds until our concerns are adequately addressed. In these two cases, NTIA took action to terminate grants to recipients that materially failed to comply with the terms and conditions of their awards. In the case of project termination, we maximize the amount of funds returned by taking actions such as carefully reviewing costs incurred, securing property and equipment related to the project, and seeking to repurpose or sell any equipment purchased with federal funds. The two terminated projects were awarded approximately \$139 million and have expended approximately \$11 million, representing less than 0.3 percent of the total grant dollars awarded under BTOP. While I am disappointed that these particular projects will not deliver their intended benefits to unserved and underserved areas, these experiences underscore the importance and value of NTIA's strong federal oversight and monitoring of its broadband projects, and highlight its commitment to working closely and proactively with all recipients to ensure the success of the program as a whole.

In addition, seven other awards were voluntarily terminated by the grantee early in the program. Just one of these seven grantees drew down any federal dollars from its account, which

amounted to approximately \$36,000, and the remaining approximately \$44 million in federal funds were returned to NTIA.

*d. Collaborating with the Inspector General*

NTIA has worked closely with the Department of Commerce's Office of Inspector General (OIG) since the broadband grant programs began. Our shared goal has been to prevent waste, fraud, and abuse of taxpayer dollars by implementing these programs in the most responsible and efficient manner possible. The OIG has issued several reports that have provided valuable input to strengthen our oversight, identify lessons learned for the future, and ultimately demonstrate that we have managed our broadband programs with the highest degree of responsibility, efficiency, and vigor possible for a program of this size, scope, and speed of implementation.

*e. Program Close-Out*

As we approach the end of Fiscal Year 2013, NTIA is focused on ensuring that the broadband grants deliver on their promises on time. To date, four projects have completely closed out, meaning that the grantees have reconciled all project finances, submitted final reports, and the government has a full accounting of the property paid for with taxpayer funds. Approximately 30 more projects are in what we call the "closeout phase," meaning that they are in the process of submitting their final grant paperwork. These projects will return over \$10 million in project savings.

Once projects close, the federal government maintains an interest in real and personal property acquired or improved using federal funds.<sup>7</sup> Recipients and subrecipients of broadband grants hold all property acquired or improved, in whole or in part, with federal funds in trust for the public purposes for which the grant was made. This exists throughout the duration of the

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<sup>7</sup> See 15 C.F.R. §§ 14.30-37 and 24.31-34.

useful life of the property.<sup>8</sup> During its useful life, awardees must obtain approval from the Department of Commerce prior to selling or leasing the federally-funded property or using the property for a different purpose than intended. These requirements ensure that the assets the recipients acquired for their broadband projects continue to deliver their promised benefits long after NTIA closes out the awards.

We expect the majority of remaining projects to be complete by the end of Fiscal Year 2013. Approximately 15 percent of the BTOP projects may require additional time to complete their work due to delays caused by weather, environmental and historic preservation approvals, permitting, the statutory creation of the First Responder Network Authority, and other factors. Despite these delays, NTIA is focused on moving these projects forward quickly to deliver the intended benefits to the nation.

*f. Sharing Lessons Learned*

Because BTOP is a one-time program, NTIA is committed to leveraging these investments to the maximum extent possible. One way we will do that is by sharing successful strategies across the grant portfolio on issues ranging from procuring fiber to streamlining the environmental review process. In September 2010, NTIA contracted with ASR Analytics, LLC (ASR) to conduct an evaluation of the program's economic and social impacts. The study will assess the degree to which NTIA has met the Recovery Act goals by measuring the short- and long-term economic gains in the grant-funded communities. ASR has already submitted an Interim Report summarizing results of its analysis of public computer center and broadband adoption recipients, and will deliver its Final Report, including analysis of the broadband

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<sup>8</sup> More information on the useful life of property is available at [http://www2.ntia.doc.gov/files/fact\\_sheet\\_useful\\_life\\_schedule\\_082510\\_v1.pdf](http://www2.ntia.doc.gov/files/fact_sheet_useful_life_schedule_082510_v1.pdf).

infrastructure projects, in 2014.<sup>9</sup> The initial findings confirm that NTIA's broadband investments have already begun to demonstrate a meaningful and positive impact in their communities by training at-risk populations with the skills essential for today's economy.

Furthermore, the broadband adoption projects are identifying best practices to overcome hurdles in advancing broadband adoption in the United States. NTIA is finalizing a Sustainable Broadband Adoption Toolkit that will provide detailed guidance for replicating the success of these broadband adoption projects and utilizing the lessons learned. The Broadband Adoption Toolkit harvests the innovations of our sustainable broadband adoption projects. It lays out the steps for effective broadband adoption efforts and provides concrete, field-tested approaches to leaping the barriers to adoption – such as lack of skills, lack of understanding, and plain old fear. Many of our grantees contributed their detailed and specialized knowledge about what works on the ground, and we will include information that covers outreach, awareness-building, training, curriculum, and making broadband affordable to low-income Americans. The Toolkit contains a wealth of information on good project ideas, incentivizing target audiences, and avoiding common pitfalls. We are hopeful that the Toolkit will help communities throughout the United States develop tailored adoption programs to help more Americans harness the power of broadband technology to improve their lives.

#### **IV. Conclusion**

Four years after passage of the Recovery Act, the record is clear that the more than 220 BTOP projects and 56 SBI projects funded through NTIA's broadband programs are delivering

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<sup>9</sup> See Progress towards BTOP Goals: Interim Report on PCC and SBA Case Studies, available at <http://www.ntia.doc.gov/report/2012/progress-towards-btop-goals-interim-report-pcc-and-sba-case-studies>.

economical, tangible, and extremely valuable benefits to communities and individuals nationwide.

Thank you.

Mr. WALDEN. Thank you, Mr. Strickling.

We will now go to Mr. John Padalino, the Acting Administrator, Rural Utility Service. We welcome you here and look forward to your testimony.

#### **STATEMENT OF JOHN PADALINO**

Mr. PADALINO. Thank you, Mr. Chairman. And Mr. Chairman, Ranking Member Eshoo, and members of the subcommittee, thank you for the opportunity to testify on the U.S. Department of Agriculture's Broadband Initiative Program, or BIP, and the progress of the Rural Utility Service broadband investments under the American Recovery and Reinvestment Act of 2009.

Because access to affordable broadband is crucial for economic development, the Rural Utility Service remains focused on the Recovery Act projects. We continue to work to expedite delivery of affordable, robust broadband service. Broadband creates jobs when projects are planned and built, adds jobs when these projects become operational, and again as communities continue economic expansion.

The Rural Utility Service leveraged its budget authority appropriated by the Recovery Act to make grants, loans, and loan/grant combination awards to 320 projects totaling \$3.5 billion. The agency targeted grant funds to the most rural areas and to those in greatest need of service. The Rural Utility Service also leveraged grant dollars with additional private investments in broadband infrastructure projects to help communities gain sufficient access to high-speed broadband service, to facilitate rural economic development as directed by the Recovery Act statute.

Rural broadband systems may take 5 years to build out. All of our U.S. projects must comply with federal and state environmental, historic preservation, and in some cases, tribal or intergovernmental reviews that can require significant consultation with the public prior to receiving loan and/or grant funds. To ensure recipients comply with the broadband program's requirements, including the budget and network system design submitted during the application process, the Rural Utility Service technical and financial staff review requests for funding advances and continue to provide technical and financial oversight throughout the project's life and beyond. Our rigorous project oversight has led to the rescission of 38 Recovery Act awards and nearly \$266 million returned to the U.S. Treasury.

Under the Recovery Act, contracts signed by awardees require that all loan grant funds must be advanced by September 30, 2015. Funds not advanced will be rescinded and returned to the U.S. Treasury. The Rural Utility Service and senior USDA officials have repeatedly encouraged awardees to complete Recovery Act projects as quickly as possible. Our 19 technical assistance awards have been fully disbursed. The Satellite Broadband Program has now dispersed 86 percent of its \$100 million to date.

Infrastructure projects continue to progress. Over 98 percent of the projects have drawn funds. The Rural Utility Service continues to closely oversee and work with the few awardees that have not yet drawn down funds.

Since 1949, the Agency has played an important role in financing rural telecommunications. Our current rural broadband expansion efforts were initiated through the Rural Utility Service Telecommunications Infrastructure Loan Program, which has required that financed projects be broadband-capable since 1995. The 2002 Farm Bill authorized the Rural Broadband Loan Program, which has provided broadband service to more than half a million rural subscribers. And the community connect grants are available to areas completely lacking broadband service.

For this reason, the Recovery Act gave priority in funding to RUS infrastructure borrowers. For example, Baca Valley Telephone Company in New Mexico received their first loan in 1979. Today, Baca Valley Telephone Company covers over 2,600 square miles providing rural residential and cellular service, local internet access, business telephone and security systems, and network cabling throughout northeastern New Mexico and southeastern Colorado. Baca Telephone received Recovery Act funding to provide fiber optic connectivity and deploy a last mile access system, to provide broadband services to households and businesses in the northeast area of New Mexico.

Now fully operational, contract savings allowed the project to expand into unserved areas and provide a solid framework for future needs. In Oregon, the Confederated Tribes of Warm Springs received an award for a broadband network on the reservation to improve public safety, enhance educational opportunities, and allow access to medical professionals on the reservation. The new network continues to assist employment growth as community members start online, home-based businesses.

With a combined loan portfolio of over \$6 billion, the Rural Utility Service Telecommunications Programs help deliver affordable, reliable, advanced telecommunication services critical to the future prosperity of rural communities.

Despite Rural Utility Service investment, rural areas lag urban and suburban areas in broadband deployment. The RUS continues to address challenges to bring broadband to rural communities, yet we remain concerned over the impacts slow broadband investment may have on rural economies.

Mr. Chairman, I thank the Committee and its members for its continued interest in the Recovery Act and other Rural Utility Service broadband programs.

[The prepared statement of Mr. Padalino follows:]

**Statement of John Padalino**  
**Administrator, Rural Utilities Service**  
**United States Department of Agriculture**  
**House Energy and Commerce Subcommittee on Communications and Technology**  
**Wednesday, February 27<sup>th</sup>, 2013**

Chairman Walden, Ranking Member Eshoo, and members of this Subcommittee, thank you for the opportunity to testify on the U.S. Department of Agriculture's Broadband Initiatives Program (BIP) and the progress on the Rural Utilities Service (RUS) broadband investments under the American Recovery and Reinvestment Act of 2009 (Recovery Act).

Among the goals of Congress and this Administration is to increase the number of rural Americans with access to robust broadband service. Broadband has already diminished the barriers of distance and increased web-based business and services, helping strengthen rural economies. Continued investment in broadband infrastructure will allow rural areas to take full advantage of the same speed and efficiency that the Internet delivers to nonrural areas.

Because access to affordable broadband is crucial for economic development, RUS remains focused on Recovery Act projects. We continue to work to expedite delivery of affordable, robust broadband service through this program.

Infrastructure investment has been a cornerstone of this Administration's economic recovery strategy. Broadband creates jobs when projects are planned and built, adds jobs when these



projects become operational, and continues to contribute to job growth as these services are used by communities to spur further economic expansion.

To maximize the level of funds available for broadband projects, the agency leveraged its budget authority appropriated by the Recovery Act to make grants, loans, and loan/grant combination awards. In total for the broadband program, over \$2.33 billion in grants and \$1.19 billion in loans were made to 320 projects, totaling over \$3.5 billion. Of those original 320 projects, 297 were for infrastructure, 4 for satellite broadband service support, and 19 for technical assistance, the majority of which went to tribal communities.

RUS targeted grant funds to areas in the greatest need of service and the most rural. RUS also leveraged grant dollars with additional private investments in broadband infrastructure projects to help communities gain “sufficient access to high speed broadband service to facilitate rural economic development,” as directed by the Recovery Act.

RUS BIP investments will bring broadband access to nearly 7 million rural Americans, along with more than 360,000 businesses and critical community facilities, such as schools, healthcare facilities, and rural public safety agencies. These projects will span more than 300,000 square miles in 45 states and 1 U.S. territory. These projects also overlap with 31 tribal lands and 125 persistent poverty counties, and are estimated to create more than 25,000 immediate and direct jobs for rural workers in a variety of industries.

Rural broadband systems, which are large infrastructure projects, may take as many as five years to build out. All RUS projects must comply with federal and state environmental, historic preservation and in some cases tribal or intergovernmental reviews that can require significant consultation with the public prior to receiving loan and/or grant funds. Also the RUS worked closely with Federal and state partners to complete required reviews and to address regulatory or processing issues. RUS technical and financial oversight continues throughout the project's life and beyond.

To ensure recipients comply with the BIP requirements, including the budget and network system design submitted during the application process, RUS technical and financial staff review requests for funding advances and continue to provide technical and financial oversight throughout the project's life and beyond. Our rigorous project oversight has led to the rescission of 38 Recovery Act awards. As a result, nearly \$266 million has been returned to the Treasury.

Under the Recovery Act, contracts signed by awardees require that all loan or grant funds must be advanced by September 30, 2015. Funds not advanced will be rescinded by RUS and returned to the U.S. Treasury. However, in light of the current economic climate and the urgent need to put Americans back to work, in September of 2011, the President directed Federal agencies to take steps to complete all Recovery Act projects.. RUS and senior USDA officials have repeatedly encouraged awardees to complete Recovery Act projects as quickly as possible. RUS field employees continue to vigorously monitor the progress of construction and

compliance of the projects. Projects are progressing well and within the Department's expectations.

All 19 Technical Assistance awards have been fully disbursed.

The \$100 million satellite broadband program has now disbursed 86 percent of its funds to date to the four satellite awardees.

Infrastructure projects, many of them large and complex, continue to progress and offer more rural residential and business consumers access to broadband service. Of these, 116 projects, representing \$1.5 billion in funding, are partially operational or have been completed. About \$2.6 billion of construction for projects has been completed or is actively being worked on. Because recipients generally determine the timing of the loan or grant advances, the pace of construction continues to exceed the pace of reimbursement.

Loan or grant funds have been drawn in 98.4 percent of these projects, representing approximately 98.2 percent of the funding. RUS continues to closely oversee the few projects that have not yet advanced far enough to draw funds and is working with these awardees, Federal partners, and government entities to address issues affecting completion of these projects. RUS will work to ensure that projects remain viable. Our goal is to make each award a success.

Determining the financial feasibility and sustainability of the proposed service territory continues to remain a significant challenge in funding broadband construction in unserved rural areas. It is important to ensure the availability of sufficient revenue from all sources to make projects successful in accelerating broadband service to underserved areas of the country. RUS has played an important role in financing rural telecommunications since 1949. Our current rural broadband expansion efforts were initiated through RUS' telecommunications programs, including the Telecommunications Infrastructure Loan Program, the Rural Broadband Loan Program and the Community Connect Program. The traditional Telecommunications Infrastructure Loan program, authorized in 1949 under Titles II and III of the Rural Electrification Act (REA), was created to ensure rural areas had access to reliable and affordable telecommunications systems. Beginning in 1995, RUS required that telecommunications infrastructure financed be broadband-capable to facilitate business, educational, and medical service needs. Since 2009, this program has provided broadband service to more than half a million rural subscribers. For this reason, the Recovery Act gave priority in funding to REA Title II borrowers.

The Rural Broadband Loan Program, first authorized under the 2002 Farm Bill and revised by the 2008 Farm Bill, has provided broadband loans to independent telephone companies, cable companies, and wireless broadband service providers. Community Connect grants are available to areas completely lacking broadband service. The funds are used to build broadband infrastructure, and awardees are required to establish community centers that offer free public access to broadband.

These programs, with a combined loan portfolio of over \$6 billion, help deliver affordable, reliable advanced telecommunications services critical to the future prosperity of rural communities.

Despite this investment, recent surveys and studies indicate that in general, rural areas remain behind urban and suburban areas in broadband deployment. The Federal Communications Commission (FCC) noted in its Eighth Broadband Progress Report that 14.5 million rural Americans living in 6.5 million households — nearly one-fourth of the rural population — lack access to robust broadband service. This digital divide is most exacerbated along racial and ethnic lines. The FCC estimated that it will cost \$23.5 billion to make broadband available to those homes currently without access.

Since this data was released, the pace of rural broadband investment has slowed, although the need for rural broadband service remains high. We continue to address the challenges in bringing broadband to rural communities. Solutions to difficult terrain, sparse population, low income levels, limited access to a skilled workforce, and issues surrounding the long term financial feasibility of small rural systems are not easy to develop.

RUS also continues to work to expand broadband connectivity and capacity, and to extend service to the millions of rural Americans still lacking affordable access to the Internet. Infrastructure investment offers returns—building, deploying, and using broadband increases access to health care and education, expanded markets for business, and jobs.

I thank the Committee and its members for its continued interest in the Recovery Act and other RUS broadband programs.

Mr. WALDEN. Mr. Padalino, thank you. And Mr. Strickling, thank you for your testimony.

I request unanimous consent to submit for the record the Ars Technica story about allegations West Virginia wasted millions of dollars putting enterprise-grade routers in small libraries like the one that I held up the picture for earlier.

Without objection.

[The information appears at the conclusion of the hearing.]

Mr. WALDEN. Assistant Secretary Strickling, the West Virginia auditor concluded, "The decision to spend the federal funds on oversized routers resulted in millions of dollars in federal funds not being spent on expanding the states fiber-optic broadband network." The auditor said that "A capacity and a user's need survey prior to the procurement of the routers would have determined the appropriate router size, but such surveys were not conducted." The Commerce IG's report also concluded that West Virginia overspent, noting that West Virginia "did not perform a study to determine which size router would most effectively and efficiently meet its needs."

Did the NTIA require any kind of site assessment or use-case analysis before approving a grant or authorizing the purchase? And if not, should it have? And will you do so going forward? Are you reviewing any other grants with questionable purchases? And how are you monitoring these grant recipients to prevent this from happening again?

As you know this came up in a hearing we had back in May—

Mr. STRICKLING. Yes.

Mr. WALDEN [continuing]. and we sparred back and forth about this very situation. And so it is a matter of keen interest to me and this subcommittee.

Mr. STRICKLING. Yes, sir. Well, to answer the second part of your question, as you know, we don't have any more grant dollars to be giving out. So the issue of what we would do in terms of looking at a new application is a moot question because we are not in the business of giving out any new money. Now, with respect to these findings in West Virginia, I have had a chance to look over the auditor's report and I am certainly familiar with the Inspector General's report at the Department of Commerce. I think it is not at all clear from those reports that what West Virginia did was unreasonable in terms of its choice of a platform, a single platform, the Cisco router, at the time they made it.

And I think part of the confusion we are having here, and it is reflected in the articles about this project, is we are confusing cost with capability. There is no question that the routers that West Virginia chose through its process that it used are providing superior capabilities. And there is no doubt that there are places in West Virginia that if those routers are installed, they are going to have far more capability than one would expect they would need now and probably in the next 10 years. But what West Virginia did was they were looking in terms of, how do we do this in the future-proof way?

Because the question we have here is not what do you need today to serve these facilities? What do we need for the next 10 years?

Mr. WALDEN. Mr. Strickling, with all due respect, hold up that library. The Market Public Library is open Thursdays—what does it say here—Thursdays, Fridays, and Saturdays—in a single-wide trailer with one internet connection. Do you really think that is going to build out to where they have the need for a couple hundred internet connection router in a community of 1,500?

Mr. STRICKLING. I don't know, Mr. Chairman. But I do know that that community has plans to build a 5500 square foot library to replace the temporary one that is in your picture. So—

Mr. WALDEN. A 5,500 square foot library in a town of 1,500 needs a \$20,000 router?

Mr. STRICKLING. Well, sir, the \$20,000 is a list price and I am not in any way suggesting that every one of these locations in West Virginia will make full use of these capabilities. But it still comes back to the cost question. The question is, how did they waste money if they wasted money? And the fact is that the financial analysis of this shows that the prices that were paid in the aggregate by West Virginia are pretty close to what they would have paid under an alternative model.

Mr. WALDEN. So you have read the audit from the West Virginia.

Mr. STRICKLING. Our Inspector General did a review of this project and said that if you assume that they would have gotten the same level of discount on the lower-class router and if they had gotten 100 free routers, there might have been a savings of 2 to 5 percent—

Mr. WALDEN. Mr. Strickling—

Mr. STRICKLING [continuing]. but our Inspector General finally just finished, Mr. Chairman, concluded that if either of those assumptions wasn't true, if in fact they couldn't get the 100 free routers, then the cost would have been a wash.

Mr. WALDEN. So you are happy with the outcome in West Virginia is what I hear you defending. Is that correct?

Mr. STRICKLING. I am saying—

Mr. WALDEN. You believe that what they did is accurate and a good use of taxpayer money? Have you read the West Virginia audit itself? The IG didn't dig as the as the West Virginia auditor did.

Mr. STRICKLING. The West Virginia auditor used list prices. They didn't use the actual prices—

Mr. WALDEN. And they identify that there was no competitive that process—just a moment, sir.

Mr. STRICKLING. Sir—

Mr. WALDEN. Did they use a competitive bidding process in West Virginia in accordance with their statutes? No, they did not according to the auditor. Correct?

Mr. STRICKLING. Well, I think we need to hear from the State on that. My understanding is they use a process that they have used in the past in terms of the—

Mr. WALDEN. I don't believe that is true. I don't believe that is true at all. Have you read the West Virginia audit?

Mr. STRICKLING. I have, sir. But I am telling you that it—

Mr. WALDEN. That clearly identifies the problem and the waste here and calls for future investigations?

Mr. STRICKLING. It used list prices, not the actual prices.



Mr. WALDEN. So you are oK with this little single-wide trailer having a \$15 or \$20,000—

Mr. STRICKLING. That is not what I said, Mr. Chairman.

Mr. WALDEN. But I believe it is.

Mr. STRICKLING. I have indicated to you that what we are talking about is the decision of West Virginia to make—

Mr. WALDEN. We are talking millions and millions of dollars being wasted here that we don't have that I expect you to go after if they have been wasted in West Virginia to give back to us.

Mr. STRICKLING. That is my point, sir. There is no real showing of wasted dollars expended here.

Mr. WALDEN. Wow.

Mr. STRICKLING. Look at our IG's report.

Mr. WALDEN. I have.

Mr. STRICKLING. Our IG concluded a possible 2 to 5 percent savings had they used different routers if they would have gotten 100 free routers, which they got by buying the higher-capacity gear and if they had gotten the same level of discount. If they wouldn't have gotten the free routers, the price of buying the lower capable routers would have been the same as what they bought. So that is what we are confusing here, Mr. Chairman. We are confusing the capabilities of what they are getting with the cost that they paid.

Mr. WALDEN. Well, it is interesting that we have gotten a letter from the Chief of Staff of the Governor asking for all kinds of flexibility now going forward to deal with this issue of routers that have overcapacity.

My time has expired. I recognize the gentlelady from California.

Ms. ESHOO. Thank you, Mr. Chairman. I think that if this little town—wherever it is in West Virginia—had their 5,500 square foot library built with not only capacity for today but capacity for the future that was purchased that we wouldn't be having this discussion. It is the shed that doesn't look good. Because when you look at what is going on, I mean you don't just buy something with capacity for today. You shortchange yourself. And there is—if you want to get into the weeds, and it is important to—that the pricing of these routers are very important.

Now, just for the record, I have spoken to some of the companies that are a part of this. Well, first of all, Cisco did not write up the order. They responded to the customer and sold them what they asked for. Number two, if there is any kind of shadow over these dollars, Cisco is willing to refund the federal program. I don't think that is going to be the case, but nonetheless, I think it is important to state that.

Now, the GAO recently raised concerns about the quality of the data being collected by BTOP and BIP. Have your agencies taken any action to respond to the GAO's recommendations? You want to be brief because I have got a lot of questions to ask.

Mr. STRICKLING. In fact there weren't any recommendations—

Ms. ESHOO. There weren't?

Mr. STRICKLING [continuing]. directed at us. In fact they used us, I think, as a model of a good way to collect data. They did—

Ms. ESHOO. Terrific.

Mr. STRICKLING. They did raise some questions about how they collected data.

Ms. ESHOO. I hope all of the members are listening to this. I mean we have a tendency to insulate ourselves from any kind of good news.

Mr. Padalino?

Mr. PADALINO. Yes, the recommendation in the GAO audit was directed at the Rural Utility Service and the Broadband Initiative Program.

Ms. ESHOO. So what are you doing with it?

Mr. PADALINO. At the time the audit was published, we had at that point developed a dashboard and required project-by-project reporting so that we could—

Ms. ESHOO. I don't know what that means. What are you doing with it?

Mr. PADALINO. Well, what we are now collecting is the data similar to what NTIA is collecting as far as network miles, wireless access points, number of—

Ms. ESHOO. When are you going to finish with your absorption of that and what you are going to do with recommendations?

Mr. PADALINO. We plan to try to make that data publicly available.

Ms. ESHOO. But don't try. You need to. You just need to do it.

Mr. PADALINO. Yes, ma'am.

Ms. ESHOO. Try is not good enough. OK? Really. We are in the public business, all right, or the business of the public.

Now, the RUS has been, I think, less than forthcoming than NTIA about publicly reporting on the progress of your grantees. So what are you doing to make sure or ensure that the public has access to information where BIP projects are building and whether they are on track to meet their milestones?

Mr. PADALINO. One of the first things we do even before an award is made is have each of the applicants go out for public comment. And they notify the public that they are seeking RUS funds. And the public has an opportunity to comment on that application. Afterwards, as I said, we developed a dashboard so we are—

Ms. ESHOO. But my question is about the progress of the grantees. You are talking about who is bidding and the public knows that Company A, Company B, Company C. That is not what I asked you.

Mr. PADALINO. Earlier this year, we had a webinar with all of the Broadband Initiative Program awardees, and the very same question was asked of how we can make this information available. We are working to get that information available online so we can report on the progress of our projects.

Ms. ESHOO. Yes, I mean the public needs to know, and in a very clear way, how they can track the progress of this. That is essentially what the hearing is about. All right? And it is very important that you do that.

At the Subcommittee's last hearing on BTOP and BIP in May of last year, USDA's Deputy Inspector General identified that the IG had begun an audit of the BIP application process. And he estimated that the audit would be complete in September of last year and that a second phase examining the post-award process would be completed by December of last year. Has either of these audits been released?

Mr. PADALINO. Those audits have not been released yet.

Ms. ESHOO. Why?

Mr. PADALINO. I am not sure.

Ms. ESHOO. Do you know?

Mr. PADALINO. We could look to the Inspector General's office to ask why. I think they will be coming out shortly, and when they are publicly available, we would be happy to discuss it with you.

Ms. ESHOO. Well, if they are publicly available, then we will get them, too. Let me ask you this. Are you pressing them for it?

Mr. PADALINO. Yes, we have been working closely with them on the audit.

Ms. ESHOO. Are you? Good. OK. Do you have a timeline of when—well, you just said you think it is going to be made available publicly shortly. Shortly in government time is what, in the next 6 months or the next 6 weeks?

Mr. PADALINO. I think in the next few months. I can't speak for the Inspector General—

Ms. ESHOO. I know. It is a guess. It is a guess.

I just want to also request, Mr. Chairman, while I still have some time, that a unanimous consent request that the letter dated February 26 from the National Association of Telecommunications Officers and Advisors be made part of the record.

Mr. WALDEN. Without objection.

[The information appears at the conclusion of the hearing.]

Ms. ESHOO. Thank you, Mr. Chairman.

And I would also like the majority to follow up on something that was said at the beginning of the hearing, that there is documented fraud. And if there is documented fraud, we need to know about it. I don't know, you know, if it is documented, if it is speculative, then say if it is speculative and we will look into it. But fraud is a heavy charge. Some of these issues, obviously, you can debate them. You know, I don't think the Cisco router look so great in the shed. You know, it kind of pulls down, I think, the value of the brand. But on the other hand, if there is documented fraud, we need to cast a spotlight on that and examine it.

And with that I yield back.

Mr. WALDEN. The gentlelady's time has expired and she yields back.

The Chair recognizes the vice chair of the subcommittee.

Mr. LATTI. Mr. Chairman, I will yield 2 minutes to you. Thank you.

Mr. WALDEN. I thank the gentleman for yielding.

I want to go to this point of the West Virginia audit. I will quote from the audit, page 29 of the audit. "The State Office of Technology used a purchasing process which is unauthorized by West Virginia statute or legislative rule to purchase 1164 Cisco model 3945 branch routers at a cost of 24 million on behalf of the Broad and Technology Opportunity Program, BTOP, Grant Implementation Team." The Office of Technology used a "secondary bid process" on an existing contract approved by the state purchasing division instead of a competitive bid process open to non-Cisco vendors as required by law.

Now, if you go back to some of the points I was making earlier, according to the audit, "The auditors research, some conclusions

can be readily drawn. Smaller, less-extensive routers could have been purchased for the State's 172 libraries. If the average cost savings was 16,265 less per router, 2.8 million could have been saved." Smaller, less-extensive routers, if necessary, could have been purchased for the state police for \$15,000 less per router saving \$1 million more. Several of the State's public schools are presently able to meet the 2017 broadband standards set by the State Educational Technology Directors Association, and in the opinion of the legislative auditor, routers significantly smaller than the Cisco model 3945 could have been purchased to ensure almost all the state schools meet the standards. Purchasing approximately sized routers, which could have cost \$10,000 less for at least the 368 schools with enrollment less than 500 which received Cisco 3945 routers could have achieved the same result for \$3.68 million less."

So these are issues that we are reading in an independent auditor's report from the State of West Virginia that went much deeper than the IG's report did—are disturbing.

I yield back to the vice chair.

Mr. STRICKLING. But if I could just say, Mr. Chairman, they are still using list prices. They didn't focus on the actual discounts that were provided.

Mr. WALDEN. We will look forward to getting the data that you have.

Mr. LATTA. Thank you very much, Mr. Chairman. Reclaiming my time.

Mr. Padalino, if I could ask you, could you explain the criteria and application process for the BIP awards, please?

Mr. PADALINO. When we are reviewing a BIP award application, we are looking to see if this is a project that can promote rural economic development and if it is in an area to be served is at least 75 percent rural. Then, we take a look at the technical and financial feasibility of the project. The project applicant will go out for public comment. They will, you know, notify the public that they are seeking RUS funding. We will take those comments, we take application, and then do the technical and financial feasibility review to see if, based on the totality of the application, if one, if it is technically feasible; and two, if it is financially feasible, and basically, can this loan be repaid?

Mr. LATTA. OK. In your testimony you state that nearly \$266 million were turned back into the Treasury because after you had done your oversight there was a rescission of 38 of the Recovery Act awards. How long did it take you to find that these 38 awards weren't up to the standards that had been set?

Mr. PADALINO. We have a rigorous oversight process even after the award is made. We continue to work with each and every project through the life of the construction and even afterwards. We have auditors and field representatives who regularly meet with these individual projects as those 38 came—and different reasons. Each one has a slightly different story. As they would come up to the Agency, a decision at some point was made that this project couldn't move forward. And maybe in some cases the applicant just decided they did not want to pursue it even after the award was made. So those funds were rescinded and returned to the Treasury.

Mr. LATTA. OK. So had the money already been allocated out to those 38 or how is that done?

Mr. PADALINO. The funds had been obligated but they had not been—

Mr. LATTA. They had been allocated. Let me ask this, too. Now, after these award grants have been rescinded, can those organizations, groups, et cetera, come back to you and reapply?

Mr. PADALINO. They can reapply if they are—well, they can always reapply under the regular programs that we have. I mentioned our Traditional Infrastructure Loan Program and our Broadband Loan Program. The Broadband Initiative Program money, if those funds are rescinded, go right back to the Treasury and are no longer available.

Mr. LATTA. And so those should be no longer available to those. But you are saying they could apply it under another grant?

Mr. PADALINO. Under another loan program.

Mr. LATTA. But not under BIP? OK.

Mr. Chairman, I see that my time has expired and I yield back.

Mr. WALDEN. The gentleman yields back his time. The Chair now recognizes—I think Mr. Doyle is next with Mr. Waxman out of the room. So we welcome your comments.

Mr. DOYLE. Thank you, Mr. Chairman. To both of our witnesses, welcome. We appreciate you coming here today to update us on these important programs.

Mr. Chairman, I think BTOP and BIP are programs we should be really proud of because they are creating opportunities for our constituents to have faster, cheaper internet service. I want to say for the record that I am not happy with the direction this hearing is taking. I don't really understand how any of my colleagues can argue that providing that better, faster internet and more digital literacy training to unserved and underserved areas of this country is something we should criticize. Is this program perfect? Of course it is not perfect. In the 19 years that I have been here I have yet to see the first perfect government program run at this scale.

If you want to criticize or ask questions about West Virginia or Colorado, you have every right to do so. And I support that. What you don't have the right to do is to imply that this program in its totality is a waste of government money and hasn't met its mission.

Congress passed the Recovery Act mandating the NTIA and RUS support programs in unserved and underserved communities, and that is what they have been doing. In Pittsburgh, BTOP has funded four public computing centers in low-income neighborhoods. Mr. Chairman, I have toured these centers and I have seen firsthand what an important service they provide to my constituents who don't have computers or internet access at home or don't know how to use computers. And in Pennsylvania statewide, BTOP is funding the construction of a massive middle-mile fiber network called PennREN, which will connect anchor institutions including universities, K through 12 schools, libraries, and hospitals to a robust internet backbone. Both of these programs are thriving and are on track.

So I think rather than apologizing for these programs, we should be proud of them because they are providing real tangible benefits to our constituents.

Gentlemen, I have question for both of you regarding interconnection. As you know, one of the requirements put in place by the Recovery Act is the ability for other providers to interconnect to BTOP- and BIP-funded facilities on a reasonable and non-discriminatory rates and terms. Can you share with us whether other broadband providers have used interconnection agreements to leverage the investment being made by BTOP and BIP?

Mr. STRICKLING. I will start. And thank you for the question. Yes, it has been a fundamental feature of our program from the start that we wanted to use this investment to prime the pump for additional private sector investment. And as a result, we do have interconnection and nondiscrimination obligations that apply to any facilities built with federal dollars. It is a very clear standard. These dollars come from the public; the public should benefit from it. And therefore, the facilities should be open to anyone who wants to use them to offer new or improved services to their constituents.

To date, we have had 600 interconnection agreements signed with our various grantees. And what these people are able to do then is get cheaper backhaul to internet exchange points, which may allow them to better serve homes and residences that they want to serve. Our projects, for the most part, do not serve end-user homes and businesses. We do serve anchor institutions, but for the most part, we have left it to the private sector to serve homes and businesses and we think that is the appropriate way to do it.

What we have done for all those companies, whether they are incumbents or new entrants, is offering them a lower-cost middle-mile to get back to the internet exchange points. That cost for many of these providers is a barrier to expanding or even entering the business. And we have been able to see successes with that by virtue of the middle-mile capacity that we offer.

And I know there has been a lot of comment about overbuild and I am sure we will hear more, but I say fundamentally, the construction of middle-mile facilities is not overbuilt in this country. The amount of internet usage is expanding at a rate so great that we need as much middle-mile as we can get. And in fact, the last statistics that I saw is that we expect internet usage to double from what we had last year to 2016. In 2011 we had 1 billion devices connected to the network. That is projected to be 3 billion in 2016.

So what our projects are doing is laying these facilities out there for anybody to use to help future-proof and improve our opportunities in the global economy by having this capacity available as we need it.

Mr. DOYLE. I agree totally. Mr. Padalino?

Mr. PADALINO. Thank you, Congressman.

Where our projects under the Broadband Initiative Program focus was on the last mile, the connections to the home. And many of our awardees are providing service where there was no service available. And so in many cases they are the only provider out there.

We heard a number earlier in the testimony or in the opening statements of 19 million Americans who lack access to broadband today; 14.5 million of those Americans are in rural America. And so what we see in our applications are applications that propose to

provide broadband to new areas, to areas where there has been no service before.

As Assistant Secretary Strickling mentioned, we are aware of the issues of overbuild and we take those issues very seriously and work with our federal partners and local borrowers to ensure that we are dealing with those issues as they come up.

Mr. DOYLE. Thank you, Mr. Chairman. I yield back.

Mr. WALDEN. The gentleman yields back.

The Chair recognizes the gentleman from Texas, Mr. Barton.

Mr. BARTON. Thank you, Mr. Chairman.

I am going to have some technical questions for the record for some of the FirstNET or NetOne projects down in Texas I would ask unanimous consent that we have those in the written format.

Mr. WALDEN. Without objection.

Mr. BARTON. I want to focus on a little bit broader issue. I am so glad that Congressman Doyle got to go right before me because he gave a very passionate defense of the program and how it is helping constituents in his district. And I don't doubt that for a minute. I don't doubt that for second. If you spend or are obligated to spend over \$7 billion you darn sure better help somebody. And it is good that that some people in Pennsylvania have been helped.

But I looked at this, and I haven't focused on the math of the program, but we obligated or authorized over \$7 billion to be spent on these two programs, and it looks to me like we spent about \$4.5 billion. And it looks like for that \$4.5 billion, NTIA has provided access to about a half a million homes and the RUS, it says, has access—it doesn't say connections—to about 2.8 million. So I don't know how many of those people actually signed up.

But it looks like per recipient—and the gentleman from RUS said that we are not really trying to connect homes; we are trying to provide that middle mile and then let the private market do the rest of it. And I don't have a problem with that. But if you looked at the end result, it is about \$100,000 a home. Now, we could have given everyone of Mike Doyle's constituents \$25,000, and I bet they would have been able to go out and find some sort of broadband. When 220 million Americans have access to broadband in their homes and on their iPhones and iPads, 96 percent of the country has access in some shape, form, or fashion. It really calls into question why we need the program. It is not that it is a bad program. It is not that it is even a wasteful program, but is it a necessary program when this weekend we are going to have sequestration kick in? It is going to cut \$85 billion, and if you believe President Obama, the sky is falling.

You know, we are borrowing \$1.5 trillion a year. We don't need the program. We don't need it. It is not that it is a bad program. It is not that these are bad administrators. These gentlemen look to me to be very credible, competent, government servants. I think we could have taken at \$7 billion, set up some sort of a voucher program for people that really needed it, and we would have been much better off.

So here is my question. We spent over 4.5 billion which means there is still about 2.5 billion that hasn't been spent. What would be the harm of just rescinding the funding that has not yet in been spent saying game over, save the taxpayers \$2.5 billion.

Mr. STRICKLING. Well, first, I wouldn't be a credible and competent administrator if I didn't at least ask you about your math. How did you arrive at that number? You used the 500,000 number for NTIA.

Mr. BARTON. I just use the numbers provided——

Mr. STRICKLING. That is the results of our adoption program. That has nothing to do with the infrastructure program.

Mr. BARTON. Well, it says that NTIA has provided access to 510,000 homes or something like that or has signed up for it.

Mr. STRICKLING. No. What we report——

Mr. BARTON. That number——

Mr. STRICKLING [continuing]. And what was in my testimony was the fact that our adoption programs, the digital literacy training, the low-cost computers, those programs have reported adding 500,000 adopters as new subscribers to already existing services.

Mr. BARTON. Well, give me your number.

Mr. STRICKLING. We don't have number for infrastructure projects.

Mr. BARTON. Give me a guess. Give me guess. How many homes?

Mr. STRICKLING. I don't know because our focus has been on building the middle-mile infrastructure for private industry.

Mr. BARTON. How much money have you spent? Do you accept the \$2.8 billion? Is that a good number?

Mr. STRICKLING. We have spent 2.8 of the 4.1 we had. But——

Mr. BARTON. All right. How many people should be getting service for \$2.8 billion?

Mr. STRICKLING. But you are misapprehending the focus of our program. Our program focused on——

Mr. BARTON. I thought it is to serve people in underserved areas?

Mr. STRICKLING [continuing]. Comprehensive community infrastructure projects where we were extending middle-mile to try to bring a gigabit into as many communities as we could to allow private industry—from that, use those facilities to offer improved and new services to homes and businesses. We have had 600 interconnection agreements but we don't have any control over those 600 companies.

Mr. BARTON. Well——

Mr. STRICKLING. I don't know what they have actually delivered.

Mr. BARTON [continuing]. Let me go at it a different way. Do you dispute the number that 220 million homes have access to broadband and 96 percent of the population has access to broadband? Do you dispute that number?

Mr. STRICKLING. No, sir. Depending again on——

Mr. BARTON. So you accept that number?

Mr. STRICKLING [continuing]. Using a fairly low speed to define broadband. But what that ignores is the need——

Mr. BARTON. Well, we are using the speed——

Mr. STRICKLING [continuing]. Of our anchor institutions. Our schools cannot get by with the 3 or 4 megabits per service that might work perfectly fine in the home of a, you know, a single family. When we are talking about schools and we are talking about libraries and were talking hospitals, we are talking about dozens and in some cases hundreds of students or people in the library——

Mr. BARTON. But you can't justify——



Mr. STRICKLING [continuing]. Trying to be online the same time. Those folks need much—

Mr. BARTON. You give me—

Mr. STRICKLING [continuing]. Greater bandwidth than what can be supplied with 4 megabits per second.

Mr. BARTON. You give me your number. Don't accept my number; give me your number.

Mr. STRICKLING. But what I am telling you is that our program is attempting to—

Mr. BARTON. What have we got for \$2.8 billion?

Mr. STRICKLING [continuing]. Increase the level of broadband capacity in these very important anchor institutions like schools and libraries and hospitals and government facilities as a way to then serve as anchors for the rest of the community.

Mr. BARTON. I don't know the number but I expect—

Mr. STRICKLING. I am telling you that your number is only a piece of what we are trying to accomplish with this program.

Mr. BARTON. Except for some very remote rural schools, every school in America has access to broadband. It is closer to 100 percent than it is to 70 percent.

Mr. STRICKLING. But again—

Mr. BARTON. It is probably closer to 100 percent than is to 95 percent. Whatever it is, it is a high number. Do you dispute that?

Mr. STRICKLING. The technology directors of the schools in this country believe that we are in a crisis in terms of getting broadband to schools because again 4 megabits per second does not meet our need for schools.

Mr. BARTON. If that is the case, sir, give me the number of the schools that don't have it.

Mr. STRICKLING. Well, I can—

Mr. BARTON. Give us a number. Then, we can have a debate.

Mr. WALDEN. The gentleman's time has expired.

Mr. STRICKLING. Well, I know with our national broadband map, when we issued it, we said that only 25 percent of schools at that time, 2 years ago, had access to even 25 megabits-per-second speeds. The state education technology directors say that today, schools of 1,000 students need at least 100 megabit-per-second service, and in a couple of years, they are going to need a gigabit-per-second service. Very few schools have access to that in this country except in those States that have taken the initiative to deliver that kind of statewide network.

Mr. WALDEN. The gentleman's time has expired.

Mr. BARTON. Give us the number. Give us the number.

Mr. WALDEN. The gentleman's time has expired.

The Chair recognizes the gentleman from California, Ms. Matsui for 5 minutes.

Ms. MATSUI. Thank you, Mr. Chairman.

Let me just say that no program of this magnitude will be perfect. But I do believe that these programs have achieved laudable goals, most notably, expanding broadband access to more Americans.

Now, let me switch to the BTOP program, Secretary Strickling. You will be releasing soon a digital literacy toolkit that is to serve

as best practices for promoting digital literacy. Can you explain the reason and goals for such a digital literacy plan?

Mr. STRICKLING. Yes. As you know, Congress provided us \$250 million for sustainable broadband adoption projects. So we have had a number of very exciting and innovative, very creative programs performed around the country in terms of delivering digital literacy training to people to provide job skills training, to work on providing low-cost computers, finding discounted service. We are finding that all of these different elements are required to have an effective adoption strategy to get people to subscribe to broadband. But we only reached those communities we could reach with the \$250 million in grants we had. Yet we know this is still a national problem.

As Mr. Barton said, we have got 96 percent availability of broadband, but today, only about 68 percent of people subscribe.

Ms. MATSUI. Yes.

Mr. STRICKLING. So the toolkit is an effort to get our best practices out to the entire country so that other communities can take advantage of what we have learned from the programs we have done.

Ms. MATSUI. Certainly. And I just want you to expand on this, too. What do we stand to lose if we leave underserved areas behind? And I am thinking about all underserved areas. Will these communities have the same ability to attract economic development and benefit from educational and healthcare opportunities that require high bandwidth?

Mr. STRICKLING. Well—

Ms. MATSUI. And I want you to expand on this because anchor institutions are important. I have advocated for that previously. And I understand what you are saying about not all schools have the technology that we believe they should have. So could you expand on all that?

Mr. STRICKLING. Sure. So in terms of the question of the adoption issue in the underserved areas, yes. There is no question that people who have not been able to adopt broadband service are going to be left behind in the modern economy. If you don't know how to go online and write a resume and submit a job application, you are going to find it hard to get a job. So we have felt that moving that adoption needle from 68 percent up to a higher number is critical if we are going to have all of our citizens able to fully participate in today's economy. So we do think it is an area of emphasis.

The good news is that it doesn't take a lot of money to expand adoption. The bad news is you really need a very comprehensive individualized approach in terms of meeting the needs of individuals as they are trying to get over that hurdle of becoming an adopter of broadband service. But it is an absolutely important area and one in which we want to continue to work in even after the grant program is completed.

Ms. MATSUI. Well, isn't it true that even though we might say, you know, 95 percent of Americans have access to broadband, that is not true across the Nation. It depends on where you live. And I think that that is a situation where you cannot—it is just apples and oranges. And I would like you to explain further about some

of the differences that occur on, you know—and I would also think the other witness can chime in, too—about the difficulties to have broadband access across the Nation as a whole so all Americans have access.

Mr. STRICKLING. Right. So we know that businesses look at this issue and they determine where to locate a plant and to get new jobs. We have several cases through our State Broadband Initiative which collects the data for the national broadband map where we know businesses have been able to use that data and make decisions only to go into communities that have adequate broadband infrastructure. And that is where the jobs are going come.

Ms. MATSUI. Right.

Mr. STRICKLING. So if you are a community that doesn't have this, you risk being left behind in terms of when companies are deciding where to locate.

Mr. MATSUI. Mr. Padalino, would you like to chime in on this, too?

Mr. PADALINO. I would, and thank you. I mentioned earlier of the 19 million Americans who lack access to broadband, 14.5 million of those Americans are in rural America. And we applaud the efforts that NTIA has focused on the anchor institutions. And at the Rural Utility Service, we also focus on the anchor institutions. But we also want to focus on those rural household and rural businesses and all the other subscribers out there who can take advantage of increased access to broadband.

Assistant Secretary Strickling mentioned all the benefits that can come from that, but in rural America, it is so much more. That means a 2- or 3-hour trip to the metro area could be avoided because you can take advantage of a telehealth facility. It means that children can take advantage of distance learning opportunities and receive educational opportunities that they may not have been able to benefit from without having to move from home or take an hour-long drive or 2-hour-long drive to get to that educational facility. In addition, in the ag sector where we are seeing a lot of—right now, we have tractors that—if they had access to all of the broadband technologies that are available—could, on a square-meter basis, be able to determine the amount of fertilizer, the amount of seed, all the different variables that go into keeping our ag sector the most prosperous, most abundant, affordable food supply in the world.

Ms. MATSUI. Well, thank you very much.

And I see my time has expired. Thank you.

Mr. WALDEN. Thank you. The gentlelady yields back.

The chair now recognizes the gentleman from Colorado, Mr. Gardner.

Mr. GARDNER. Thank you, Mr. Chairman.

And Mr. Padalino, to your response, I mean we are a farm equipment dealership. We sell tractors. We have never once relied on the government to provide our GPS signal. That comes from satellites; that comes from a tower that we ourselves put up. That is a private sector solution.

Mr. STRICKLING. I believe, sir, that GPS satellites are government satellites, but—

Mr. GARDNER. Mr. Chairman, I would request unanimous consent to submit for the record this New York Times story describing how EAGLE-Net used its 100 million BTOP award in Colorado to overbuild existing providers, including building a third fiber line to an 11-student elementary school that it says it neither needs nor wanted.

Mr. WALDEN. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. GARDNER. I have several other letters that I would ask to be unanimous consent.

Mr. WALDEN. Without objection.

Mr. GARDNER. Thank you. Administrator Strickling—

Mr. WALDEN. Suspend. I am sorry?

Mr. GARDNER. Letters from companies in my district and throughout Colorado, PC Telecom, C-COM, Blanca, one from—

Mr. WALDEN. Without objection.

[The information appears at the conclusion of the hearing.]

Mr. GARDNER. Thank you, Mr. Chairman.

Administrator Strickling, Administrator Padalino, at prior broadband stimulus oversight hearings, the NTIA and the RUS have claimed overbuilding is not occurring. Do you still maintain that position? Mr. Strickling?

Mr. STRICKLING. Sorry?

Mr. GARDNER. Is overbuilding occurring?

Mr. STRICKLING. Well, that depends on what you mean by overbuilding. But as I said earlier—

Mr. GARDNER. All right. It is just a simple question. Are we overbuilding? Are you laying fiber where existing fiber exists?

Mr. STRICKLING. That is not necessarily overbuilding as I explained in my previous answer.

Mr. GARDNER. Are you laying fiber where existing fiber exists?

Mr. STRICKLING. I am sure that some of our grantees are doing that.

Mr. GARDNER. Has EAGLE-Net in Colorado put fiber in the ground where existing fiber exists?

Mr. STRICKLING. Yes. But that doesn't tell you whether or not it is needed or not.

Mr. GARDNER. Let me tell you a story about a school in my district. I spoke at a graduation in southeastern Colorado several years ago. The graduating class was one. There was one graduating senior. That school that had one graduating senior when I spoke there has three fiber connections, C-COM, FairPoint and EAGLE-Net. Three of them to a school that I spoke to that had one graduating senior.

I have got a map that I would like to display and it talks about the overbuild that is occurring, \$100 million in Colorado.

Now, the other question I had yesterday at the hearing in Colorado before the Audit Committee with EAGLE-Net, they said that a federal—this is EAGLE-Net testifying—that a federal handler watches every move we make and are onsite from the beginning. Yet their grant was suspended. If there is a federal handler—and they identified NTIA—watching every move they make, why after several years, after \$96 million was committed out of the 100 million, why did NTIA wait so long to suspend the grant?

Mr. STRICKLING. Well, I am not sure what they mean by a federal handler. We certainly have provided oversight to this project. But then to the specific question of the suspension——

Mr. GARDNER. Why were they suspended?

Mr. STRICKLING. They were suspended because they wanted to take advantage of the economies of using fiber where originally they had proposed using microwave. Now, this is a good change.

Mr. GARDNER. They blame——

Mr. STRICKLING. Because this means that they will be able to have greater capacity than they otherwise would have, but by doing so, it changes their environmental approval.

Mr. GARDNER. In testimony before the State Legislature yesterday, they blamed the clay-loving buckwheat in Montrose and the Pagosa Springs blooming plant.

Mr. STRICKLING. Right. So what happens is when you come off of the radio towers from microwave and come down to the ground for fiber, you now have the potential of passing through areas of habitats of endangered species.

Mr. GARDNER. So if you provided oversight, why were they—and the other comments that they made were that they have to get a permit from every jurisdiction. Why did they not know about the clay-loving buckwheat?

Mr. STRICKLING. Well, I think it is been discovered as part of the process.

But there are two separate issues here. One is the permitting that they need to get whether or not they are federal grantee, but as a federal grantee, they also have to get an overall environmental assessment.

Mr. GARDNER. Let me show you a little bit about this. This map shows and identifies EAGLE-Net's current route in pink. The green identifies existing routes of CenturyLink. The purple identifies existing routes of businesses represented in this room with the Colorado Telecommunications Association. Look at the duplication. PC Telecom, a company 60 miles away from my hometown in rural Colorado, 100 percent overbuilt by EAGLE-Net. 100 percent overbuilt by EAGLE-Net. This is the eastern plains. Yesterday, they testified, they said that it is built on the eastern plains first because this is the easiest to get to. But that is also why you have all of these other companies that have built existing fiber in the ground while places on the Western Slope that truly need it because of the mountainous terrain have received nothing.

Mr. STRICKLING. Well, that is not true. There has been plenty of construction on the western part of the State.

But let us back up a second. The EAGLE-Net project is a state-wide educational network——

Mr. GARDNER. This is off of Eagle-Net's Website. I mean this is——

Mr. STRICKLING. I understand that, sir. But what we are trying to accomplish with this project is to improve educational opportunities in the State of Colorado. The fact is that in Colorado only 4 percent of schools in Colorado are able to get or subscribe to services of greater than 50 megabits per second. You are going to hear from——

Mr. GARDNER. Let me just interrupt you real quick.

Mr. STRICKLING [continuing]. Mr. Freddoso at North Carolina that his network——

Mr. GARDNER. So you are saying that this is not——

Mr. STRICKLING [continuing]. A statewide network is able to provide much greater speed.

Mr. GARDNER [continuing]. Overbuilding; this was all necessary?

Mr. STRICKLING. It is not true. If you are going to have a statewide——

Mr. GARDNER. This is not overbuild?

Mr. STRICKLING. No, I disagree wholeheartedly.

Mr. GARDNER. So you are saying that PC Telecom that sent a letter saying that there is 100 percent overbuild isn't true?

Mr. STRICKLING. No.

Mr. GARDNER. You are saying——

Mr. STRICKLING. You are missing my point, sir. What I am trying to say is that what is trying to be accomplished in EAGLE-Net is to figure out why Colorado—and fix the problem that Colorado is so far behind the rest of the Nation——

Mr. GARDNER. I live in rural Colorado——

Mr. STRICKLING [continuing]. In terms of broadband at schools. This has to be accomplished through statewide network.

Mr. GARDNER. I live in a town of 3,500 people 30 miles away from the border of Kansas.

Mr. STRICKLING. I am sorry?

Mr. GARDNER. I live 30 miles away from the border of Kansas, a town of 3,000 people. I have high-speed DSL. I have 4G connections. I have an incredible—I have two, three other high-speed internet connections that I can choose from. My daughter goes to school there. I have never once heard them come to me saying we don't have the internet that is necessary for our kids to learn. And my daughter goes to school there. Now, this——

Mr. STRICKLING. Well, sir, can I put into the record this chart that shows that Colorado is behind States like North Carolina? I mean your problem is that 4 megabits per second to a school——

Mr. GARDNER. Why did EAGLE-Net turn down \$20 million? Why did EAGLE-Net turn down the opportunity to use it, \$20 million worth of technology that a private telecom in Colorado had offered them instead of overbuilding?

Mr. STRICKLING. Well, let us go through the facts here because I think—let us take just a moment to go through this. At the time at which EAGLE-Net went out to build the eastern part of the State they went out on an RFP. And a group of the carriers who are now complaining about this put in a bid to deal with this. We didn't hear anything about overbuild at that point in time.

Mr. GARDNER. They support EAGLE-Net.

Mr. STRICKLING. But they put in a bid that was hundreds of thousands of dollars higher than the lower bidder.

Mr. GARDNER. Because of absolute miscommunication from NTIA.

Mr. STRICKLING. I disagree. But more importantly most of the network.

Mr. WALDEN. Gentleman. Gentlemen. The gentleman's time has expired.

Mr. GARDNER. It is actually using existing——

Mr. WALDEN. The gentleman's time has expired. The gentleman's time has expired.

The Chair recognizes the gentleman from California, Mr. Waxman.

Mr. WAXMAN. Thank you, Mr. Chairman. I want to move to a different issue if I might, Mr. Strickling.

Mr. STRICKLING. I have plenty more to say about EAGLE-Net if you like to stay there. But—

Mr. WAXMAN. Well, if I have any time left, I will let you expand on that because you were interrupted many times.

It is critical that the administration implement the provisions of the law that set up the Public Safety Response Program, and your agency is tasked with hosting the First Responder Network Authority, also known as FirstNET.

NTIA has a critical role in ensuring the success of the Public Safety Network. In May 2012, NTIA partially suspended funding for seven public safety BTOP awardees. And I was encouraged that FirstNET recently adopted a resolution that could lead to NTIA lifting that partial suspension of these BTOP Public Safety Program funding.

Can you explain the path forward for the seven public safety BTOP awardees? What can we tell cities like Los Angeles—which is of particular interest to me—San Francisco and Charlotte, as well as States like New Jersey about the likelihood of retaining their BTOP grants, and how quickly do you expect FirstNET at NTIA to make their decisions?

Mr. STRICKLING. Yes, sir. We suspended the projects a year ago because when FirstNET came into being, we wanted to make sure FirstNET had an opportunity to evaluate these projects and make sure that they would continue to be a prudent use of taxpayer money to build out. These projects were originally approved in 2010 based on a totally different concept about how do public safety broadband that was changed in the Middleclass Tax Relief Act last year where Congress directed this be done as a single, nationwide network.

So before we spent another dollar on this technology, we wanted to make sure what was planned would fit in with FirstNET's plan. So the Board has completed its review. They have visited every one of these locations and their initial recommendation is they believe all of these projects can add value to the ultimate FirstNET build-out, and they would like to see all of the projects reinstated. They intend to spend the next 90 days negotiating the spectrum conditions because each of these localities has to get a spectrum license from FirstNET.

So they are going to negotiate some conditions on that. And if they are successful in that, they are then—as I understand it—going to recommend to us at NTIA to go ahead and lift the suspensions. And at that point in time when we receive that information, it is certainly our hope and intent that we would like to see all those projects continue if they are able to negotiate the appropriate conditions with FirstNET going forward.

Mr. WAXMAN. Thank you. I want to go to this West Virginia BTOP grant. Did the Inspector General's review of the grant awarded to the Executive Office of the State of West Virginia dis-

cover any fraud? And was the grantee in noncompliance with any of the terms of its BTOP grant?

Mr. STRICKLING. There was no fraud found. The IG certainly made some recommendations in terms of inventorying and management of the equipment, all of which West Virginia—as I understand it—has agreed to do and has either done or is the process of doing. I don't know that any of those were findings of noncompliance with grant conditions but they were certainly improvements that were appropriate and which the IG was fit to recommend and which West Virginia has gone on to implement.

Mr. WAXMAN. What is the typical application and award-monitoring process for these BTOP grantees? Were those processes followed in the case of the West Virginia BTOP grant?

Mr. STRICKLING. Yes.

Mr. WAXMAN. OK. You were asked about overbuilding in areas where there is already lines or communication systems set up, in this situation in Colorado particularly. Does that mean if they have something in place, there is no need for something else to be in place?

Mr. STRICKLING. I think some people would like that to be the definition, but that goes back what I said earlier. I don't believe any addition of middle-mile capacity to our Nation's infrastructure should in any way be considered overbuild. And that is the vast, vast majority of our projects are spending dollars on. The two towns that Congressman Gardner mentioned—at least the two towns mentioned in the New York Times article, Agate and Flagler—sit right on Interstate 70. Maybe it will become internet 70. And that is, you know, a major east-west route. This country is going to need lots of capacity along that highway to allow—as people continue to use more and more wireless devices, as schools, as homeowners continue to use more and more bandwidth, we need that.

And the fact is, in 70 percent of the build that EAGLE-Net is doing in Colorado, they are using existing facilities to do it. It is part of our program that people should do this in the lowest-cost manner and use existing facilities where we can. What we have here is a group of companies that bid on this project, lost the bid, and then we started to hear about overbuilding.

Mr. WAXMAN. I see. Well, my time is expired and I thank you for that response.

Mr. WALDEN. The gentleman yields back.

And the chair recognizes the gentleman from Illinois, Mr. Shimkus, for 5 minutes.

Mr. SHIMKUS. Thank you, Mr. Chairman.

I guess I have missed some exciting testimony. So I was another hearing. So I apologize for being absent.

Welcome back, Mr. Strickling. Mr. Padalino, welcome.

And Mr. Strickling, you and I talked about the West Virginia case last time.

Mr. STRICKLING. Right, we have talked about a lot here this morning, too.

Mr. SHIMKUS. Oh, oK. And I am not going to spend a lot of time on it, but you did say don't believe everything you read in the



newspaper. And after government review and oversight, the reality is you can believe what you read in that newspaper article.

I think the best way to get out of this mess is to just owning up to when there is problems and also bragging about the successful deployment. And that is where I hope we go because we are going to have people on the second panel that actually have been very appreciative. But there are also problems. It is oK, you know. We are human. We make mistakes. It is oK. So I am sorry about the emotionalism, but we are emotive people here.

Mr. STRICKLING. And actually to your point, Congressman, if I could just add, there are steps underway to do just that in West Virginia.

Mr. SHIMKUS. Excellent.

Mr. STRICKLING. We sent a letter to them after our IG issued a report and asked them to do another look at their long-term capacity requirements, and I understand that—

Mr. SHIMKUS. Well, that is a great segue—

Mr. STRICKLING [continuing]. Us today—

Mr. SHIMKUS [continuing]. Into my question.

Mr. STRICKLING. Then, I will leave today's news to you.

Mr. SHIMKUS. So, you know, what can West Virginia do to remedy this situation? Can West Virginia trade in or sell back their routers, or does it need NTIA approval to do so?

Mr. STRICKLING. Well, my understanding is that the governor and Cisco, who is the supplier of the routers, are going to be working together along with perhaps some other people as part of a group the Governor is pulling together.

Mr. SHIMKUS. But you don't think you have to have a role in this?

Mr. STRICKLING. I think it will depend on what they are able to work out.

Mr. SHIMKUS. Will you exercise oversight over this as what they decide to do and make sure that it makes sense—

Mr. STRICKLING. Yes, sir.

Mr. SHIMKUS [continuing]. And in the taxpayers' interest and that—I mean our biggest concern is—there is a lot of concerns, especially when you are from rural America. One is that we want the unserved areas served. We really hate overbuilding of systems that are providing service to rural America because there are so few people there that to have the government come in with taxpayers dollars compete against the private sector is really un-American is the problem. And we appreciate our people who roll out and assume the risk, raise the capital, assume the risk to provide access to rural America and we don't want them competing against the government. So you understand that. We have talked about that before. Let me—

Mr. STRICKLING. That guided us in our whole philosophy. That is why we have chosen the middle-mile approach to projects.

Mr. SHIMKUS. OK. Not always, right? Not always.

Let me talk about a specific provider, and this goes to both of you. Frontier in Illinois has requested wholesale services for access to the BTOP-funded project. But according to the rules and fact sheet online, recipients should offer wholesale broadband services at rates and terms that are reasonable and nondiscriminatory. The

Illinois BTOP recipient, who is Clearwave, came back with an offer of wholesale prices that were about 100 percent higher than its retail offering. The rules state that “recipients that failed to accept or comply with the terms listed above may be considered in default or breach of their loan or grant agreements.” RUS and NTIA may exercise all available remedies to cure the default. Assuming the parties do not work this out—and of course that is the best solution—what are the next steps for NTIA to remedy the situation?

Mr. STRICKLING. Well, I am not going to speculate on that, but I will say this, that this is a hallmark of our program. We are going to make every effort to ensure that Frontier is able to get the wholesale service that they are entitled to under the rules of our program. I mean, it goes right to the heart of why we want to use these investments to prime the pump for private investment. And it doesn’t work if our grantees are not offering wholesale services at reasonable prices. That is why that is a requirement of our program.

And the case you described was one we first heard about last summer. We had urged the parties to work it out, and frankly, we hadn’t heard back from Frontier until yesterday, the day before the hearing. Everybody kind of gets their house in order the day before a hearing.

Mr. SHIMKUS. As we receive testimony sometimes, even the day of, so it comes both ways.

Mr. STRICKLING. Yes, sir. So we are on this. We will go right back and look at this but this is a very serious issue for us because it is part of the whole philosophy of our program.

Mr. SHIMKUS. Please do. Thank you.

Mr. WALDEN. The gentleman’s time has expired and yields back. And next is the gentlelady from Colorado, Ms. DeGette.

Ms. DEGETTE. Thank you very much, Mr. Chairman.

Mr. Strickling, I am going to be honest. Some of the facts of this EAGLE-Net project don’t look very good. And I want to ask you a series of questions. I feel like the questions you have been asked so far have not really been designed to get answers from you. So what I am trying to do in the 5 minutes that I have is get some answers. If you could listen closely to these questions and if possible, answer yes or no, or short as you can, that would be helpful because I want to clear up the record. I think it is important.

Now the first thing is, this program that EAGLE-Net has its funding under is approximately, I believe, a \$4 billion program. Is that correct?

Mr. STRICKLING. Yes.

Ms. DEGETTE. And the EAGLE-Net program is \$100 million. Is that correct?

Mr. STRICKLING. Of federal dollars. The state will supply a match.

Ms. DEGETTE. Of federal dollars. It is \$100 million of federal dollars. And I am going to assume that your agency—part of your oversight obligation—is to make sure that that \$100 million, or for that matter the \$4 billion, is not misspent in any way. Is that correct?

Mr. STRICKLING. Yes.

Ms. DEGETTE. And the NTIA has been aware of difficulties—many of them political—around the EAGLE-Net project for many months now. Is that correct?

Mr. STRICKLING. We first started hearing about this late last summer.

Mr. DEGETTE. So you have been aware of these problems for many months?

Mr. STRICKLING. Yes.

Ms. DEGETTE. And you are investigating these allegations in a robust manner, aren't you?

Mr. STRICKLING. Yes. We have made a number of trips out there. I personally—

Ms. DEGETTE. OK.

Mr. STRICKLING [continuing]. Was on the ground a couple of weeks ago with some of the parties.

Ms. DEGETTE. And you have also asked for a lot of data around this. Is that correct?

Mr. STRICKLING. Yes.

Ms. DEGETTE. And EAGLE-Net's grant is under suspension right now. Is that correct?

Mr. STRICKLING. Yes.

Ms. DEGETTE. And it is under suspension because—and you tried to say this before but you got cut off—it is under suspension because the original application was for microwave technology and EAGLE-Net decided to abandon that and go to fiber. Is that right?

Mr. STRICKLING. In part, that is right.

Ms. DEGETTE. And you like fiber better. I think that is what you were trying to say, right?

Mr. STRICKLING. Absolutely.

Ms. DEGETTE. But the problem is EAGLE-Net didn't get the environmental approvals to lay that fiber. That is also what you were trying to say. Is that right?

Mr. STRICKLING. And that is why it was suspended.

Ms. DEGETTE. And so that is why you put them under suspension, right?

Mr. STRICKLING. Yes. And we are working through those issues now with the hope the suspension will be lifted shortly.

Ms. DEGETTE. OK. So now I have got to admit, I don't understand either. And Mr. Gardner, my colleague from the Eastern Plains, was asking you this question. Why would EAGLE-Net be going so much into these markets in eastern Colorado where there is already fiber laid and not going into the areas in western Colorado which are underserved? Can you please explain clearly why that is happening and why the NTIA approves of that or doesn't approve of that? Or, what is your position on that?

Mr. STRICKLING. Well, that is not a true statement in terms of—

Ms. DEGETTE. OK.

Mr. STRICKLING [continuing]. Not going into western Colorado. This is a statewide project. The reason western Colorado is underserved is because there has never been an economic case for serving it. What we have is we had a group of educational organizations that wanted to deal with educational needs on a statewide basis. So that means building the entire State or providing network

in the entire State. In order to be able to economically serve the western part of the State, you need to have enough people on this network that you are able to have the project be sustainable.

Ms. DEGETTE. So it is for economics? That is why they are building in the east first?

Mr. STRICKLING. In part. Sustainability is key, but there are huge advantages to a State they can bring all of their K to 12 schools onto a single network. There are advantages in terms of the speeds that can be provided, in terms of the security that can be provided, in terms of the applications—the ability for schools to be connected with each other, to have distance-learning, to have, you know, courses from colleges provided. There are huge advantages to a statewide approach to this. And you will hear about that in the next panel from Joe Freddoso, because he is doing exactly that in North Carolina.

Ms. DEGETTE. OK. So what you are saying is that duplication doesn't necessarily mean waste, fraud, and abuse.

Mr. STRICKLING. That is right.

Ms. DEGETTE. And if there was a waste, fraud, and abuse, you feel that your agency has the procedures in place to identify that and to either suspend or eliminate the funding. Is that correct?

Mr. STRICKLING. Yes. But if I could just say, having said all of this, we would like to see peace in Colorado. I have been out—I have worked with the Congressman—we would like to find a way to accommodate everybody out there even those bidders who were unsuccessful before. If there is a way to find a win-win here, which is the goal of all of our projects, we want to do that.

Ms. DEGETTE. Mr. Strickling, I will say to date I really haven't been part of those discussions, but as a senior member of this committee, I will make you the offer and I will make Mr. Gardner the offer. I would be happy to sit down on a bipartisan basis with him and with your office and see if we can make peace in Colorado. I think that would be a win-win situation for everybody, especially these school children.

And I yield back.

Mr. WALDEN. The gentlelady yields back and her time has expired.

The gentleman from Kansas, Mr. Pompeo, is recognized for 5 minutes.

Mr. POMPEO. Thank you, Mr. Chairman.

You know, as I am sitting here listening to this discussion today, this reminds me an awful lot of the Solyndra hearings where you had enormous amounts of federal money being rushed out the door under tight deadlines and constraints, and it just went scattershot. And you see the GAO report, you see your efforts, and I take you at good faith that you are trying to collect data and make sure that you are overseeing these funds in a way. You all were given a task that was darn near possible.

Mr. STRICKLING. I disagree.

Mr. POMPEO. But no, you haven't succeeded. I will say that much. In my judgment, you have not succeeded.

Mr. STRICKLING. Well, I disagree.

Mr. POMPEO. I understand. I haven't asked a question yet. You will get a chance to talk. You have a different view. You think it

has been wildly successful. I have a fundamentally different view of this.

Let me ask a couple of yes or no questions because I want to be as quick as I can today. Yes or no, do you both think that teaching someone to create an email account is a proper task for the United States Federal Government?

Mr. STRICKLING. Yes.

Mr. PADALINO. Yes.

Mr. POMPEO. Wow. So you don't think a city could do that? You don't think a school board could do that? You don't think a county could do that, a state could do that? You think Kansans ought to teach people from New Mexico to create an email account and folks in Alaska ought to pay to teach someone in Illinois to create an email account? Is that correct also?

Mr. STRICKLING. Well, maybe I didn't understand your question. We have funded programs to let local institutions do just that.

Mr. POMPEO. It is federal taxpayer dollars, sir. With all due respect—

Mr. STRICKLING. Yes.

Mr. POMPEO [continuing]. This is federal money that is going for the tasks that I—

Mr. STRICKLING. Right. So I think it is appropriate to use federal money. Who actually does the teaching, we have left up to the local communities to do that.

Mr. POMPEO. Great. You talked, Mr. Strickland, for a moment about how much speed was there, and I have heard this discussion—I am amazed that the chairman's not here—but you had the discussion about the right size of routers in broadband. To see Members of Congress discussing this at the federal level when I have trouble figuring it out at Best Buy, and so does every one of my constituents. But they can make good value decisions for themselves and cities can, too, whether it is in Hays, Kansas, where this program was overbuilt just like we are talking about Colorado today. And that was from a previous hearing. I don't really want to spend much time going back into that today.

To hear that discussion here, how do you know what the right speed is? You said, well, they don't have enough megabits, or in the case of schools, gigabits. How do you know what the right speed is?

Mr. STRICKLING. Well, I am relying on the experts—the state educational technology directors. These recommended speeds are based on the work that they have done. But it is also based on some simple math. If we agree that 4 megabits per second is an appropriate speed for a homeowner today in terms of their day-to-day needs, all you have to do is now project that to a library or project it to a school where you now have several hundred people all trying to use that bandwidth at the same time. Just do the math. It is not hard to see how we are up to 100 megabits per second as a basic need for schools.

Mr. POMPEO. I don't dispute that. It might be 1,000 tomorrow. And the challenge here—

Mr. STRICKLING. It is going to be a—

Mr. POMPEO. The challenge is you have no idea and you have no incentive to get it right because you don't have your own personal

skin in the game. You have no risk. You have the taxpayers' money making arbitrary decisions about the proper speed at the proper location instead of risk-taking people making evaluations for themselves about the right risk to take.

And with that I will yield the balance of my time to Mr. Gardner.

Mr. WALDEN. The gentleman yields.

Mr. GARDNER. I thank the gentleman from Kansas for his additional time.

And I just want to read a House Joint Resolution that was passed in Colorado back in 2010 "whereas every effort should be made to prioritize the provision of broadband service to unserved customers throughout the efficient distribution of resources to avoid overbuilding of existing facilities and to strongly encourage the use of private sector local telecommunication providers." Has that been achieved in Colorado?

Mr. STRICKLING. It has been attempted.

Mr. GARDNER. Has that been achieved? If you can grade EAGLE-Net on a scale of A to F, what would you give EAGLE-Net?

Mr. STRICKLING. I wouldn't speculate on a grade, but what I can tell you is that the process that was used gave everybody an opportunity to bid on this project to provide these services. Not everybody could be selected. But the fact is there was an open competitive process to do just this. And again, in light of that resolution, as I said earlier, 70 percent of the build-out there is on existing facilities.

Mr. GARDNER. But you have 100 percent build-out of PC Telecom. The town that I mentioned that had one graduating senior, that wasn't on I-70. That is in Kiowa County out by the Kansas border. It is a long way away from I-70.

Mr. STRICKLING. Yes.

Mr. GARDNER. It is closer to Kansas. Three fiber connections. But yet EAGLE-Net is providing service to the Denver Museum of Natural History, to Cherry Creek School District in the Denver Metro area—

Mr. STRICKLING. Yes.

Mr. GARDNER [continuing]. One of the State's largest and wealthiest school districts. They have approached the City of Lone Tree, which has a Nordstrom's in it, about whether or not they should receive EAGLE-Net Service. After a build-out in Yuma County, Colorado, of the local private internet provider, EAGLE-Net went and approached them about peeling off their anchor institutions. You were asked earlier whether or not you believed there was waste in West Virginia. Is there waste in Colorado?

Mr. STRICKLING. I can't answer that. But I do believe that the process—

Mr. GARDNER. NTIA has oversight.

Mr. STRICKLING. Yes.

Mr. GARDNER. You know this project. Is there waste in Colorado?

Mr. STRICKLING. I can't answer that yes or no today.

Mr. WALDEN. The—

Mr. STRICKLING. What we know is that the process that has been used has gotten us to result where we have people who are complaining about the project. We have been working to try to resolve

those complaints. I absolutely believe this is a critical project for the future of education in Colorado. We would like to see it succeed to deal with the fact it Colorado has such slow speeds across the state in terms of broadband into its schools. That is what we are trying to accomplish here. What we would like to find is an opportunity for everybody to come together in support of this project. And we are still committed to doing that.

Mr. WALDEN. Thank you. The gentleman's time has expired.

The chair now recognizes the gentleman from New Mexico, Mr. Lujan, for 5 minutes.

Mr. LUJAN. Thank you very much, Mr. Chairman. And Mr. Chairman, I look forward to the day when consumers across America are able to go to that Best Buy and make decisions on those routers because they can go home and use them. It doesn't matter which one they may get their hands on, that they can go home—they have speeds—the ability to use the pipe, the bandwidth, the amount of information and data that can stream in this magical realm sometimes that is lit up by light rather than an old copper wire that provides plain old telephone service that oftentimes is paired, which means is split over and over and over and loses its capacity.

There is a reason why we pave our roads in America. I still come from rural America. We have a lot of dirt roads. But a lot of people don't drive their cars on those dirt roads. They drive bigger pickup trucks or vehicles they don't mind getting beat up a little bit. I am hoping that we can pave the information highway for America. We have talked about this a lot, and that is what this is.

Mr. Strickling, I very much appreciate your willingness based on the questioning from Ms. DeGette to go and make peace in Colorado. That is all we should ever want. And for you to go and solve this problem out there and be willing to do that is important.

Ranking Member Eshoo talked about the importance of cracking down on waste, fraud, and abuse. We can't emphasize that enough. I hope that that is something we both share as Democrats and Republicans in this Congress. And I appreciate your willingness to help us work on that.

To the witnesses, I am going to read a few statements and ask you if you agree or disagree that these statements support the goals of what this program was. All-encompassing and affordable broadband connectivity will go a long way toward returning our region to long-term growth and productivity for which it is known. Would you agree that that is the goal of the program?

Mr. STRICKLING. Yes.

Mr. PADALINO. Yes, I agree.

Mr. LUJAN. A BIP grant to extend broadband service would help the poor and underserved areas become highly productive. Would you agree?

Mr. STRICKLING. Yes.

Mr. PADALINO. Yes.

Mr. LUJAN. With these grants, providers could expand educational opportunities; assist hospital patients, families, and nurses; improve services for the disabled; empower the elderly to use technology; offer job training and retraining; help displaced

workers in the area; and establish additional libraries. Do you agree?

Mr. STRICKLING. Yes.

Mr. PADALINO. Yes.

Mr. LUJAN. Could bring us into true integrated technological advances that we ask our communities to strive for but are unable to achieve since they are at the mercy of companies only looking for densely populated areas. Do you agree?

Mr. PADALINO. Yes.

Mr. STRICKLING. I guess I don't want to castigate industry. I think industry is doing the economically reasonable thing here. But when they do that, it is still going to leave behind areas where they just can't find the economic case to serve them.

Mr. LUJAN. I appreciate that, Mr. Strickland.

Mr. PADALINO. And if I could expand on that little bit.

Mr. LUJAN. Please.

Mr. PADALINO. I think that touches on the issue of overbuild. And, you know, we take that issue very seriously. I mentioned earlier that we go out for public comment and at times we will receive a comment from a provider who may provide service in that densely populated rural town but not in the outer reaches, on those dirt road areas that you mentioned. And that is a lot of times what the applications that we are entertaining at the Rural Utility Service.

Mr. LUJAN. I appreciate that.

This project is part of a larger plan to not only upgrade and extend high-speed broadband access across the State but transform our State's economy. Would you agree?

Mr. PADALINO. Yes.

Mr. STRICKLING. Yes.

Mr. LUJAN. And I will just read one more. These areas either do not have high-speed access to the internet or it is available only at speeds that are insufficient for the bandwidth intensive applications essential for delivering programs such as telemedicine, distance learning, public safety, economic development that will create and maintain jobs and improve the lives of all of our constituents.

Mr. PADALINO. Yes, I agree.

Mr. STRICKLING. Yes.

Mr. LUJAN. I was intrigued, Chairman, when I saw the title of the hearing—named "Is the Broadband Stimulus Working"—and thought that that is something that we would be tackling and talking about today. The statements that I read were from my Republican colleagues in support of these projects to you guys to your departments. It is working. The instances where we found fraud and abuse or problems or where peace needs be found and healed, we need to work on. But in the same way that RUS benefits rural America from electrifying it, because there are places in America that still raise our crops and produce our beef or lamb like our family raises, these areas of the country need a little bit of help. And that federal investment goes a long way. These are immense benefits.

And Mr. Chairman, I certainly hope that we can find more common ground as we talk about the commonalities and the kind words that I just read, which I agree with wholeheartedly, where different parts of America have benefited, let us talk about those



areas and let us work together to make sure that we go and heal and help our brothers and sisters up in Colorado.

And if there is anything that I can do, Ms. DeGette and Mr. Gardner, to provide some assistance from a neighbor to the south, you got it.

With that, Mr. Chairman, I yield back the balance of my time.

Mr. WALDEN. Thank you very much. The gentleman yields back.

And the chair now recognizes the gentleman from Missouri, Mr. Long, for 5 minutes.

Mr. LONG. Thank you, Mr. Chairman.

Mr. Strickling, when a baseball player gets suspended for steroids or something like that, normally they have done a bad thing. Suspension in this case, I believe you said there are three contracts under suspension at this time?

Mr. STRICKLING. That is correct.

Mr. LONG. Is that a good thing or a bad thing? When you were talking about EAGLE-Net, you described it as they have come up with better technology. They want to from microwave to fiber. So it is like we suspended them because they are going to do a good thing. So is suspension normally—and the other two cases—is that a good thing or bad thing?

Mr. STRICKLING. Well, the reason for the suspension in the case of EAGLE-Net is, having made that good decision to move to fiber, it had consequences in terms of their compliance with the grant conditions, in particular, the need to go back and do an environmental review, which brought us into the two endangered species that Congressman Gardner talked about. So they have to work that through with the Fish and Wildlife Service in order to be able to resume construction. And they are in the process of doing that right now.

Mr. LONG. And the other two instances, do you know off the top of your head whether they are good things or bad things they have been suspended for?

Mr. STRICKLING. I think in the case of the other two projects, we have some management challenges that we need to see fixed there in order to allow them to continue to spend money. Yes. And so—

Mr. LONG. So we might have one good thing and two bad things?

Mr. STRICKLING. I am not sure how to respond to that. But it is not—

Mr. LONG. I am not trying to be argumentative. I am just trying to—because my original question was going to be how does one get suspended? But then, as I sat here waiting for all my other colleagues to go ahead of me, I came to realize that EAGLE-Net, who we have heard a lot of complaints about today—I don't know if their proven or not—but we have heard a lot of complaints about them. And when I heard they were suspended, I thought, oh, they have done something bad. But now we have learned that they are suspended because they are doing something good. So I am just trying to get a handle on how one would get suspended.

Mr. STRICKLING. Well, it is not something you should aspire to do. I guess I would say that.

Mr. LONG. OK. Let us see. You also referenced two her three times—you seem to be upset with one of my colleagues; I can't remember which one—but the fact that they were using—

Mr. STRICKLING. Sir, I am not upset with anybody. We are just having an active discussion.

Mr. LONG. Then, don't come back when you are upset. But you have mentioned two or three times that—you spoke in a louder tone, perhaps—that they——

Mr. STRICKLING. Guilty as charged.

Mr. LONG [continuing]. Were not using discounts and they should of been or should not have been using a discounted figure on the equipment cost, I presume.

Mr. STRICKLING. What we were talking about was the West Virginia auditor's report and the way the auditor came up with the alleged millions of dollars of overspend was, I believe—I am not entirely certain because the report is a little ambiguous on this—but it looked to be based on list prices of routers. And I only say that because when we did our calculation, we came up with an average price, including the discounts, for what they bought at about \$12,000. That doesn't even include the 100 free routers they got. And in one case the auditor referred that they could of save \$16,000 per router. Well, that suggests to me they weren't using a discounted price when they did that analysis.

Mr. LONG. And this was in West Virginia, correct?

Mr. STRICKLING. Yes, we are talking about West Virginia.

Mr. LONG. OK.

Mr. STRICKLING. Now, if you look, our Inspector General did a report where they looked at the same exact issue and concluded that possibly West Virginia could have saved 2 to 5 percent on the router purchases had they bought lower capacity routers. But our IG made an assumption that they would have still gotten the 100 free routers even under that scenario. And they acknowledged that, if in fact the 100 free routers weren't available under the alternative purchase, that there would have been no net savings by going to the lower-capacity routers.

Mr. LONG. But my question that I am trying to lead up to is that in West Virginia, which we are speaking now, we agree they used no competitive bid process?

Mr. STRICKLING. That has been raised by the West Virginia auditor in its report.

Mr. LONG. Right. OK. So the West Virginia auditor believes they used no competitive bid process. Later——

Mr. STRICKLING. We understood that they certainly got multiple bids on Cisco routers——

Mr. LONG. Later in your——

Mr. STRICKLING [continuing]. But I think it is correct that they didn't have bids from other company gear.

Mr. LONG. Later in your testimony, you said EAGLE-Net went out on an RFP, Request for Proposal. So are these contracting things handled differently in different States? I mean, if somebody goes out on an RFP, they have to prove their worth. That is a request to earn the proposal but yet then we go to West Virginia and they don't even bid competitively, apparently, according to their auditor.

Mr. STRICKLING. So each State has to—if it is a state government organization—has to comply with their own procurement rules. We don't have a set of federal procurement regulations for our grants

other than you have to follow the rules that apply to you in your State.

Mr. LONG. OK.

Mr. STRICKLING. So, yes, you could have different procurements happening in different States based on differences in their laws and regulations.

Mr. LONG. OK. I was going to yield to someone else but I have taken up too much of my time.

So Mr. Chairman, I yield back.

Mr. WALDEN. The gentleman yields back. Mr. Welch, I believe, is next.

Mr. WELCH. Thank you very much, Mr. Chairman.

Mr. Strickling, I would like to clarify some of the discussion about the West Virginia project. Did NTIA approve individual contracts executed by West Virginia or any grantee?

Mr. STRICKLING. I am sorry. Could you repeat that? I am not sure I understand the question.

Mr. WELCH. Well, does the NTIA approve every purchase made by every grantee—

Mr. STRICKLING. No, no.

Mr. WELCH [continuing]. Or do grantees have to follow guidelines set by the NTIA?

Mr. STRICKLING. So we approve the grantee's budget at the beginning of the project, and then we would look at their quarterly spend reports to see if there had been anything that got out of line. But no, for the typical project we don't review individual purchases. Now, in some cases when we get a project that is somewhat challenged, we will put them on a reimbursement-basis only at which point we are looking at individual invoices and making sure those are appropriate to be paid.

Mr. WELCH. OK. And we have heard the suggestion today that because 95 percent of the population already has access, government action to extend broadband is unnecessary. That is an argument some folks are making. But is it the case that extending infrastructure to every corner of our country, and especially in rural areas—and a lot of us on this committee represent rural areas—always require some public resources in participation?

Mr. STRICKLING. I am not sure that I can give you a categorical answer to it. But what I can tell you is that the 95 or 96 percent figure is a figure for the mass market. We know from our program, and it is been well documented, that these anchor institutions have much higher needs for broadband, much greater speed requirements. Those aren't factored into that 96 percent. And as I said before, we know that schools overall have been at the low end of what their needs are. So our program has been trying to deal with some of these specific needs of anchor institutions which was set out as a standalone obligation or purpose under the Recovery Act. It was to serve unserved and underserved areas and to serve anchor institutions. And we have taken that to heart in the philosophy of our program.

Mr. WELCH. Good. Yes. And, you know, the private sector has spent billions and that is tremendous. But I believe it is the case that these investments have been enabled, to some extent, by pub-

lic resources including the Universal Service Fund and the RUS loans. Is that your sense as well?

Mr. STRICKLING. Well, there is no question that in rural areas the USF money and the RUS support has definitely had an impact. Yes.

Mr. WELCH. OK. Thank you.

I yield back, Mr. Chairman.

Mr. WALDEN. The gentleman yields back the balance of his time. Does that cover—

Ms. DEGETTE. Mr. Chairman?

Mr. WALDEN. Oh, Ms. DeGette.

Ms. DEGETTE. I ask unanimous consent to place the documents that Mr. Strickling was referring to—

Mr. WALDEN. Oh, absolutely.

Ms. DEGETTE [continuing]. The charts into the record.

Mr. WALDEN. Yes, without objection. Of course.

[The information appears at the conclusion of the hearing.]

Mr. WALDEN. And I think we have covered everybody who had to step out. Right? Or have you gone, Mr. Kinzinger? Oh, oK. Mr. Kinzinger, for 5 minutes.

Mr. KINZINGER. Thank you, Mr. Chairman.

Mr. WALDEN. Oh, but before you start.

Mr. KINZINGER. Uh-oh.

Ms. DEGETTE. Yes, we want to—

Mr. WALDEN. This is his birthday.

Ms. DEGETTE. This is his birthday so we have—

Mr. STRICKLING. Do we get to sing, and does it come off his time?

Mr. WALDEN. What is that? Yes, it comes off as questioning time,

Mr. Strickling. So happy birthday to our colleague, Mr. Kinzinger.

Mr. KINZINGER. Thank you. I am now old enough to have—

Mr. WALDEN. I look good for 70; he looks good for 35.

Mr. KINZINGER. Well, thank you. And thank you all for coming out. I know this was touched on a bit. I want to change gears from what we have been talking about, talking about FirstNET. Our subcommittee did help to create this authority in order to establish a nationwide interoperability public safety broadband network. But there were some differences of opinion on what this board, among other things, should look like. That being said, it is now our job to have a bit of oversight on the activities of this board with respect to the NTIA. In the most recent FirstNET board meeting, there were a couple of resolutions adopted in order to move forward with last year's previously suspended public safety BTOP projects. These resolutions stated that the suspensions were to be resolved within 90 days. And I was glad to hear this since there are States and localities who have committed vast amounts of resources to these now dormant projects.

My concern in these resolutions is the special award conditions being required to end the suspensions, specifically, the condition which ensures BTOP projects systems from interoperability problems and the requirement that a State's BTOP public safety assets be transferred to FirstNET. The former seems like an overly broad indemnification, while the latter seems a bit premature since States don't even know what options they will have in regards to a FirstNET network. My question to Secretary Strickling is this:

Why has the reinstatement of these BTOP public safety project awards taken so long and are those special conditions really necessary?

Mr. STRICKLING. Well, the board only met a week ago.

Mr. KINZINGER. Yes. It is 2013 so I was just, like, you know—

Mr. STRICKLING. Right. So they were on suspension to give the board an opportunity to go visit the projects and to make their recommendation. The board didn't come into being until last September when they had their first meeting. One of the first tasks they organized to do was to conduct a review of the projects. They have now been out; they have been on the ground to visit every one of them, and that led to recommendation that they just passed last week.

Mr. KINZINGER. We are hoping then that can move forward very quickly.

Mr. STRICKLING. Yes. And again, they are going to take the 90 days to sit down with each of these projects.

Mr. KINZINGER. And then, what are your thoughts on the special conditions on them?

Mr. STRICKLING. I will reserve judgment on those until they are presented back to us as part of the process.

Mr. KINZINGER. Then I can submit that for the record, if you wouldn't mind getting back to me on them.

Mr. STRICKLING. Yes. Sure.

Mr. KINZINGER. And also, while your testimony highlights the ability to get grants back on track after suspensions, we have been contacted by a number of people who remain very concerned about the grant to the North Florida Broadband Authority. Mr. Chairman, I seek unanimous consent to enter into the record a letter from Mr. Chris Thurow, Sr., a former North Florida Broadband Authority board member raising concerns about the program.

Mr. WALDEN. Without objection, so ordered.

[The information appears at the conclusion of the record.]

Mr. KINZINGER. My understanding is it has had problems from the start and NTIA suspended the grant for a period in 2011—

Mr. STRICKLING. Yes.

Mr. KINZINGER [continuing]. Requiring a corrective action plan. The outside contractor, law firm, and compliance firm have been replaced. Additionally, 7 of the 14 counties have dropped out of the project. We have been told the project has very few paying customers left and its revenue is only a fraction of the monthly operating expenses. A few questions on this. Is the project financially sustainable? If not, what happens next? Because, specifically, 7 of the 14 counties have withdrawn because they see a project. So what is it that the NTIA sees regarding its viability that the local counties are missing?

Mr. STRICKLING. Well, as of right now, we still think it is a good project and it is sustainable. And I will tell you that even in the case of at least one of the counties, the project is still picking up customers within that county even though that county might have dropped out. It is the Suwannee County, but the City of Live Oak has remained a customer and is very interested in the project. So I think the fact that the 7 counties have left—while not a great

event for us or for North Florida—doesn't necessarily mean that those counties are not going to continue to supply customers.

Mr. KINZINGER. You still see this to be a financially feasible venture?

Mr. STRICKLING. Yes. At this time, yes.

Mr. KINZINGER. All right, then we will obviously see how this goes over time.

Mr. STRICKLING. Right.

Mr. KINZINGER. With my remaining minute I would like to yield to Mr. Gardner of Colorado.

Mr. GARDNER. I would like to thank the gentleman from Illinois for the time. And just a couple of follow-up questions on what he asked.

Mr. Padalino, are you concerned that these rural telecoms in Colorado that have RUS loans may be unable to pay their loans due to competition from EAGLE-Net?

Mr. PADALINO. We have been monitoring the situation closely. We have heard from some of the borrowers in Colorado. We forwarded that correspondence over to NTIA. The rural development undersecretary Mr. Strickling met I think late last summer and we allowed NTIA to take the lead as it was there awardee.

Mr. GARDNER. So that is a concern?

Mr. PADALINO. Well, we are concerned with all of our borrowers to make sure that the loans are repaid.

Mr. GARDNER. Thank you. And Mr. Strickling, is EAGLE-Net sustainable financially?

Mr. STRICKLING. I think that is still to be determined.

Mr. GARDNER. Wasn't that a condition of the grant, that they be sustainable?

Mr. STRICKLING. As presented to us, yes. But I think we certainly are watching it carefully. The events of the suspension, the events of the controversy clearly could have an impact on its ultimate sustainability, which is why I would like to work with you and Congresswoman DeGette and the entire delegation to find a way to make sure this project is sustainable and can serve the school-children of Colorado.

Mr. GARDNER. Will the grant be reinstated before the issues are worked out in Colorado?

Mr. STRICKLING. The grant suspension would be lifted once they work out the environmental issues. But as you know, and we have committed to you to work and make sure EAGLE-Net is working with all of the stakeholders out there to try to resolve these other issues as quickly as we can.

Mr. GARDNER. And the last question. I am out of time. With 96 million out of the \$109 obligated or spent, is there enough money to finish the west slope build-out?

Mr. STRICKLING. Well, that doesn't include a bank loan that they also had sought and I think they are still working through some of the issues with the bank because of the delays in the project. There are some issues about whether the bank will continue on or not. So yes, I think ultimate financing is a concern, and again, that is an issue we would like to work with you on to make sure that the bank might carry through on that or that other sources of funding could be found.

Mr. GARDNER. That is a bank loan they haven't received yet. Or they have?

Mr. STRICKLING. They haven't received all of the proceeds of it. I think they have received a small amount of the loan so far.

Mr. GARDNER. They told the audit committee about \$500,000. I don't know if that is the same loan.

Mr. STRICKLING. I think that is what they have received so far. Yes, sir.

Mr. WALDEN. All right. The gentleman's time has expired.

I want to thank our two public servants for being here today and answering our questions—or attempting to—to the best of your abilities. And we look forward to continuing the discussion. And again, thank you for your service and we appreciate your participation in our hearing.

We are going to move on now to the second panel. As we change out here, we will have Mr. Pete Kirchhof, Executive Vice President, Colorado Telecommunications Association; Ann Eilers, the Principal Assistant Inspector General for Audit and Evaluation, Office of Inspector General, U.S. Department of Commerce; Michael K. Smith, the State President, Vermont, FairPoint Communications; and Bruce Abraham, Board of Directors, North Georgia Network; and Joe Freddoso, President and CEO of MCNC. I hope I got all those names correct.

And if you all will take your seats and I will just tell you with regards to these microphones, they do have an actuator button there at the base. And the closer you are between the microphone and your mouth, the better we will be able to hear you once the light is lit.

So we thank all of you for coming today to help enlighten us on what is working and what is not this program, and to how we can be good stewards of the taxpayers' money. So with that——

Ms. DEGETTE. May I take a moment, sir?

Mr. WALDEN [continuing]. I would like to recognize my friend and colleague from Colorado, Ms. DeGette——

Ms. DEGETTE. Thank you.

Mr. WALDEN [continuing]. To introduce our first witness.

Ms. DEGETTE. Thank you very much, Mr. Chairman.

I am really delighted to introduce our first witness because he is an elementary school classmate of mine from St. John's Elementary School in Denver, Colorado. And he does a wonderful job in his current role—I am getting his exact title—Executive Vice President of the Colorado Telecommunications Association. And we are hoping he can sort all this out for us in 5 minutes or less. Thanks, Mr. Chairman.

Mr. WALDEN. So Mr. Kirchhof, if you would like to lead off. We are delighted to have a fellow westerner out here. And please go ahead.

**STATEMENTS OF PETER KIRCHHOF, EXECUTIVE VICE PRESIDENT, COLORADO TELECOMMUNICATIONS ASSOCIATION; ANN EILERS, PRINCIPAL ASSISTANT INSPECTOR GENERAL FOR AUDIT AND EVALUATION, OFFICE OF INSPECTOR GENERAL, U.S. DEPARTMENT OF COMMERCE; MICHAEL K. SMITH, STATE PRESIDENT-VERMONT, FAIRPOINT COMMUNICATIONS; BRUCE ABRAHAM, BOARD OF DIRECTORS, NORTH GEORGIA NETWORK; AND JOE FREDDOSO, PRESIDENT AND CEO, MCNC**

**STATEMENT OF PETER KIRCHHOF**

Mr. KIRCHHOF. Thank you, Chairman Walden, Ranking Member DeGette, now, I guess it is. And I hope the elementary school comment does not become part of the permanent record.

But to the rest of the committee members, my name is Pete Kirchhof, Executive Vice President of the Colorado Telecommunications Association. CTA represents 25 small rural communications companies that provide voice, video, and data service to approximately 30,000 customers located in 25,000 square miles, a very diverse geography. That equates to approximately 1.2 customers per square mile, which presents huge challenges in providing services to these customers where the cost is determined by distance and density.

Attached to my written testimony is a colored service area map that shows you graphically those large geographic areas served by our members.

CTA members receive support from two federal programs, the Universal Service Fund and the Rural Utility Service. Both of these programs were and are instrumental in helping our members grow their companies, upgrade their networks, and provide high-quality affordable communications service. CTA members appreciate the confidence shown by these agencies in supporting service for rural Colorado.

In 2010, NTIA was awarded a grant to an entity called EAGLE-Net. The purpose of the grant was to provide broadband service to unserved, underserved entities through construction of a middle-mile infrastructure and in collaboration with local telecommunication companies like CTA members. Several CTA members sent letters of support to NTIA and were referenced as potential partners by EAGLE-Net in their original application. Our members truly believed that this project would be a tremendous benefit to rural communities. EAGLE-Net would build facilities where needed, i.e. fill in the gaps or reinforce existing facilities or lease existing facilities from companies where possible to provide broadband service to these targeted institutions.

It now appears to us that this project was not intended to serve unserved or underserved areas or to collaborate with the local providers but rather to build a government-owned and operated duplicative network, overbuilding hundreds of miles of existing fiber infrastructure from our members and other providers throughout the State to serve as many government entities as possible, including many in urban, highly competitive and densely populated areas.

As I discussed in my written testimony, the attached maps also demonstrate there are several examples of where duplicate facili-



ties were built. And even more troubling, they were funded by three different federal programs.

In addition, facilities and services are being provided to customers in Denver, hardly unserved or underserved by anyone's definition.

Congressman Gardner referenced the resolution passed, the House Joint Resolution 26. I won't read the section. He and I had the same sections to discuss. But the overall, I think, goal of the State Legislature was to make sure that there was not duplicating facilities and that there was use of the private sector facilities where possible.

In our opinion, EAGLE-Net has done just the opposite by overbuilding existing networks on the eastern plains, south-central Colorado, the Denver Metro area, as well as Laramie, Wyoming, while largely ignoring the western slope communities where broadband facilities are desperately needed and would be welcomed by those communities.

CTA member service areas have small populations, are costly to serve, and generate limited revenues. Supporting even one network under those circumstances is a challenge even with the subsidies. Maintaining two competitive government-funded networks is highly unlikely. And since most of the CTA members RUS funding is in terms of loans, not grants, overbuilding presents a serious impact to the financial stability of our members and ultimately to RUS if our ability to repay those loans is compromised.

First and foremost in our mind, federal agencies should ensure that taxpayer dollars are not used to duplicate infrastructure development in rural communities. The Federal Government is the Federal Government. Any conflicts should be resolved through an interagency agreement or cooperation.

I do want to publicly thank Assistant Secretary Strickling for his attention and for recently meeting with us in Colorado. But in conclusion, I would say this: CTA members still support the mission of EAGLE-Net as it was originally constituted, but I think what has happened is it has gone far from what the original intent was. We respectfully ask committee members to encourage EAGLE-Net to negotiate with local providers in good faith to avoid duplicating facilities. And we would hope that any additional monies left over could be redirected to the western slope.

Thank you, Mr. Chairman and members of the committee, for your time.

[The prepared statement of Mr. Kirchhof follows:]

Testimony of Mr. Peter Kirchhof

Executive Vice President

Colorado Telecommunications Association

Subcommittee on Communications and Technology

February 27, 2013

CTA Mission Statement

To promote the availability of resources and enhance the opportunity of its members to provide the most advanced and highest quality communications networks and services to customers in rural Colorado and link residents of the state to the global network.

**Summary**

The 25 CTA member companies provide voice, video and data services to approximately 30,000 Colorado customers that are located in 25,000 square miles of very diverse geographical territory (1.2 customers per square mile). Our members supported EagleNet because they believed it would benefit rural communities by building facilities where truly needed and/or lease existing facilities from companies where possible. It appears to CTA members that this project was never intended just for unserved or underserved areas but rather to build a government owned and operated duplicate network to serve as many government entities as possible. EagleNet is primarily overbuilding networks on the Eastern Plains, South Central Colorado and in the Denver Metro Area while largely ignoring Western Slope Communities. Since most of the RUS funding to our members is through loans not grants, overbuilding presents a serious risk to the financial stability of our members operations and ultimately to RUS if their ability to re-pay the loans is compromised. CTA members still support the original mission to provide service to unserved and underserved areas. We respectfully ask committee members to strongly encourage EagleNet to negotiate in good faith with local providers to use existing local facilities and to avoid duplication of existing infrastructure. EagleNet should redeploy remaining funds to areas of the state (Western Slope) where it is badly needed.

Chairman Walden, Ranking Member Eshoo and subcommittee members

My name is Pete Kirchhof Executive Vice President of the Colorado  
Telecommunications Association (CTA).

**Background on CTA**

The association was founded in 1963 to support companies providing communications facilities in rural Colorado. The association now has 25 small rural communications companies. Our member companies were formed decades ago out of necessity because the former bell operating company Mountain Bell refused to serve customers in sparse rural areas of Colorado. These companies evolved in to several different operating structures: family owned, cooperatives (owned by their members) and publicly or privately held entities. They provide voice, video and data services to approximately 30,000 customers that are located in 25,000 square miles of very diverse geographical territory. That equates to 1.2 customers per square mile which presents huge challenges (high cost, low revenue) in providing service to these customers. The attached service area maps show the large geographic area served by our members.

**CTA Members Support Local Communities**

Our members are also very connected (pun intended) in their communities. They live, work and raise families side-by-side with their customers.

In 2010, an economist with Colorado State University issued a study on the economic impacts of member companies in their communities. They provide:

- 165 direct jobs (428 total)
- Average salary \$61,300 (35 percent higher than the average rural job)
- \$21 million in annual payroll

**CTA Members Receive Federal Funds**

CTA members receive support from two federal programs: Universal Service Fund (USF) and Rural Utilities Service (RUS). Both of these programs were and are instrumental in helping our members grow their companies, upgrade their networks and provide high quality affordable communications service. In Colorado, members receive approximately \$23 million dollars annually from the USF and with the changes in the USF program are focusing those dollars on providing broadband service. RUS has long been a partner of the rural companies providing primarily loans and some grants to build their networks. There is approximately \$114 million dollars in outstanding CTA member loans for communications infrastructure and broadband deployment.

**NTIA Awards EagleNet \$100.6 Million for Broadband Deployment**

In 2010, the National Telecommunications and Information Administration (NTIA) awarded a grant to an entity in Colorado now known as EagleNet. The purpose of the grant is to provide broadband service to unserved/underserved schools, libraries and community anchor institutions through construction of middle mile infrastructure and in collaboration with local communications companies like CTA members. Several CTA members sent letters of support to NTIA and were referenced as potential partners by EagleNet in its original application. Our members truly believed that this project would be a tremendous benefit to rural communities. EagleNet would build facilities where needed (fill in the gaps or reinforce existing facilities) or lease existing facilities from companies where possible to provide broadband service to the targeted institutions. However, EagleNet's implementation did not match its initial promise. Discussions both formal (responses to RFP and RFI) and informal (including network information) took place with individual CTA companies for several years but with little success. The original CEO of EagleNet was invited to speak at one of our membership meetings to help the members understand their mission and to develop relationships. I am personally aware of only two companies that signed an agreement but even then - one was not spared from being overbuilt by EagleNet (even after the manager attended a press conference in support of the project).

A sobering reality when that company discovered in the summer of 2012 plows were burying fiber optic lines right next to existing company lines.

**EagleNet builds Duplicate Network (see attached maps)**

It appears to CTA members that this project was never intended just for unserved or underserved areas, building middle mile infrastructure or collaboration with local providers but rather to build a government owned and operated duplicate network (overbuilding hundreds of miles of existing infrastructure from our members and other providers) to serve as many government entities as possible including many in urban, highly competitive and densely populated areas. There are two very clear examples where duplicative facilities were built and, even more troubling, were funded by three different federal programs. Agate, Colorado is located 71 miles east of Denver. CTA member, Agate Mutual Telephone Cooperative Association, has facilities in place to serve the local K-5 school with 11 students. Another provider using federal E-rate dollars from the USF has a facility at the school and now EagleNet has recently supplied a third facility to the school. All three facilities were built using federal money (USF, RUS, NTIA) for a school so small that several strands of fiber would likely provide all the bandwidth they could ever use. A similar situation exists in the town of Flagler – population 561. This eastern plains K-12 school has 140 students and will have three fiber connections to the school funded by RUS, NTIA and USF.

Other examples of overbuilt facilities exist or are planned in other areas of the state including CTA members PC Telcom, Blanca Telephone and SECOM. In Denver, they have connected several schools, cities and even a museum. One example is the Cherry Creek School District which is the 4th largest in the state; serves a very highly populated and middle/upper income community and has many, many choices of providers for broadband service and the necessary bandwidth to support their needs. Hardly unserved and/or underserved by anyone's definition. The Colorado General Assembly wanted to avoid this very situation when they approved a resolution (HJR 10-1026) in support of the grant. In part, it stated:

“WHEREAS, Every effort should be made to prioritize the provision of broadband **service to unserved customers through the efficient distribution of resources to avoid over-building of existing facilities and to strongly encourage the use of private sector local telecommunications providers**; now, therefore,” **(emphasis added)**

Interestingly, EagleNet has done just the opposite of what the legislature intended by primarily overbuilding (and not collaborating with local providers) networks on the Eastern Plains, South Central Colorado, in the Denver Metro Area as well as to Laramie, Wyoming while largely ignoring Western Slope Communities (i.e., Silverton and Routt County) where broadband facilities are desperately needed and would be welcomed by those communities.



**EagleNet Undermines RUS Loans in Colorado**

CTA member service areas have small populations, are costly to serve and generate limited revenues. Supporting even one network under these circumstances is a challenge even with subsidies. Maintaining two competing government funded networks is highly unlikely. Since most of the CTA members' RUS funding is through loans not grants, overbuilding presents a serious risk to the financial stability of our members operations and ultimately to RUS if their ability to re-pay the loans is compromised. In addition, EagleNet's open network and excess capacity availability for resale will likely have the effect of funding new commercial carriers to enter the market to compete with the local provider (including our members) for non-governmental (residence and business) customers. Many of our members already face varying degrees (access and reliability may be limited) of competition from the private sector: wireless providers (including one provider that also receives federal USF dollars and recently won a Connect America Fund grant), and cable and satellite providers. CTA members cannot "compete" with EagleNet or its network because it is not regulated, does not pay taxes, has no debt (their money was a grant not a loan) and has no state oversight.

**Conflicting Agency Policies, Practices and Grant Conditions**

Conflicting federal agency policies and strict grant conditions limit CTA member's ability to secure agreements with EagleNet. First and foremost, federal agencies should insure that taxpayer dollars are not used to duplicate infrastructure development in rural communities. In addition, NTIA should reconsider its' policy of primarily leasing Dark Fiber Facilities because of an internal accounting requirement that leases can only be categorized as a capital expenditure. Some lit fiber solutions may provide better service at a more reasonable price with greater reliability. Also, both RUS and NTIA require that they be in the first lien position on owned or leased fiber facilities. This is counterproductive and leaves CTA members stuck in the middle. The federal government is the federal government – this should be resolved through internal accounting or inter-agency agreement not by penalizing local providers.

**Assistant Secretary Strickling Meets with CTA in Colorado**

CTA was able to meet with Mr. Strickling earlier this month while he was in Colorado to speak at a conference. In addition, the meeting included Mr. Gardner and his staff, myself and CTA Board President Kevin Felty as well as other NTIA staff and Congressional staff. Newly appointed EagleNet CEO Mike Ryan also attended the meeting.

While no agreements or commitments were made by either party Mr. Ryan agreed to make every effort to work with our members where feasible.

**Conclusion**

- CTA members still support EagleNet's original mission to provide service where there is a demonstrated need that is not being met by another provider
- We respectfully ask committee members to strongly encourage EagleNet to negotiate in good faith with local providers to use existing local facilities and to avoid duplication of existing infrastructure
- Eliminate conflicts within federal agencies to allow for collaboration
- EagleNet should redeploy remaining funds to areas of the state (Western Slope) where it is badly needed

Mr. Chairman, Ranking Committee Member Eshoo thank you for your time and attention to this very important issue affecting our members. I would be happy to answer questions.

Mr. WALDEN. Mr. Kirchhof, thank you for your testimony. We appreciate your participation in our hearing.

We will turn now to Ann Eilers, the Principal Assistant Inspector General for Audit and Evaluation, Office of the Inspector General, U.S. Department of Commerce.

Ms. Eilers, thank you for being here this afternoon. We look forward to your testimony.

#### STATEMENT OF ANN EILERS

Ms. EILERS. Great. Thank you, Chairman Walden, Ranking Member DeGette, and members of the subcommittee. I appreciate the opportunity to appear before you today to discuss our continued oversight of the Broadband Technology Opportunities Program, or BTOP.

The American Recovery and Reinvestment Act of 2009 was signed into law 4 years ago. The Act provided the National Telecommunications and Information Administration, or NTIA, approximately 4.7 billion to establish BTOP. Since then, BTOP has developed into a program of approximately 225 projects that are providing broadband services. NTIA issued grants in three major areas: comprehensive community infrastructure, public computing centers, and sustainable broadband adoption. Many of the projects are nearing completion, with the last projects scheduled for September of this year. Extensions have been granted to a number of grantees, some through September 2013. Additionally, we understand NTIA has requested a waiver from OMB for grant funds to be spent after September 2013.

The Recovery Act also established a central role for the Offices of the Inspector General to monitor their agencies use of funds to prevent fraud, waste, and abuse. Our oversight began immediately after the passage of the Act. We have provided over 50 sessions of compliance and controls training to program staff and grant recipients. We also assisted with the development of the program-specific Audit Guide for for-profit BTOP award recipients.

Our oversight efforts have continued, and to date, we have both assessed the program operations of BTOP and reviewed specific issues with some individual awards. Our work includes 10 published products containing over 40 recommendations developed to improve BTOP administration and monitoring of the grant awards. Additionally, our review of single- and program-audit reports has identified findings and questioned costs within the grant operations.

Finally, we have established procedures to closely monitor, follow up on, and analyze complaints made to our hotline. The hotline is available online by telephone. It provides stakeholders a fast, anonymous, or confidential means to report fraud, waste, and abuse.

Since appearing before the Subcommittee last May, we have reported that BTOP continues to face challenges with issues in grant match, acquisition and implementation of equipment, and sub-recipient monitoring. Most recently, we issued reports on the need for sub-recipient monitoring to be strengthened and problems associated with an infrastructure award to West Virginia.

We reviewed the West Virginia award at the request of this committee. We found that the grantee had not demonstrated it had

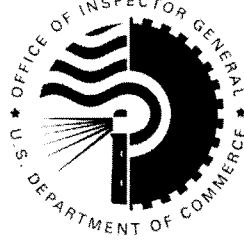
used award funds cost-effectively to purchase routers. We also identified problems with the grantee's inventory management.

We currently have two BTOP reviews in progress. One is on assessing the internal controls NTIA has in place to monitor grantee equipment procurement and deployments. The other is to review NTIA's closeout operations as they assess that all laws, regulations, and grant terms are met by these projects.

Finally, we will continue to work on BTOP hotline complaints and tracking audit issues identified in audits performed by independent accounting firms.

Again, we appreciate the opportunity to appear before the Subcommittee. I am pleased to respond to any questions that you may have.

[The prepared statement of Ms. Eilers follows:]



Testimony of

**Ann C. Eilers**  
Principal Assistant Inspector General  
For Audit and Evaluation

U.S. Department of Commerce

before the

House Energy and Commerce Committee  
Subcommittee on Communications and Technology

***Is the Broadband Stimulus Working?***

February 27, 2012

Chairman Walden, Ranking Member Eshoo, and Members of the Subcommittee:

I appreciate the opportunity to testify today about our continued oversight of the Broadband Technology Opportunities Program (BTOP), as well as the challenges the National Telecommunications and Information Administration (NTIA) faces in its oversight of BTOP projects as they are completed and the grant awards closed out.

The American Recovery and Reinvestment Act of 2009 (Recovery Act), passed four years ago this month, provided NTIA approximately \$4.7 billion to establish BTOP. This competitive grant program was established to provide funds for deploying broadband infrastructure in unserved and underserved areas of the United States, enhance broadband capacity at public computing centers, improve access to broadband services for public safety agencies, and promote sustainable broadband adoption. BTOP awards were made in three major areas:

- *program infrastructure (comprehensive community infrastructure, or CCI)*, to provide institutions such as schools, libraries, and medical facilities with internet connectivity, including seven grant awards, totaling approximately \$382 million, targeting 700 megahertz (MHz) interoperable public safety wireless networks;
- *public computing centers (PCCs)*, to establish new public computer facilities or upgrade existing ones to provide broadband access to the general public or specific populations such as low-income individuals, the unemployed, seniors, children, minorities, and people with disabilities; and

| .....

- *sustainable broadband adoption (SBA)*, to promote broadband Internet usage and adoption, including among specific populations traditionally underserved by this technology.

NTIA also administers the State Broadband Initiative Program that supports the twice yearly update of the National Broadband Map, a searchable map of broadband availability.

Table I provides a summary of BTOP funding with these and other categories:

**Table I. BTOP Funding**

Category	No. of Awards	Actual (millions)
CCI	117	\$3,348
State Broadband Initiative Program	56	278
SBA	43	250
PCC	65	199
Rescission		302
Other		147
Cancelled, modified, or terminated awards		171
<b>Total</b>		<b>\$4,695</b>

Source: OIG, based on NTIA data

<sup>a</sup> Includes transfer to OIG, transfer to Federal Communications Commission, and NTIA

administrative expenses (figures have been rounded).

At the conclusion of the BTOP award process on September 30, 2010, NTIA had awarded 233 grants. As of December 31, 2012, the total number of BTOP grants decreased from 233 to 225 due to grant cancellations, modifications, and terminations, which resulted in approximately \$171 million returned to the U.S. Department of the Treasury. Most of the awards are in CCI



projects (see table 1).

The Recovery Act also established a central role for Offices of Inspector General in monitoring their agencies' use of funds to prevent fraud, waste, and abuse. To date, our oversight efforts have (1) assessed the establishment, implementation, and program operations of BTOP and (2) reviewed specific issues with some individual awards. This includes 10 published products and 44 recommendations developed to improve the administration of BTOP and monitoring of approximately \$4 billion in grant awards. We have also provided training to NTIA and grant recipients on the need for compliance with terms of the award. Our nonfederal audit review of single and program-specific audit reports has identified audit findings and questioned costs with BTOP awards. Since our testimony on May 16, 2012, to this subcommittee, we have reported on BTOP grantees' matching share, NTIA's management and oversight of its contract for BTOP administration, subrecipient monitoring, and the review of a CCI award to West Virginia.

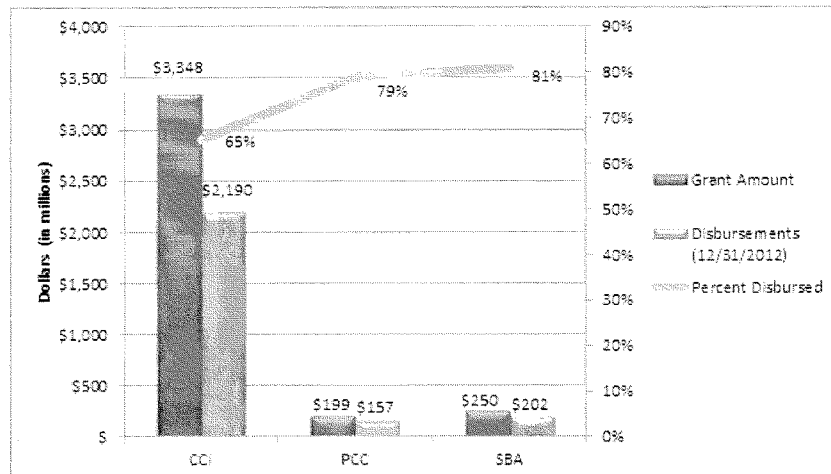
We currently have two BTOP review engagements in process, including a review of BTOP equipment and an audit of NTIA's closeout of its awards. (Please see appendix for further details.) Further, we have established procedures to closely monitor, follow up on, and analyze trends for Hotline complaints. The Hotline, available online or by telephone, provides stakeholders with a fast and—should they wish—anonymous or confidential means to report waste, fraud, and abuse and to hold BTOP awardees and NTIA accountable for federal dollars. These represent our most immediate efforts to anticipate and address NTIA's ongoing challenges in administering the program.

My testimony will address the following challenges that we believe NTIA faces:

1. Some BTOP projects are at risk of not being completed by September 30, 2013;
2. Additional monitoring of equipment may be needed;
3. Findings from OIG and nonfederal audits require close attention;
4. NTIA needs to address challenges associated with the First Responder Network Authority (FirstNet) program and BTOP public safety projects that were affected by its establishment; and
5. Effective oversight remains essential as awards are closed out.

**I. Some BTOP Projects Are at Risk of Not Being Completed by September 30, 2013**

In our May 2012 testimony, we reported that slow Recovery Act spending represented a challenge. Although overall BTOP disbursement increased from 42 percent as of April 30, 2012, to 67 percent as of December 31, 2012, 27 grants continue to lag, with reported spending at less than 50 percent of their available grant funds (see table 3 below). For all awards, more than \$1.0 billion had not been disbursed at the close of calendar year 2012. Figure 1 below provides a summary of BTOP disbursements through December 31, 2012.

**Figure I. BTOP Disbursements by Project Type (as of December 31, 2012)**

Source: U.S. Department of the Treasury, Automated Standard Application for Payment

The July 2009 and January 2010 notice of funds availability (NOFA) required that all BTOP grants be awarded by September 30, 2010 and projects be fully completed within 3 years of the grant issuance. Since the first BTOP grants were awarded in December 2009, the forecasted completion dates ranged from November 2012 to September 2013. However, as of February 1, 2013, extensions to complete projects had been requested for more than 35 awards—many until September 30, 2013.

Further, on September 15, 2011, the Office of Management and Budget (OMB) issued memorandum M-11-34, stating that federal agencies "should work collaboratively and transparently with recipients of discretionary Recovery Act grants to accelerate the spending rate for all awarded funds while still achieving core programmatic objectives." M-11-34 also directs federal agencies to "establish aggressive targets, consistent with programmatic objectives,

for outlaying remaining funds [and] take steps to complete Recovery Act projects by September 30, 2013.” While federal agencies were directed to “accelerate the spending rate for all awarded funds while still achieving core programmatic objectives,” M-11-34 does allow for deadline extension waivers where a project must undergo complex environmental review, the long-term nature of programs prevent acceleration, contractual commitments prevent adjusting the timeline for spending or other special circumstances exist. NTIA has informed us that it has requested such a waiver for BTOP projects.

Table 2 provides additional details on the 27 projects with spending levels at 50 percent or less as of December 31, 2012. With approximately 7 months of the 3-year grant life remaining, those projects that have spent 50 percent or less of their grants present a higher risk of not meeting their spending deadlines.

**Table 2. BTOP Grants with Spending Less Than or Equal to 50 Percent (as of December 31, 2012)**

Project Type	Number of Grants	Federal Funds (millions)	Portion of Type's Total Grants
CCI	21	\$720.2	18%
SBA	4	\$15.4	9%
PCC	2	\$8.4	3%
<b>Total</b>	<b>27</b>	<b>\$744.0</b>	<b>12%</b>

Source: U.S. Department of the Treasury, Automated Standard Application for Payment

Spending delays result from multiple causes. For example, special award conditions included in CCI awards require that an environmental assessment (EA) conclude prior to the start of

construction. Additionally, in its September 2012 *Quarterly Program Status Report*,<sup>1</sup> BTOP reported to Congress that local permitting and agreements for rights-of-way and other land easements, utility pole agreements and make-ready work, and other predeployment activities have caused implementation schedule delays for some grant awards. Also, passage of legislation that established an interoperable nationwide public safety network (discussed later) delayed seven public safety projects because assessments of the legislation's effect on their implementation became necessary.

## **2. Additional Monitoring of Equipment Procurement May Be Needed**

With a complex grant portfolio and recipient profile, NTIA's continual monitoring of the program and technological challenges is essential to ensuring that approximately \$4 billion in federal funds are safeguarded. It is important to verify that the equipment procured under BTOP is appropriate for its intended use; complies with market standards; and has been tested for functionality and properly implemented and inventoried. In December 2012, OIG initiated an equipment review of a sample of BTOP projects. The objectives of this audit include verifying (1) whether NTIA has adequate internal controls in place to monitor equipment procurements and federal interest, (2) whether grantees have appropriately acquired, tested, and implemented the most effective equipment, and (3) whether grantees are on track to complete the projects on time and achieve program goals. As we discussed in our May 2012 testimony, our November 2011 BTOP award monitoring report provided recommendations to NTIA for improving internal controls over monitoring activities. NTIA submitted a responsive action plan to our report and took a number of corrective actions. NTIA committed to

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<sup>1</sup> National Telecommunications and Information Administration, March 2012. *Broadband Technology Opportunities Program (BTOP) Quarterly Program Status Report*. Washington, DC: NTIA.

strengthen its procedures for following up on inconsistent performance reporting, documenting identified and resolved grant implementation issues; and strengthening site visits by verifying certain documentation (i.e., grant match). Also, NTIA committed to working closely with recipients that are at risk of not completing projects on time.

In our January 23, 2013, response to the June 4, 2012, congressional request to review the BTOP grant awarded to the Executive Office of the State of West Virginia (EOWV), OIG found several issues associated with the implementation of the award.<sup>2</sup> We concluded that EOWV:

- had not demonstrated that BTOP funds used to purchase routers were spent cost-effectively,
- had not effectively managed and tracked router inventory, and
- did not administer agreements with community anchor institutions (CAIs) for the receipt of federal property.

Specifically, EOWV did not perform a study to determine the appropriate size router that would most effectively and efficiently meet the individual CAI needs. As a result, it is uncertain whether the selected approach was the most cost-effective. Savings could have been achieved if less expensive routers had been purchased for some locations. The issues we identified with inventory and agreements for the receipt of federal property reflect concerns over the

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<sup>2</sup> On June 4, 2012, the Chairmen of the Subcommittee on Communications and Technology and Subcommittee on Environment and the Economy requested the review.

accountability of purchased assets. The West Virginia legislative auditor also reported that federal funds had been misspent on oversized routers.

### **3. Findings from OIG and Nonfederal Audits Require Close Attention**

Our audits of cross-cutting issues affecting BTOP awards resulted in the issuance of reports containing recommendations to strengthen grant match and subrecipient monitoring.

In June of 2012, we issued a report on whether NTIA has processes in place to monitor BTOP recipient match and verify that match contributions meet federal administrative requirements. We concluded that: (1) PCC and SBA grantees do not receive the same detailed match review as CCI projects; (2) grantees permitted a contractor and a subrecipient to access cash drawdowns through the U.S. Department of the Treasury; (3) grantees did not record the grant match in the financial records; and (4) some grantees were behind schedule in contributing their nonfederal match. Steps were needed to ensure that grant match requirements were met and to guard against the unauthorized use of funds. NTIA submitted a responsive action plan to address the report's recommendations.

In January of 2013, we issued a report on the effectiveness of subrecipient monitoring for BTOP.<sup>3</sup> We concluded that: (1) awards that had a vendor might not be properly classified, (2) subrecipient monitoring plans were not in place or were inadequate, (3) subrecipient agreements did not contain all required provisions, and (4) recipients were not reporting all

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<sup>3</sup> U.S. Department of Commerce, Office of Inspector General, January 2013. *Proper Classification and Strengthened Monitoring of Subrecipients Are Needed for the Broadband Technology Opportunities Program* (OIG-13-013-A). Washington, D.C.: Department of Commerce OIG.

required information into FederalReporting.gov. Effective monitoring of subrecipients is necessary to ensure that project costs are allowable, allocable, and reasonable: program goals are achieved; and that Recovery Act transparency reporting requirements are met.

We also noted other matters not directly related to subrecipient monitoring that warrant attention, including: (1) recipients might not complete projects on time, (2) recipients' financial information was not reconciled to the Recovery Act website, (3) vendors were not reviewed for suspension and debarment, (4) not all vendor contracts were competed for BTOP grants, and (5) recipients did not maintain vendor contracts.

Finally, our nonfederal audit review of single and program-specific audit reports identified questioned costs and noncompliance concerning BTOP awards.<sup>4</sup> OIG also worked with NTIA to develop a program-specific audit guide for BTOP award recipients that are for-profit entities. The most common findings included noncompliance with (1) applicable policies or procedures (either not having them or not following them), (2) cost principles for allowable costs, and (3) reporting requirements (either deficient or late reports). Please see appendix for further details.

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<sup>4</sup> Nonfederal entities (i.e., states, local governments, tribes, colleges and universities, and nonprofit organizations) that expend \$500,000 or more in federal awards in a year are required to have these awards audited annually in accordance with OMB Circular A-133. Commercial organizations that receive federal funds from the Department are subject to award requirements as stipulated in the award document.



**4. NTIA Needs to Address Challenges Associated with the First Responder Network Authority (FirstNet) Program and Existing BTOP Public Safety Projects That Were Affected by Its Establishment**

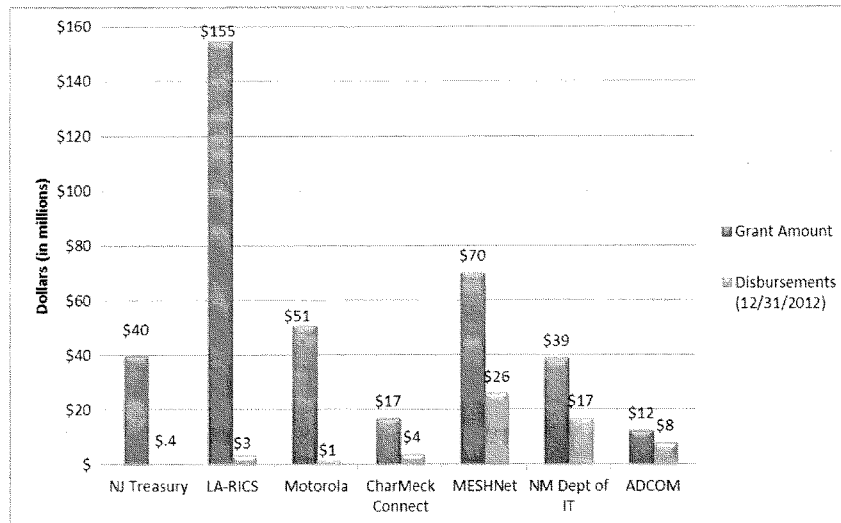
The passage of new legislation requiring NTIA to establish an interoperable nationwide public safety broadband network (PSBN) while continuing to oversee BTOP places additional requirements on NTIA, increasing program risk. As we continue to track the establishment of FirstNet, its impact on key BTOP public safety projects should be closely monitored.

On February 22, 2012, Congress enacted the Middle Class Tax Relief and Job Creation Act of 2012 (P.L. 112-96), reallocating the D-block spectrum and \$7 billion in funding to NTIA for the establishment of PSBN. Specifically, the law requires the establishment of an independent authority within NTIA called the First Responder Network Authority (FirstNet) to (1) administer the D-block and existing public safety spectrum and (2) oversee the establishment and deployment of the PSBN.

Several BTOP projects involve networks similar to FirstNet's PSBN. As a result, our BTOP oversight helps us anticipate issues and concerns that could potentially arise with FirstNet. We have been closely following the progress of BTOP's seven existing public safety grant awards (totaling \$382 million), having already reviewed the BayWEB grant in a report issued May 2011 and a memorandum issued in January 2012. These seven large, complex infrastructure projects have faced multiple deployment challenges, resulting in slow awardees spending and a subsequent halt:

- Adams County (Colorado) Communications Center, Inc. (ADCOM)
- City of Charlotte, North Carolina (CharMeck Connect)
- Executive Office of the State of Mississippi (MESHNet)
- Los Angeles Regional Interoperable Communications System (LA-RICS)
- Motorola, Inc. (in the San Francisco Bay area)
- New Jersey Department of Treasury
- New Mexico Department of Information Technology

Causes include delays in EAs, vendor selection, design modifications, establishment of governance structure, and the partial suspension of these awards on May 11, 2012. Figure 2 depicts the federal fund amounts and the spending rates as of December 31, 2012, for these projects.

**Figure 2. Disbursement of BTOP Public Safety Grant Funds**

Source: U. S. Department of the Treasury, Automated Standard Application for Payment

If the suspension from NTIA is lifted, FirstNet will integrate the progress achieved by the seven public safety grantees into the PSBN.

Given the complexity and time requirements of PSBN, it has taken FirstNet several months to fully establish itself and its rules and regulations. While FirstNet hires staff to handle its day-to-day operations, it receives support from NTIA for establishment of its program guidelines. This has put additional requirements on NTIA staff, which could negatively affect oversight of BTOP.

Since its establishment, the FirstNet board has held three meetings. Per the February 12, 2013, meeting, the FirstNet board has informed the public that they have made site visits to each of

the seven BTOP public safety awards and are moving forward with issuing new spectrum leases with each. Also, the board has made its recommendations to NTIA to lift its partial suspension, so that the recipients can continue their long-term evolution (LTE) network build-out.

Several challenges remain for FirstNet in the establishment of PSBN, including:

- *Integration of the seven BTOP grants into the PSBN.* Despite the FirstNet board's recommendations, NTIA has to be willing to lift the partial suspension and allow the projects to integrate into FirstNet/PSBN.
- *Construction of a nationwide LTE network.* Due to the size of this network, vendor participation, equipment readiness, and build-out will represent significant challenges.
- *Ensure sufficient funding for build-out and sustenance of a truly nationwide network.* The public safety customer base is a fraction of the commercial network customer base. Therefore, it will be challenging for FirstNet to ensure funding for its network without future congressional funding.
- *Regional and statewide cooperation.* Getting various state and local public safety agencies to cooperate with each other and truly realize the benefits of such a network could pose challenges, as was stated in our May 6, 2011.

With so much significant spending on public safety equipment procurement and deployment, it is imperative to ensure that the equipment works and meets the intended BTOP objectives.

OIG continues to oversee NTIA efforts to ensure it can monitor grantees' equipment procurements.

#### **5. Effective Oversight Remains Essential as BTOP Awards Are Closed Out**

Finally, Mr. Chairman, we would like to update the Subcommittee on concerns we expressed at our May 2012 testimony relating to funding of oversight. Section 1306 of the Dodd–Frank Wall Street Reform and Consumer Protection Act requires that unobligated Recovery Act funds be returned to the U.S. Department of the Treasury on December 31, 2012. On that date, OIG had \$4.8 million in unobligated oversight funds that OIG needed for continued oversight of BTOP, in addition to approximately \$600,000 for other ARRA oversight activities. OIG requested and received a waiver from this provision for \$4 million, to be divided between BTOP and other ARRA oversight.

Our future BTOP oversight plan includes a combination of program audits and targeted reviews of risky grants. In addition, we will continue investigating and resolving complaints of wrongdoing made against BTOP award recipients, for which we have established a formal complaint monitoring process. The number of complaints has increased over time, and it is reasonable to expect that number to continue to go up as the program matures.

As of January 14, 2013, NTIA identified 15 awards as being currently in the closeout phase, with an additional 55 scheduled to end within 90 days. Closeout procedures are actions performed at the expiration of an award to ensure that all activities are complete and ensure that the recipient has complied with applicable laws, regulations, OMB circulars, and grant terms and

conditions. Of those 55 grants, 26 have submitted a request to extend their performance period to September 30, 2013. The risks associated with inadequate closeout processes include the possibility that assets purchased with federal funds are not properly secured and that unused funds are not promptly returned to the Treasury. Grant closeout procedures also represent one of the final opportunities to detect unallowable uses of funds.

We have initiated an audit of grant closeout procedures to ensure adequate operations are in place to effectively close out the BTOP grants as their period of performance comes to an end. The audit objectives are to evaluate whether grant project closeout policies and procedures established for BTOP are adequate to effectively administer closeout activities and to assess whether closeout procedures are being followed as BTOP grants are closed.

Additionally, while OIG is not in a position to speak to the Administration's budget request for NTIA oversight, it is essential that NTIA receive sufficient funding for the oversight of BTOP. As BTOP projects progress toward completion dates, NTIA must continue to monitor the awards. Oversight will need to continue beyond September 30, 2013 (the target end date for the last of the BTOP awards) to monitor (1) projects receiving extensions and (2) projects that have been completed for which closeout procedures are being performed.

In conclusion, Mr. Chairman, for FY 2013 and beyond, BTOP continues to face challenges, in the oversight of projects as they are being completed and grant awards are closed out. The Subcommittee's continued attention and oversight are important. For the Department to ensure effective implementation of BTOP, especially in light of fulfilling OMB and legislative

requirements, OIG and NTIA will need Congress to continue your oversight efforts. This concludes my prepared statement, and I will be pleased to respond to any questions you or other Subcommittee members may have.

## Appendix

### OIG BTOP-Related Testimony, Reports and Memorandums, Works in Progress, and Training

OIG's BTOP oversight efforts began immediately after passage of the Recovery Act. Our ongoing monitoring activities include: tracking grant recipient spending, reviewing quarterly progress reports submitted by recipients, attending BTOP biweekly meetings to learn updates on program status, attending quarterly meetings with contractors providing program services, reviewing single audit and program-specific audit reports (as well as complaints), and responding to BTOP program office questions. Further, our outreach efforts have resulted in 53 total training sessions, reaching more than 3,250 program staff and grant recipients with more than 3,500 total training hours. For further detail, see table below.

**Table A. OIG Oversight of BTOP (2009-Current)**

Related Testimony		
Title (Number)	Date	Congressional Audience
Broadband Loans and Grants (OIG-12-026-T)	May 16, 2012	Committee on Energy and Commerce Subcommittee on Communications and Technology (U.S. House of Representatives)
Stimulus Oversight: An Update on Accountability, Transparency, and Performance (OIG-12-012-T)	November 30, 2011	Committee on Science, Space, and Technology Subcommittee on Investigations and Oversight (U.S. House of Representatives)
ARRA Broadband Spending (OIG-11-019-T)	February 10, 2011	Committee on Energy and Commerce Subcommittee on Communications and Technology (U.S. House of Representatives)



Related Reports and Memorandums		
Title (Number)	Release Date	Synopsis of Recommendations
Proper Classification and Strengthened Monitoring of Subrecipients Are Needed for the Broadband Technology Program (OIG-13-013-A)	January 31, 2013	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Review grants to ensure subrecipients are properly classified and funds are appropriately accounted for</li> <li>• Work with recipients to ensure effective monitoring mechanisms are in place and reemphasize the importance of including BTOP provisions in subsequent agreements</li> <li>• Notify recipients of the OMB M-0921 vendor/subrecipient reporting requirements and ensure recipients understand what should be reported as federal expenditures</li> <li>• Encourage recipients to review vendors and principals for suspension and debarment throughout the life of the grant and promote appropriate competition</li> <li>• Communicate to recipients the importance of maintaining vendor contracts</li> </ul>
Letter to Representatives Walden and Shimkus re: Review of NTIA's BTOP Grant Award to the Executive Office of the State of West Virginia (OIG-13-012-I)	January 23, 2013	<p>Results of our work:</p> <ul style="list-style-type: none"> <li>• EOWV should have had an adequate inventory systems and agreements with CAIs for the router equipment</li> <li>• EOWV should have done a detailed data rate capacity study of each CAI, before signing up for a one-size-fits-all router approach</li> </ul>
Review of NTIA's Oversight of the Booz Allen Hamilton Contract Supporting the Broadband Technology Opportunities Program (OIG-12-031-M)	August 9, 2012	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Consider improving contract oversight controls : <ul style="list-style-type: none"> <li>○ invoice and payroll reconciliation</li> <li>○ closeout audit by the Defense Contract Audit Agency</li> </ul> </li> </ul>

NTIA Needs Stronger Monitoring of BTOP Grant Recipients' Match (OIG-12-029-A)	June 18, 2012	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Develop and implement improved processes for reviewing PCC and SBA grant match amounts</li> <li>• Formally communicate the risk associated with third-party cash drawdowns to all grant recipients and stress the importance of increased monitoring on their behalf when allowing third parties to draw down grant funds from the Treasury ASAP system</li> <li>• Implement program office controls to closely monitor ASAP drawdowns on a timely basis, especially those grant recipients that have delegated ASAP system access to third parties</li> <li>• Communicate to recipients that match expenditures must be supported and correctly reflected in their financial records</li> <li>• Work with NIST and NOAA grants officers to provide NTIA with the BTOP grantees' quarterly financial status reports and monitor the contribution trends and proportionality waiver activity to ensure grantees are providing their required match</li> </ul>
Misrepresentations Regarding Project Readiness, Governance Structure Put at Risk the Success of the San Francisco Bay Area Wireless Enhanced Broadband (BayWEB) Project (OIG-12-016-M)	January 10, 2012	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• "[M]ake a determination whether the corrective actions underway by the grantee and political jurisdictions are sufficient to overcome the defects in the initial application"</li> <li>• "[With the Department,] gather lessons learned from this award to employ on other BTOP and future grant programs"</li> </ul>
NTIA Has an Established Foundation to Oversee BTOP Awards, But Better Execution of Monitoring Is Needed (OIG-12-013-A)	November 17, 2011	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Take prompt steps to strengthen federal program officers' monitoring efforts</li> <li>• Verify source documentation as part of its monitoring efforts</li> <li>• Strengthen its monitoring tools' internal control capabilities</li> <li>• Improve guidance for recipient match documentation during site visits</li> <li>• Help recipients at risk of noncompliance with award progress and completion requirements to revise completion dates, request project extensions, or rescope projects</li> <li>• Incorporate continuous trend analysis into its award monitoring process</li> </ul>

Review of BTOP Award for the San Francisco Bay Area Wireless Enhanced Broadband (BayWEB) Project (OIG-11-024-I)	May 6, 2011	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Ensure independent review of complaints and document responses and results</li> <li>• Develop policies and procedures for timely response to complaints, including the communication of issues with OIG</li> <li>• Emphasize for BTOP staff the importance of communication with the grants office when responding to complaints</li> <li>• Ensure, when monitoring awards, that equipment is valued at cost (consistent with cost principles)</li> <li>• Direct BTOP to promptly communicate potential problems or deviations to the grants officer</li> </ul>
Broadband Program Faces Uncertain Funding, and NTIA Needs to Strengthen Its Post-Award Operations (OIG-11-005-A)	November 4, 2010	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Manage the future lack of funding for BTOP by developing alternative approaches to monitoring and oversight</li> <li>• Ensure that agreements with other agencies, manuals and guidance, training and development, and monitoring procedures are clearly documented and fully adhered to</li> </ul>
NTIA Must Continue to Improve its Program Management and Pre-Award Process for its Broadband Grants Program (ARR-19842-I)	April 8, 2010	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Create a staffing plan that outlines the necessary management resources and adjusts to key positions lost</li> <li>• Develop and implement documentation policies and procedures</li> <li>• Have in-house counsel document arising program issues and opinions from the Department's</li> <li>• Office of General Counsel</li> <li>• Supplement reviewing staff to address unforeseen delays</li> <li>• Develop procedures for monitoring recipients at risk of experiencing delays in completing post- award NEPA requirements</li> </ul>
NTIA Should Apply Lessons Learned from Public Safety Interoperable Communications Program to Ensure Sound Management and Timely Execution of \$4.7 Billion Broadband Technology Opportunities Program (ARR-19583)	March 31, 2009	<p>NTIA should:</p> <ul style="list-style-type: none"> <li>• Seek to extend program office funding to ensure proper oversight</li> <li>• Use joint peer reviews before making grant awards</li> <li>• Complete a prompt environmental assessment of BTOP</li> </ul>

Nonfederal Audit Review (2/17/2009–2/20/2013)			
Audit Type	Reports Reviewed	Total Number of Findings	Total Questioned Costs <sup>a</sup>
Single Audits	59	63	\$2,220,000
Program-Specific Audits	65	91	\$ 73,000

<sup>a</sup>Costs related to audits completed by independent public accountants. We work with NTIA grants officers to resolve these issues, which can result in repayment.

Related Works in Progress	
Subject	Summary of Objectives
Acquisition of Equipment for BTOP Infrastructure Projects	Determine (1) whether NTIA has the personnel and processes in place to effectively monitor grantees' equipment acquisitions, including security, inventory control, and report submittals; (2) assess whether grantees have appropriately acquired, tested, and implemented the most effective equipment; and (3) evaluate whether grantees are on track to complete the BTOP projects on schedule and achieve project goals.
BTOP Grant Closeout Procedures	Determine whether adequate closeout policies and operations have been established to effectively close out the approximately 230 BTOP awards and assess if closeout procedures are being followed as BTOP projects are completed and closed.

Selected Trainings		
Subject	Date	Audience
OIG oversight and reemphasis on the importance of effective subrecipient monitoring	May 24, 2012	BTOP grantees
Project management, grant match, and nonfederal audits	October 6, 2011	Grant recipients (mixed local, state, nonprofit)
State Broadband Initiative on common audit findings and the need for strong recipient internal controls	April 28, 2011	NTIA staff; awardees
Webinar on importance of subrecipient monitoring and common issues with subrecipients	February 3, 2011	NTIA staff; awardees
Fraud prevention (identifying red flags and providing tips to prevent fraud)	Various	NTIA staff; awardees

Mr. WALDEN. Ms. Eilers, thank you very much for the work you and your team do. We appreciate it. It is very valuable in the course of our activities.

We will turn out to Mr. Michael K. Smith, State President-Vermont, FairPoint Communications.

Mr. Smith, thank you for being here today. We look forward to your testimony.

#### **STATEMENT OF MICHAEL K. SMITH**

Mr. SMITH. Well, thank you very much. I want to thank the Subcommittee Chairman Walden and Ranking Member DeGette for allowing me here to testify. I also wanted to thank Hon. Peter Welch of my home State of Vermont for his continuing dedication and attention to the needs of Vermonters who are unserved and waiting for reliable high-speed broadband connections. He has been a great partner with us, especially in our efforts to thwart scammers who prey on our elderly.

My name is Michael Smith and I am the Vermont State President for FairPoint Communications. I have more than 30 years of experience in executive leadership positions in both the public and private sector, most recently as secretary of administration under Governor Jim Douglas, and now with FairPoint Communications.

My testimony will concentrate on providing some specific examples of how well intentioned public policies can go off track when put into implementation opening the possibility of wasting millions of dollars of taxpayers' money and potentially leaving people without the promise of reliable broadband access.

As a State President in Vermont, I have been very vocal that public money used to overbuild existing networks is duplicative of private sector efforts, and in many cases, undercuts those efforts. The key term I would ask you to focus is on overbuild. This practice is wasteful and does not provide broadband to those who are now unserved.

Let me give you a specific example. Vermont was awarded the stimulus award of \$33 million that went to the Vermont Telecommunications Authority on behalf of its private partner Cybernet. As an aside, I can tell you that when I was secretary of administration, I helped create the VTA. It was not to create a publicly financed competitor aimed at putting FairPoint and other private providers at a competitive disadvantage.

The VTA Cybernet project that is underway is a middle-mile project. Vermont is a State unlike other States in the country that has plenty of existing middle-mile networks built and maintained by FairPoint, as well as other private sector providers. In my opinion, stimulus funding should be directed to the last mile where the need is greatest.

The Vermont Telecommunications Authority stimulus-funded project simply overbuilds existing privately funded middle-mile networks. It is a waste of taxpayers' money and duplicates existing networks and does not bring meaningful last mile broadband to Vermonters. In fact, it actually undercuts the private investment that has already been made in Vermont.

There are other examples of stimulus money being used to overbuild existing networks. In New Hampshire, the University of New

Hampshire received \$65.8 million to overbuild the existing private sector networks. What is worse is the Federal Government permitted UNH to essentially give away most of this network to a private for-profit company named Waveguide. When this project is complete, not a single residential or business customer in New Hampshire will have the ability to call UNH or Waveguide and request internet access service.

In Maine there is a similar example of \$25 million in stimulus money being used to overbuild existing private sector-funded networks. Between VTA and VTel, the other large recipient of stimulus funds, a large portion of stimulus money is being spent on overbuilding existing middle-mile networks. With that in mind, I asked our engineers to do a quick estimate to find out if we had been awarded all the stimulus grant funds that are being used for middle-mile overbuilds in Vermont, could we have built broadband to every last unserved location in the State? The answer is yes. And in New Hampshire, the benefits to residents and businesses would be that they could actually call and order services.

So you asked me the question: Is broadband stimulus working? Succinctly, I don't believe it is working as efficiently and as effectively as it should be. And the programs I am familiar with actually undercut the efforts of private broadband infrastructure investment. In my view, the implementation of the program did result in ways that unwarranted competitive harm to companies whose networks were overbuilt with federal money.

In closing, FairPoint will to continue to work with NTIA, RUS, FCC, Congress, U.S. Telecom, ITTA, and the BTOP and BIP awardees to ensure taxpayer dollars are used to better benefit the shared public policy goal of nearly ubiquitous broadband.

Thank you. And I would be more than happy to answer any questions.

[The prepared statement of Mr. Smith follows:]



**Testimony before the Subcommittee on Communications and Technology Hearing,**

**"Is Broadband Stimulus Working?"**

**House Committee on Energy and Commerce**

**Rayburn House Office Building**

**Wednesday, February 27, 2013, 10 a.m.**

Good morning. I want to thank the subcommittee, Chairman Walden and Rep. Eshoo for the invitation to testify today. I want to also thank the honorable Representative Peter Welch, of my home state of Vermont, for his continuing dedication and attention to the needs of Vermonters who are still unserved and waiting for reliable, high-speed broadband connections where they live and work. He has also been a great partner in our efforts to thwart the efforts of scammers who prey on our elderly.

My name is Michael Smith and I am the Vermont State President for FairPoint Communications. I have more than 30 years of experience in executive leadership positions in both the public and private sector, most recently as Secretary of Administration under Governor Jim Douglas and now with FairPoint Communications. I hold both masters and bachelor degrees from the University of Vermont and served in the U.S. Navy as a member of SEAL Team Two.

FairPoint is a leading provider of advanced communications services to business, wholesale and residential customers within its service territories. FairPoint offers its customers a suite of advanced data services such as Ethernet, high-capacity data transport and other IP-based services over a ubiquitous, next-generation fiber network with more than 15,000 route miles.

FairPoint is the incumbent communications provider in the markets it serves, primarily rural communities and small urban markets. Many of its local exchange carriers have served their respective communities for more than 80 years. Our service territory spans 17 states, including Ohio, Illinois, Colorado, Kansas, Missouri and Pennsylvania. With headquarters in Charlotte, North Carolina, FairPoint serves approximately 1.3 million access line equivalents, including approximately 326 thousand broadband subscribers. We have more than 3,300 employees. FairPoint recently was ranked as the sixth largest telecommunications company in the country.

Since April 2008, throughout northern New England we have invested more than \$196 million to build a sophisticated and ubiquitous IP-based fiber network that serves not only our residential customers but an extensive base of retail customers, such as financial institutions, medical facilities, and governmental and educational institutions.

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My testimony will concentrate on providing some specific examples of how well-intentioned public policies can go off track when put into implementation, opening the possibility of wasting millions of dollars of taxpayers' money and potentially leaving people without the promise of reliable broadband access.

As the State President in Vermont, I have been very vocal that public money used to overbuild existing networks is duplicative of private sector efforts, and in many respects, undercuts those efforts.

By way of background, it is very important to highlight that FairPoint, through our Washington trade association, ITTA, filed comments before NTIA, RUS, and Congress in support of the broadband stimulus efforts. In fact, FairPoint and many other telecommunication providers saw the broadband stimulus program as an opportunity to bring broadband services to those areas which are rural and



geographically challenging, where the business model makes it difficult to bring broadband to those consumers.

In 2009, FairPoint applied for stimulus grants in the first round of funding. Although each of our seven applications in NNE achieved the highest level of endorsement in their respective states, we did not win any of the funding in the first round. We also applied for funding in Florida and Missouri and were not awarded funding.

Given the experiences of the first round, we questioned internally whether to apply again, especially when Vermont indicated that the state was only endorsing its own application. As the deadline approach we decided to apply, but were only able to submit an application for Maine. It was turned down again. Never, did we expect the federal government to fund programs that overbuilt existing networks. We thought the emphasis would be on providing broadband to those residents and businesses that have no access to Internet services, those customers we know as “unserved”. In fact, we appealed BTOP grants in both Vermont and New Hampshire specifically on the overbuild issue. Nonetheless, NTIA awarded the grants and duplicative networks are being built with taxpayer funds.

The key term that I ask you to focus on is “overbuild.” This practice is wasteful, and does not provide broadband to those who are now unserved. Let me give you some specific examples: Vermont was awarded a stimulus award of \$33 million that went to the Vermont Telecommunications Authority (“VTA”) on behalf of its private partner, Sovernet.

As an aside, I can tell you that when I was Secretary of Administration and helped created the VTA, it was not to create a publicly financed competitor aimed at putting FairPoint and other private providers at a competitive disadvantage.

The VTA/Sovernet project that is underway is a middle-mile project. Vermont is a state that has plenty of existing middle-mile networks -- built and maintained by FairPoint as well as other private sector providers.

In my opinion, stimulus funding should be directed to the last mile where the need is the greatest. The Vermont Telecommunications Authority stimulus-funded project simply overbuilds existing privately funded, middle-mile networks. It is a waste of taxpayers' money and duplicates existing networks and does not bring meaningful last-mile broadband to Vermonters. In fact, it actually undercuts the private investment that has already been made in Vermont.

There are other examples of stimulus money being used to overbuild existing networks. In New Hampshire, the University of New Hampshire received \$65.8 million to overbuild the existing private sector-funded networks. What is worse, the federal government permitted UNH to essentially give away most of this network to a private, for-profit company named Waveguide. When this network is complete, not a single residential or business customer in New Hampshire will have the ability to call UNH or Waveguide and request Internet access service.

In Maine there is a similar example of where \$25 million in stimulus money was used to overbuild existing private-sector funded networks.

In Vermont, the other major recipient of federal stimulus money was VTel, or the Vermont Telephone Company, which received a total of \$129 million, including a BTOP grant of \$12 million to build middle-mile networks and another \$117 million in grants and loans that include more than \$81 million to build its wireless network to deliver broadband-like services outside its territory, and build a CATV system and fiber inside its territory.

Between the VTA and VTel, a large portion of the stimulus money is being spent on overbuilding existing middle-mile networks.

Compare all of this to FairPoint, which has invested more than \$196 million so far of its own money in Maine, New Hampshire and Vermont over the past 4 years to expand broadband and continues to invest.

With that in mind, I asked our engineers to do a very quick estimate to find out if we had been awarded all of the stimulus grant funds that are being used for middle-mile overbuilds in Vermont, could we have built broadband to every last unserved location in the state. Their answer, yes! And in the case of New Hampshire, the benefit to residents and businesses would be that they can actually call and order service.

You asked me to provide testimony on the question of "Is the Broadband Stimulus Working?"

Succinctly the answer is it is not working as effectively and efficiently as it should be and the programs I am familiar with actually undercut the efforts of private sector broadband infrastructure investment. Certainly a program from the federal or state government to help providers expand broadband makes sense. Also, the Universal Service Fund can assist in meeting the challenges of deploying broadband to these markets with programs that are properly designed. But the implementation of this program did result in waste and unwarranted competitive harm to companies whose networks were overbuilt with federal money.

In closing, FairPoint will continue to work with the NTIA, RUS, FCC, Congress and the BTOP and BIP awardees to ensure taxpayer dollars are used to better benefit the shared public policy goal of nearly ubiquitous broadband. Thank you and I would be happy to answer any questions.



**Testimony before the Subcommittee on Communications and Technology Hearing,  
"Is Broadband Stimulus Working?"  
House Committee on Energy and Commerce  
Rayburn House Office Building  
Wednesday, February 27, 2013, 10 a.m.**

**SUMMARY:**

- My testimony will concentrate on providing some specific examples of how well-intentioned public policies can go off track when put into implementation, opening the possibility of wasting millions of dollars of taxpayers' money and potentially leaving people without the promise of reliable broadband access.
- As the State President in Vermont, I have been very vocal that public money used to overbuild existing networks is duplicative of private sector efforts, and in many respects, undercuts those efforts.
- FairPoint and many other telecommunication providers saw the broadband stimulus program as an opportunity to bring broadband services to those areas which are rural and geographically challenging, where the business model makes it difficult to bring broadband to those consumers.
- Never, did we expect the federal government to fund programs that overbuilt existing networks. We thought the emphasis would be on providing broadband to those residents and businesses that have no access to Internet services, those customers we know as "unserved". Nonetheless, NTIA awarded the grants and duplicative networks are being built with taxpayer funds.
- The key term that I ask you to focus on is "overbuild." This practice is wasteful, and does not provide broadband to those who are now unserved.
- In my opinion, stimulus funding should be directed to the last mile where the need is the greatest. It is a waste of taxpayers' money and duplicates existing networks and does not bring meaningful last-mile broadband to Vermonters. In fact, it actually undercuts the private investment that has already been made in Vermont.
- The implementation of this program did result in waste and unwarranted competitive harm to companies whose networks were overbuilt with federal money.
- FairPoint will continue to work with the NTIA, RUS, FCC, Congress and the BTOP and BIP awardees to ensure taxpayer dollars are used to better benefit the shared public policy goal of nearly ubiquitous broadband.

Mr. WALDEN. Mr. Smith, I am sure we will have some and we appreciate your testimony. It is very enlightening.

Mr. WELCH. Mr. Chairman, just one objection. I wasn't here when I understand this witness said a few things about me.

Mr. WALDEN. He said nice things about you.

Mr. WELCH. Well, I want it on the record that I object to me not being here to hear that.

Mr. WALDEN. Is there any objection to his—

Ms. DEGETTE. I will be happy to move to strike that testimony from the record because you weren't here.

Mr. WALDEN. Mr. Smith said very nice things about you. We did have that removed from the record. No.

Let us go now to Mr. Bruce Abraham. He is on the Board of Directors of the North Georgia Network.

Mr. Abraham, thank you for being here this afternoon. We look forward to your testimony, sir.

#### STATEMENT OF BRUCE ABRAHAM

Mr. ABRAHAM. Thank you, sir, Mr. Walden.

Mr. WALDEN. If you will pull that microphone close and push the little button.

Mr. ABRAHAM. There we go. I am a country boy.

Thank you, Chairman Walden, members of the subcommittee. It is a great honor for me to be here today to talk about the effects of the National Broadband Opportunities Program on my home community in North Georgia. I very much appreciate this. I will remember this all my life and I will tell my grandkids about this and the great things that we did here today.

I would also like to thank our partners in this project, the University of North Georgia, Habersham and Blue Ridge, Mountain EMCs, as well as the State of Georgia who together we put up \$9 million in matching money to leverage \$33 million in federal money to bring modern high-speed internet to our region.

I would most like to thank my group of economic developers in the region, who supported this project with their money and their time and who, like me 4 years ago, faced a barrier to expanding and recruiting jobs to this region. Our region had lost about 22,000 jobs before this project started. And in Dahlonega, where I worked, we closed the doors of our largest employer—a textile manufacturing operation that employed 365 people, most of who had quit school to go to work there at an early age. My group of economic developers and I were losing jobs and business prospects not only because of the national economic downturn, but also because our local companies told us they had inadequate broadband.

My community owned a 65,000 square foot building that a prospective internet company walked away from because they told me “it would be too painful to get the broadband that they needed there.” Our local medical lab that does breast cancer analysis was trying to communicate with other hospitals in Georgia and they told me they may have to move back to Atlanta because they could not get patient medical information files back and forth on the internet.

Our local university was doubling their student enrollment and their internet service from their provider was only 50 megabits of

service for 5,000 students. The college internet went down for 37 hours as they began a new school year, so some classes' course information, homework, and assignments were inaccessible to students and to teachers. The university tried to dramatically up their internet speed and reliability but their single provider said it was just not cost-effective.

In rural Georgia, our local governments in economic development are constantly challenged to remove barriers to growth whether it is by improving a road, running a water line, or building a sewer plant. I can tell you from 20 years of local economic development experience that companies won't locate to areas where they operate off of wells or septic tanks or one-lane roads. And now, high-speed broadband is right up there with the must-haves to get jobs and growth in rural America.

As part of their strategic plan, the State of Georgia made almost \$10 million in broadband investments in Georgia. Georgia provided us with the original funding for a study, and this was no pie-in-the-sky research. We sat down with our schools, colleges, libraries, governments, hospitals—asked them how they use the internet. They said they needed more internet, and many of them said they need what is called redundant internet so if it breaks down with one provider, they can get it from another provider.

When we finished our community study, the National Broadband Program came along and we reached out to break our internet barrier. Our communities in the State applied and we built 1,100 thousand miles of fiber optic network that we just finished in December. Already, we have eight school systems connected with the majority of them getting a gigabit of service, whereas before, they had less than 50 megabits. We provided our schools at no cost a 10 gigabit network so they can share distance learning with the university, they can share online coursework, textbooks, and meetings. The university is also happy because we provided them a gigabit of service at less cost than they would have paid for 100 megabits of service from their old provider.

Now, the physician at Dahlonega Foot and Ankle does not have to drive over to the hospital to pick up his x-rays. Impulse Manufacturing fabricates products for global distribution can now talk to companies overseas without choppy internet. And they can operate in what is called the Fortune 500 Protocol.

Even our churches can now broadcast their services live online. And they are reaching the elderly, homebound, and hospitalized members. They report that 90 percent of their internet viewing is live during their church services.

Our local community bank can now communicate between its branch offices and safely store their financial information on their network. The Louver Shop that makes louvers in Dahlonega can communicate with their West Coast office and conduct live business meetings. Telecommuters who live in our region don't have to wait until midnight to send their work over the internet to their office in Atlanta.

We now have two technology parks in the region. And in a final example, we have attracted our first data center to the region. And because of this network—one of our local economic developers should announce this in March—the company proposes to make an

\$800 million investment in this facility. They will initially hire 10 people at \$100,000 per job. The company needs 2 gigabits of internet. This is an unheard-of investment in our region. This increases our local county tax base by  $\frac{1}{4}$  and \$1 million in payroll equals 60 jobs that would normally pay \$8 an hour in our region.

In closing, let me say thank you again for this investment you made in our communities. And let me sum up what you did for us. We have a low-wage, low-skilled, low-tech economy in rural America and you helped us reach for a high-skilled, high-wage, high-tech economy that we all see ahead.

We are mindful as a generation, right behind us the young digital Americans—the guy sitting right behind you—who were born under the influence of this powerful internet engine. They are not going to tolerate 1990s internet as they start a business, look for job, or move into positions of business leadership and public decision-making. They will move out of internet lazy rural towns that do not provide robust internet connectivity. They will go, as we all did, to where there is promising economic opportunity. And that opportunity, as far as we can see, is being created right now by the high-speed internet.

Thank you very much. God bless you.

[The prepared statement of Mr. Abraham follows:]

Congress of the United States  
U.S. House of Representatives  
Committee on Energy and Commerce  
Subcommittee on Communications and Technology  
Washington, D.C.

February 27, 2013

*“The North Georgia Network Brings Economic and Educational  
Progress to Rural North Georgia from Broadband Investment.”*

Testimony of:  
Bruce Abraham  
Board Member North Georgia Network  
President Connect North Georgia  
Dahlonega, Georgia



Chairman Walden, Members of the Subcommittee, it is a great honor for me to be here today to talk about the effects of the National Broadband Opportunities Program on my home community in rural North Georgia. I would like to personally thank you and all the citizens of my country for investing 33 million dollars in a modern fiber optics network that reaches from metro Atlanta and crosses the Appalachian Trail to the North Carolina line. I would also like to thank our partners in this project, the University of North Georgia, Habersham and Blue Ridge Mountains Electric Membership Corporations as well as the State of Georgia, who all put up nine million local dollars to bring high-speed modern communications to the students, businesses and citizens who call this area home.

I would most like to thank my group of economic developers in the region who supported this project with their money and their time and, and who like me four years ago, faced a barrier to expanding and recruiting jobs to this region. Our region had lost about twenty-two thousand jobs when this project started four years ago. In Dahlonega where I worked then, we closed the doors of our largest employer, a textile manufacturing operation that employed 365 people, many of whom had quit high school to take a job at the local plant.

My group of economic developers and I were losing jobs and business prospects not only because of the national economic downturn, but also because our local companies told us they had inadequate broadband. My community owned a 65,000 square foot building that a prospect internet company walked away from buying because they told me we did not have enough broadband. They told me "It would be too painful to get the bandwidth they needed."

Our local medical lab, that does breast cancer analysis, was trying to communicate with other hospitals in Georgia and they told me they might have to move back to Atlanta because they could not get patient medical files back and forth on the Internet.

Our local university was anticipating doubling their student enrollment, and their internet service from their provider was only about 50 megabits for 5,000 students. The college internet also went down for 37 hours as they began the new school year, so some classes, course information, homework and assignments were inaccessible. The university tried to dramatically up their speed and reliability, but their single provider said “it was just not cost effective.”

In rural Georgia, our local governments and economic development people are constantly challenged to remove barriers to growth and attract jobs, whether it is by improving a road, running a water line or building a sewer plant. I can tell you from 20 years in local economic development that companies won’t locate to areas where they will have to operate off of wells, septic tanks and one-lane roads. Now high-speed broadband is right up there with the “must haves” to get jobs and growth in our communities.

As part of their state strategic plan, the State of Georgia has made almost 10 million dollars in broadband investment in rural Georgia. As a part of that plan, Georgia provided us with the original funding in 2008 to study our broadband barriers. Again, please appreciate that in 2008

in our area of the state our weekly wages averaged one-third less than the rest of the state and 41% less than other workers in the United States.

And this was no “pie in the sky” research we did with that study. We sat down with our schools, colleges, libraries, businesses, governments and hospitals and asked them about how they used the internet. Universally, they said they needed much more internet, and many of them said they needed what is called “redundant internet” from two providers, so that like the University I mentioned, if their internet goes down, the entire organization is not shut down.

Right as we finished our community study, the National Broadband Opportunities Program offered us a chance to solve the internet barrier we had run into. Our communities applied through BTOP for a project to build 1,100 miles of new fiber optic network across eight counties. They invested nine million dollars in match money, with again, the State of Georgia making the largest contribution of two-and-a-half million dollars.

So we just finished building this network in December of last year, and already we have our eight school systems connected, with the majority of them getting a gigabit of service, whereas before they had less than 50 megabits to share with thousands of students and teachers. We have provided our schools, at no cost to them, a 10 gigabit network which we can do with fiber optics, so they can share distance learning with the university, on-line coursework, text books, meetings between schools, all because of abundant internet. The University is also happy

because we have provided them a gigabit of service at less cost than they would have paid for 100 megabits of service with their old provider.

Now the physician at Dahlonga Foot and Ankle does not have to drive over to the hospital to look at patient x-rays. With our network the hospital can now send the doctor the radiology files and he can read them at his office.

Impulse Manufacturing that designs and fabricates products for global distribution can now talk to companies overseas without choppy internet problems and operate in what they describe as “the Fortune 500 Protocol.” They are not only a growing, smart rural company, but can now play in the big leagues for big contracts and move big technical files without losing their internet connection. They recently won a major production contract, and say they are buying another building in the region.

Even our churches can now broadcast their services live on this network, and they are reaching their elderly, homebound and hospitalized members. And this means more than just putting a canned sermon or a wedding last week up on an internet site. They report that 90% of their internet viewing is live during the church service, with people who want to sing and pray and participate on-line in their home church on Sunday morning.

Our local United Community Bank can now communicate between its branch offices and safely store their financial information on our network. They can provide service to their customers

and conduct financial transactions in four milliseconds, which is the speed of our core network with its modern fiber optic capabilities.

The Louver Shop that makes window louvers in Dahlonega can now communicate real-time with its West Coast office, and conduct live business meetings on the internet without having to fly its salespeople to Georgia. Telecommuters who live in our beautiful region don't have to wait until midnight to send their work over the internet to their Atlanta office, as they report they have to do. Dawsonville Hardware told me they sold an expensive Stihl chain saw to a customer in South Carolina with their new internet connection.

We now have two Technology Parks and Lumpkin and White Counties that are being developed to attract companies that need the business high-speed internet that fiber optics provide.

And in a final example, we have attracted our first data center to the region because of this network, and one of our local economic developers plans the announcement the first of March. The company proposes to make an 800 million dollar investment in this facility, and initially will hire 10 people at 100,000 dollars per job. The company needs about two gigabits of internet to start and two megawatts of electricity. This is an unheard of investment in our region where county tax bases run about two and a half billion dollars, so this increases the local tax base by a quarter. And the new million dollars in payroll will equal 60 jobs that would normally pay eight dollars an hour in our area.

My far-sighted State also just recently invested 1.3 million dollars in two more fiber optics extensions at the edge of our network, bringing those communities the same high-speed broadband that our original communities now proudly boast of having.

We just turned in a project last week to the USDA proposing to teach business internet applications on a bus all over the region through our local chambers of commerce. We will also take this bus to local high schools and bring students on the bus to tell them about good paying jobs and technology-related career opportunities that will be available to them.

Please let me again thank you and my fellow citizens for the critical investment that was made in the North Georgia Network, and let me sum up what you have helped us to do: In rural America, we constantly fight a low-wage, low-skill, low-tech economy. This broadband investment in our towns, our schools and our businesses will help us crack that low ceiling, and let us reach for the high-skill, high wage, high tech economy that we all see ahead.

In summary, I would ask you to please recall that we as a country invested in interstate highway infrastructure, railroads, airports and even telecommunications which drove major economic advancements. But unfortunately those major engines of economic growth do not reach very deeply into rural America to help us drive commerce.

But we do have plenty of rural electricity to run the internet, thanks to the rural electric system which again, was made possible by federal investment. The internet engine of economic

growth is barely 20 years old, but it is already transforming small business, education, medicine, government services, almost everything it touches. And this new form of infrastructure is not constrained by walls, mountains, oceans or the 8-hour day. It is only constrained by availability and its scarcity in rural America.

We are very proud and thankful in North Georgia that we have the new internet engine in rural America. We have put our foot on the throttle and we have set about to attract jobs and opportunity and prosperity, God willing.

But we are also mindful that here is a generation right behind us, the young digital Americans, who were born under the influence of this powerful Internet engine. They will not tolerate quaint 1990's internet as they start a small business, look for a job or move into positions of business leadership and public decision making. They will move out of lazy-internet rural towns that do not provide robust internet connectivity. They will not locate their growing companies to charming rural business parks that offer dial-up or DSL connections to the world. They will go, as we all did, to where there is promising economic opportunity. And that opportunity, as far as we can see, is being created now by high-speed internet.

Thank you Chairman Walden and members of the Committee. I am honored that you invited me to talk today.

Mr. WALDEN. Mr. Abraham, thank you very much. Thank you for your very kind comments and your very valuable testimony. We appreciate your participation today. And no matter how much you shower us with compliments, we are still going to ask you questions.

Mr. ABRAHAM. That will work.

Mr. WALDEN. I am just kidding.

Mr. Freddoso, we appreciate you being here today from—let me get this right—president and CEO of MCNC. And so we welcome you and look forward to your comments as well, sir.

#### **STATEMENT OF JOE FREDDOSO**

Mr. FREDDOSO. Well, thank you, Chairman Walden and Ranking Member DeGette and members of the subcommittee for this opportunity to present congressional testimony regarding the successful implementation of broadband stimulus funds in North Carolina. I particularly want to thank Congresswoman Renée Ellmers from MCNC's home State of North Carolina. She represents the great people of North Carolina's 2nd District and is a champion of better healthcare education and access to technology.

Mr. Chairman, for over 25 years the private nonprofit organization that I lead, MCNC, has operated North Carolina's fiber-optic highway of innovation, the North Carolina Research and Education Network, or NCREN. While the roots of NCREN are in serving the vast research needs of the University of North Carolina system, the community of connectors at NCREN has grown in the last several years to include connections to more than 450 community anchor institutions, including all of K through 20 public education, many private universities, numerous nonprofit healthcare providers, and several state and federal research organizations.

The anchor institutions that we serve require large amounts of low latency high-speed connectivity and collectively, their demand for bandwidth doubles every 2 years. A couple of examples: since 2011, the 58 community colleges we serve have reported a fivefold increase in bandwidth demand. And since 2007, our K through 12 public school districts have recorded a 20-fold increase in bandwidth use. Students in our community colleges now directly access and program advanced manufacturing equipment virtually over NCREN to get current skills needed in the workforce while the colleges avoid having to spend precious capital purchasing these machines directly.

MCNC also has a long history of cooperative work with our incumbent service providers, telephone membership cooperatives, electric membership cooperatives and independent telecommunications companies in North Carolina. We spend about \$9 million per year for local circuits and internet bandwidth with these providers.

In 2007 in our meetings with our private sector service provider partners, it became evident that NCREN's need for bandwidth—particularly in rural North Carolina—was going to outstrip the capacity of the existing middle-mile fiber in the State. There was either no fiber available in certain sections of North Carolina or a limited fiber capacity to meet the growing needs of the anchor institutions served by our network.



We also found that these service providers, even supported by a proposed \$8 million investment from MCNC, lacked the business case to build in the areas with no fiber or to add fiber capacity in underserved areas.

To serve the needs of the students, healthcare providers, and research institutions connected to NCREN, MCNC made the decision to pursue BTOP funds. For matching funds, we allocated \$8 million from our capital refresh fund. We also raised \$4 million from private sector wholesale service provider FRC. We raise \$24 million from North Carolina's nonprofit Golden Leaf Foundation, and \$4 million in donated conduit and land. MCNC brought a total of \$40 million to the table in a vision for a statewide network that would bring broadband to some of the most rural mountainous and difficult areas to reach in the State.

Leveraging these matching funds, MCNC applied for and won two rounds of BTOP funding totaling \$104 million. Today, MCNC is within 50 miles of completing a 2,600-mile middle-mile network. The network is comprised of 1,800 miles of new build fiber, and 800 miles of leased fiber. MCNC leased 800 miles of fiber from service providers, typically under 20-year terms. These leases are tangible demonstrations of the solid relationships that we enjoy with our service provider partners and how MCNC was able to leverage local infrastructure into its statewide broadband network.

The construction phase of the project has given a badly needed infusion of revenue to private sector companies. Our fiber and conduit supply company is CommScope. CommScope is headquartered in Hickory, North Carolina. When we chose CommScope as our supplier, their conduit plant was idled. During the height of our project over a 2-year period, they operated 24/7 with more than 100 workers to keep up with demand.

Much of the BTOP fiber is already in use, benefiting the 450 community anchor institutions served by NCREN and allowing us to serve 1,500 more community anchor institutions. The BTOP award will allow us to scale connectivity to these institutions to the multi-gigabit level they demand as they need additional bandwidth. And our sustainability plan will allow this scalability to happen at today's costs.

Also, MCNC is in discussions with more than 10 wholesale and last-mile service providers interested in the new fiber build. Many are looking to enter areas previously unavailable to them. Rural broadband is migrating quickly from wired services like DSL to wireless services like WiMAX, Wi-Fi mesh and 4G LTE as last-mile solutions. The commonality in all of these over-the-air last-mile services is the need for fiber-based backhaul and transport services.

Mr. Chairman, our story is a great success story. It is based on leveraging privately raised matching funds, utilizing existing local infrastructure, and attracting BTOP federal investment to build the digital highway that directly supports innovative research, idea formation, equity of access to education, better healthcare outcomes for North Carolinians, and also supports the private sector as they look to put new wireless services into rural areas of the State.

Thank you.

[The prepared statement of Mr. Freddoso follows:]



**U.S. House of Representatives**

**House Committee on Energy and Commerce**

**Subcommittee on Communications and Technology Hearing**

**“Is The Broadband Stimulus Working?”**

**Testimony of**

**Joe Freddoso**

**President and CEO**

**MCNC**

**February 27, 2013**

Thank you Chairman Walden and Ranking Member Eshoo and Members of the Subcommittee for this opportunity to present congressional testimony regarding the successful implementation of broadband stimulus funds in North Carolina. I particularly want to thank Congresswoman Renee Ellmers from MCNC’s home state of North Carolina. She represents the great people

of North Carolina's second congressional district and is a champion of better healthcare, education and access to technology - all benefitting from the investments made by the BTOP program.

For over 25 years, the private non-profit organization that I lead, MCNC, has operated North Carolina's fiber optic highway of innovation, the North Carolina Research and Education Network or NCREN. While the roots of NCREN are in serving the vast research needs of the 16 universities in the University of North Carolina System, the community of connectors to NCREN has grown the last several years to include connections to more than 450 Community Anchor Institutions, including all of K-20 public education, many private universities, numerous non-profit healthcare providers, and several state and federal research organizations.

These anchor institutions require large amounts of very low latency, high-speed connectivity and collectively their demand for bandwidth doubles every two years.

An example of the growth in demand comes from our North Carolina Community Colleges. Since 2011, the 58 community colleges in North Carolina have reported a 5-fold increase in bandwidth demand, and since 2007 our K-12 public school districts have recorded a 20-fold increase in bandwidth use. Students in our community colleges now directly access and program advanced manufacturing equipment virtually over NCREN to gain

current skills needed in the workforce while the colleges avoid having to spend precious capital purchasing these machines.

MCNC has a long history of cooperative work with our incumbent service providers, telephone membership cooperatives, electric membership cooperatives, and independent telecommunications companies in North Carolina. We spend about \$9 million per year for local circuits and Internet bandwidth with these providers.

In 2007, in our meetings with our service provider partners, it became evident that NCREN's need for bandwidth particularly in rural North Carolina was going to outstrip the capacity of the existing middle-mile fiber. There was either no fiber available in certain sections of North Carolina or limited fiber capacity to meet the growing needs of the anchor institutions served by our network. We also found that these service providers, even supported by a proposed \$8 million MCNC investment, lacked a business case to build into areas with no fiber or to add fiber capacity to underserved areas.

To serve the needs of the students, healthcare providers and research institutions connected to NCREN, MCNC made the decision to pursue BTOP funds. For matching funds, MCNC allocated \$8 million from its capital refresh fund for NCREN. MCNC also raised \$4 million from private-sector

wholesale service provider FRC, \$24 million from North Carolina's non-profit Golden LEAF Foundation, and \$4 million in donated conduit and land. MCNC brought a total of \$40 million to the table, and a vision for a statewide network that would bring broadband to some of the most rural, mountainous and difficult areas to reach in the state. Leveraging these matching funds, MCNC applied for and won two rounds of BTOP funding totaling \$104 Million.

Today, MCNC is within 50 miles of completing a 2,600 middle mile network. This network is comprised of 1,800 miles of new build fiber and 800 miles of leased fiber. MCNC leased 800 miles of fiber from service providers through long-term contractual arrangements common in the industry that committed this fiber to MCNC's exclusive use, typically for 20 years. These leases are a tangible demonstration of the solid relationship MCNC enjoys with its service provider partners, and how MCNC was able to leverage local infrastructure into its new statewide broadband network.

The construction phase of the project has given a badly needed infusion of revenue to engineering, construction, optical equipment, and fiber/conduit companies. Our fiber/conduit supply company is CommScope. CommScope is headquartered in Hickory, N.C. When we chose CommScope as our supplier, their conduit plant was idled. During the height of our project, over a two-year period they operated 24/7 with more than 100 workers to

keep up with demand. Since our project, CommScope has been awarded business through other BTOP winners and outside of the BTOP program. Keeping these workers employed.

Much of the BTOP fiber is already in use and benefitting 450 Community Anchor institutions served by NCREN and allowing NCREN to serve over 1500 more Community Anchor Institutions. The BTOP award will allow us to scale connectivity to these institutions to the multi-gigabit level as these institutions need additional bandwidth and our sustainability plan will allow this scalability to occur at today's costs.

Also, MCNC is in discussions with more than 10 wholesale and last-mile service providers interested in the new build fiber. Many are looking to enter areas unavailable to them in the past. Rural broadband is migrating quickly from wired services like DSL to wireless services like WiMAX, Wi-Fi mesh and 4G/LTE as the primary last-mile solution. The commonality in all these over-the-air, last-mile services is the need for fiber-based wireless backhaul and transport services. The BTOP funded fiber is of high interest and likely positions North Carolina to be an early deployment state for these services and a test bed for emerging services.

Mr. Chairman, our story is a great success story. It's based on leveraging privately-raised matching funds, utilizing existing local infrastructure and

attracting BTOP federal investment to build a digital highway that directly supports innovative research, idea formation, equity of access to education, and better healthcare outcomes for rural North Carolinians. Also through partnership, this is a highway that private and public non-profit service providers can use to drive new resources and value into the last mile for our rural citizens.

MCNC owes much of our success to the BTOP staff at the NTIA. Their guiding hand has led to a highly successful broadband investment in rural North Carolina.

Thank you.

### Supplemental Materials:

#### About MCNC

For more than a quarter century MCNC has operated a robust, secure, exclusive communications network that has connected institutions of the University of North Carolina System, Duke University, and Wake Forest University to each other and through advanced research networks such as Internet2 and National Lambda Rail, to the world.

Over the last 5 years, MCNC has expanded the reach of its services to non-profit and university hospitals, public safety, libraries and other key CAls. Through two Broadband Technology Opportunities (BTOP) grants and other private investments, MCNC is investing over \$140M in a network infrastructure that is able to meet the rapidly increasing bandwidth demands and shared services needs of North Carolina-based CAls for the foreseeable future.

#### About NCREN

NCREN, operated by the non-profit organization MCNC, is one of the nation's first statewide education and research networks. It provides broadband communications technology services and support to K-12 school districts, higher education campuses and academic research institutions across North Carolina. MCNC offers NCREN technology tools and services to guarantee equal access to 21st century learning by providing a future-proof technology network that is the foundation for change and innovation in our educational systems. In addition to all public school districts in North Carolina, the NCREN user-community now includes: 17 institutions of the UNC System and General Administration; 40 North Carolina Charter Schools; 27 of the 36 North Carolina Independent Colleges and Universities; 58 North Carolina Community Colleges; research institutions and foundations; and, along with the N.C. Office of Information Technology Services and other partners, MCNC provides broadband services for 70 Public Health agencies and 30 Non-Profit Hospitals through the N.C. Telehealth Network.

#### MCNC and NCREN

MCNC is the company and NCREN is the network, our flagship product MCNC is Connecting North Carolina's Future Today.

#### MCNC History - A Brief Timeline



**1980** - North Carolina General Assembly initially funds the Microelectronics Center of North Carolina to be a catalyst for technology-based economic development throughout the state.

**1985** - MCNC receives state mandate for providing and operating an advanced communications network CONCERT (subsequently called NCREN). Initial microwave system linking NCSU, UNC-CH, Duke, NC A&T, UNC-C, RTI and MCNC is completed. This is the first broadcast-quality, two-way interactive, multipoint video and audio system in the United States.

**1987** - The mcnc.org domain was registered on the Internet on January 15, 1987. It is number 6 on the list of the oldest .org registered domains.

**In 1991**, the VistaNet project focused on research in communications, computer science, and the use of supercomputing to support cancer treatment through computer visualization.

**1990** - VISTAnet project is implemented - first operational national gigabit test bed using OC48 backbone. 3-D imaging computers at UNC use supercomputing resources to enable medical researchers to simulate thousands of possible treatment options to find the optimal therapy for individual patients, targeting radiation in a much more precise way than was possible before.

**1993** - NCREN completes broadband connections to each of the 18 core members of the network, combining video and data, using a combination of digital microwave technology and broadband ATM technology.

**1994** - Through a collaborative effort between the N.C. State Government Office of Information Technology Services (ITS) and NCREN, North Carolina becomes the first state to deploy high-speed network capabilities to every county through the North Carolina Information Highway.

**1995** - All 16 campuses of the UNC system, Duke and Wake Forest are able to fully participate in the high-quality, two-way interactive video capabilities enabled by NCREN.

**1997** - World's first "GigaPOP" is developed - an extremely fast access point, or high-speed on-ramp, to the next generation Internet. This network infrastructure becomes a model throughout the world and is used to test next-generation networking applications and systems, leading to the establishment of a national network testing laboratory in North Carolina. The GigaPOP becomes the gateway for all Internet service for all NCREN customers and the state government. This includes North Carolina becoming one of the first states to connect to Internet 2.

**2000** - NCREN becomes the nation's first near-broadcast quality two-way interactive video system using Internet-based technology (IP using MPEG2) to support up to 20 simultaneous locations in that service with full, continuous presence audio for all participants all the time. All participants at remote sites can hear audio and see video from all other sites - exactly how a conversation would work if they were all in the same room.

**2000** - Cronos is sold to JDS Uniphase Corporation. Proceeds to MCNC enables over \$100 million investment in the state.

**2000** - MCNC pledges \$30 million to Rural Internet Access Authority, now operating as The e-NC Authority. The donation helps accelerate the spread of high-speed Internet access across North Carolina.

**2001** - North Carolina BioGrid establishes partnership with universities, the N.C. Biotechnology Center and private-sector companies. The N.C. BioGrid is one of the nation's first scientific grid computing test beds.

**2003** - MCNC is restructured into two companies. Research and venture funding activities are established as a separate company, MCNC Research and Development Institute (MCNC-RDI).

**2005** - The research operations of MCNC-RDI are sold to RTI International. MCNC-RDI changes name to NC IDEA with mission to provide early-stage companies with venture funding, grants and loans.

**2005** - MCNC is selected to lead applications support for Internet2's Hybrid Optical and Packet Infrastructure test bed.

**2005** - NCREN and N.C. State University are selected by National LambdaRail (NLR) to operate its first national Experiment Support Services.

**2006** - MCNC leads U.S. consortium for first international demonstration of integrated computing and network technology as part of the Global Lambda Integrated Facility, including Virtual Computing Lab resources at N.C. State University.

**2008** - MCNC provides connectivity to the K12 community, creating a K20 network in the state.

**2009** - MCNC celebrated 25 years of the North Carolina Education and Research Network (NCREN).

**2010** - MCNC was awarded two rounds of Broadband Technologies Opportunities Program (BTOP) historic funding to expand high-speed connectivity through the North Carolina Research and Education Network.

**MCNC BTOP Background:**

MCNC currently is working on a \$144 million expansion of the North Carolina Research and Education Network (NCREN) scheduled to be completed by 2013. This initiative has been labeled the Golden LEAF Rural Broadband Initiative.

To fund this expansion, MCNC applied for and received two U.S. Department of Commerce Broadband Technology Opportunities Program (BTOP) awards totaling \$104 million.

In addition, MCNC raised \$40 million in private matching funds as required by the BTOP program. MCNC's sources of matching funds included \$24 million from the Golden LEAF Foundation, \$8 million from the MCNC Endowment, \$4 million from private-sector wholesale telecommunications company FRC, and an estimated \$4 million through donations of land and existing conduit from individual community colleges, universities, and others including the Albemarle Pamlico Economic Development Corporation. No direct funding from the State of North Carolina was required.

MCNC estimates the expansion of NCREN will create or save 2,500 engineering, construction, and manufacturing jobs in the state.

Both MCNC awards are a part of a coordinated strategy developed by the Office of former North Carolina Governor Bev Perdue, the N.C. Office of Economic Recovery & Investment, and e-NC Authority to improve broadband access for businesses and residents in underserved areas.

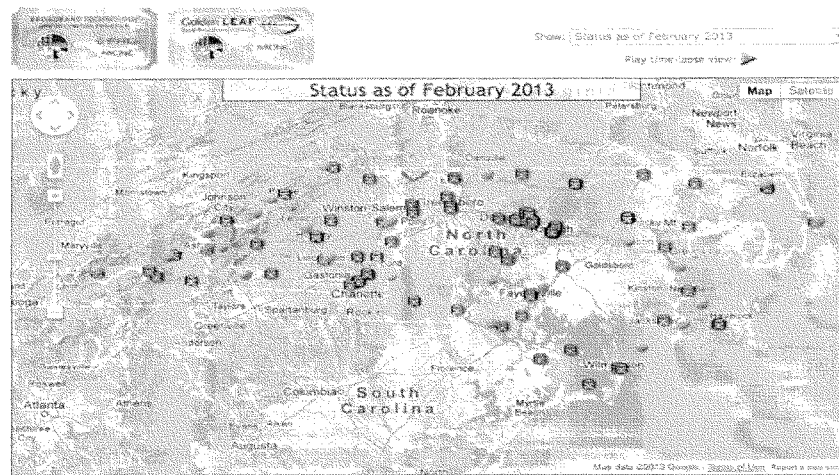
Once all work is complete, the two rounds of BTOP infrastructure have the potential to serve directly, or through MCNC partnerships with private-sector service providers, more than 1,500 community anchor institutions, 180,000 businesses, and reach more than 300,000 underserved families.

## BTOP PROGRESS MAP

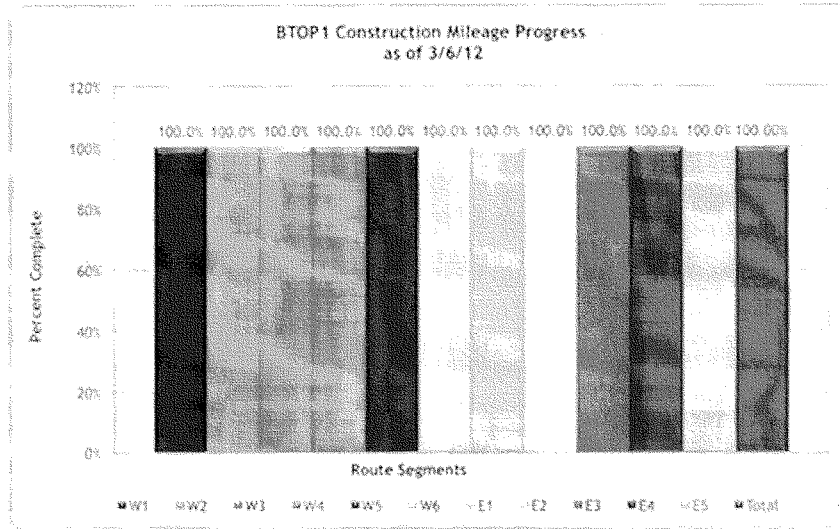
[View the BTOP Progress Map](#)

MCNC is pleased to offer this interactive map to illustrate monthly progress on the completion of its BTOP projects, which will result in a total of 2598.33 miles of newly operational network infrastructure. Please either use the drop-down menu below to see the status of the HIKIP backbone as it existed in 2008 prior to the NTA Broadband Technology Opportunities Program (BTOP), and representative views of progress on the project to date, or click the blue button to watch a time-lapse view of progress on the build. The map displays information about the routes to be constructed as well as progress building the network over time.

Map Legend	
	Operational
	Build an agreement to acquire in place
	To be completed
	Click for route segment information
	Critical equipment locations

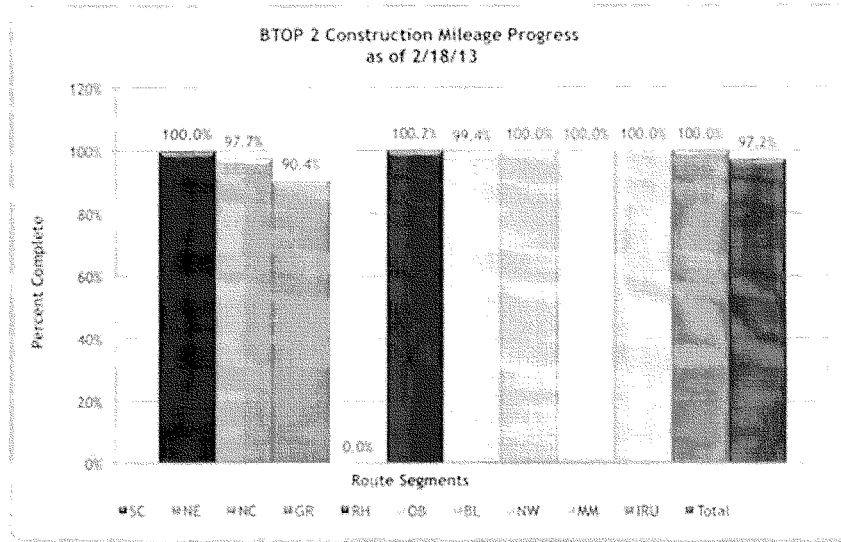


## BTOP1 CONSTRUCTION PROGRESS



Routes	Segment	Miles to be Installed	Miles Installed	% Complete
Mockville	W1	6.45	6.45	100.0%
Lenoir to Hickory	W2	19.99	19.99	100.0%
Old Fort to Asheville	W3	26.2	26.20	100.0%
Enka to Sylva	W4	37.08	37.08	100.0%
Huntersville to Shelby	W5	46.33	46.33	100.0%
Shelby to Hendersonville	W6	60.02	60.02	100.0%
Rocky Mount to Greenville	E1	51.87	51.87	100.0%
Greenville to New Bern	E2	42.33	42.33	100.0%
New Bern to Morehead City	E3	37.54	37.54	100.0%
Morehead City to Jacksonville	E4	41.16	41.16	100.0%
Jacksonville to Wilmington	E5	45.37	45.37	100.0%
<b>Total</b>		<b>414.34</b>	<b>414.34</b>	<b>100.00%</b>

## BTOP2 CONSTRUCTION PROGRESS



Routes	Segment	Miles to be Installed	Miles Installed	% Complete
SC - Charlotte to Wilmington	SC	252.80	252.80	100.0%
NE - Henderson to Elizabeth City	NE	297.37	290.52	97.7%
NC - Sparta to Henderson	NC	209.06	188.94	90.4%
GR - Graham	GR	19.54	0.00	0.0%
RH - Raleigh to Hamlet	RH	119.72	119.93	100.2%
OB - Outer Banks	OB	275.03	273.32	99.4%
MM - Mooresville to Monroe	MM	60.02	60.02	100.0%
NW - ERC Broadband	NW	44.00	44.00	100.0%
BTOP Laterals	BL	34.91	34.91	100.0%
IRU	IRU	336.35	336.35	100.0%
BW-L - Lenoir to Hickory	BW-L	20.00	20.00	100.0%
L3 - Raleigh to Henderson	L3	40.00	40.00	100.0%
<b>Total</b>		<b>1708.80</b>	<b>1660.79</b>	<b>97.2%</b>

## REQUESTS FOR PROPOSAL (RFP) OR REQUESTS FOR INFORMATION (RFI)

MCNC applied for and received two U.S. Department of Commerce Broadband Technology Opportunities Program (BTOP) awards totaling \$104 million in 2010 as part of the American Recovery and Reinvestment Act of 2009 (ARRA). The awards are administered through the National Telecommunications and Information Administration's (NTIA).

### What is the difference between a RFP and RFI?

**Requests for Proposals (RFP)** will be submitted as definitive requirements for portions of the project as identified. These requests will be related to the procurement of services and or products required to implement the project.

**Requests for Information (RFI)** will be submitted from time to time to gain information related to certain sorts of services and products for which RFP's may ultimately be released. The purpose of the RFI's will be for identification of vendors who can meet certain requirements for delivery of formal services and products.

Topic	Status
Engineering, Design Services and Environmental Assessment	<u>AWARDED</u>
Materials Availability related to NCREN Southeaster and Western North Carolina Fiber Expansion Project	AWARDED
Optical Network Design NCREN Southeaster and Western North Carolina Fiber Expansion Project	AWARDED
Materials Related to NCREN Southeastern and Western North Carolina Fiber Expansion Project	<u>AWARDED</u>
Fiber Asset Management Software Related to NCREN Southeastern and Western North Carolina Fiber Expansion Project	AWARDED
Construction and Splicing of the Fiber Optic Middle Mile Project Related to NCREN Southeastern and Western North Carolina Fiber Expansion	<u>AWARDED</u>
Optical Network Design and DWDM-based	<u>AWARDED</u>

Optical Networking Equipment Related to NCREN Southeastern and Western North Carolina Fiber Expansion Project	
Waterway Crossing Construction Related to NCREN Southeastern and Western North Carolina Fiber Expansion Project	<b>AWARDED</b>

<b>Topic</b>	<b>Status</b>
Engineering Design Services and Environmental Assessment for MCNC Golden LEAF North Carolina Rural Broadband Initiative	<u><b>AWARDED</b></u>
Fiber Asset Management and Mapping Software for MCNC Golden LEAF North Carolina Rural Broadband Initiative	<b>AWARDED</b>
Materials Related to MCNC's Golden LEAF North Carolina Rural Broadband Initiative	<b>AWARDED</b>
Construction and Splicing of the Golden LEAF Rural Broadband Initiative (GLRBI)	<b>AWARDED</b>
Marketing and Sales Vendor of the Golden LEAF North Carolina Rural Broadband Initiative	<u><b>AWARDED</b></u>
Attachment of Conduit and Fiber Optic Cable to Bridge Railings for the Golden LEAF Rural Broadband Initiative	<u><b>AWARDED</b></u>
DWDM-based Optical and/or Carrier Ethernet Network Design and Equipment Related to the Golden LEAF North Carolina Rural Broadband Initiative	<b>AWARDED</b>

<b>Topic</b>	<b>Status</b>
Locate Services and Maintenance of the Conduit, Fiber Optic Cable, and Access Points for the Golden LEAF North Carolina Rural Broadband Initiative	<b>AWARDED</b>

### **Samples of recent Press Coverage:**



December 2012 - January 2013



Updated Jan. 28, 2013 at 5:52 a.m.

## **Broadband boosts power of national climate center in Asheville**

By WRAL Tech Wire

**ASHEVILLE, N.C.** — Last year, NOAA said it was the warmest year on record in the lower 48 states.

In 2012, the average temperature was 55.3°F, which eclipsed 1998, the previous record holder, by 1°F. That difference from 1998 is an unusually large margin since annual temperature records are typically broken by just tenths of a degree.

This report is just one example of the important work happening at NOAA's National Climatic Data Center (NCDC) in Asheville.

However, since most of the data for this particular announcement is station-based throughout the U.S., this is relatively a small volume of data compared to what the facility ingests on a day-to-day basis with satellites and

radar.

And, without high-speed broadband connectivity, none of this would be possible to tackle in a timely fashion.

NCDC maintains the world's largest climate data archive and provides climatological services and data to every sector of the United States economy and to users worldwide. The center's mission is to preserve this data and make it available to the public, business, industry, government, and researchers.

NCDC recently initiated a satellite Climate Data Record (CDR) program to continuously provide objective climate information derived from weather satellite data that NOAA has collected for more than 30 years. This data comprises the longest record of global satellite mapping measurements in the world, and is complemented by data from other sources including NASA and U.S. Department of Defense satellites as well as foreign satellites.

For the first time, NOAA is applying modern data analysis methods, which have advanced significantly in the last decade, to these historical global satellite data. This process will unravel the underlying climate trend and variability information and return new economic and scientific value from the records. In parallel, NCDC will maintain and extend these Climate Data Records by applying the same methods to present-day and future satellite measurements.

In fall 2011, NCDC received two 10G broadband connections as part of the build-out through the first phase of the of Golden LEAF Rural Broadband Initiative

administered through RTP-based non-profit MCNC. These connections were a significant upgrade from the two 1G connections previously used at NCDC.

Most of the specific uses of these 10G connections are classified, but one use mentioned is for the Suomi National Polar-orbiting Partnership (NPP), which represents a critical first step in building next-generation Earth-observing satellite systems. The NPP is the result of a partnership between NASA, NOAA, and the U.S. Department of Defense.

Since Oct. 2011, 1.3 petabytes of data has streamed into NCDC for consumption and storage from the NPP. In that process, a copy also is made of all data and is sent as a backup to Colorado. This means since this project went active, more than 2 petabytes of information has traveled over broadband-based pipes to researchers all over the world.

"Broadband is absolutely critical to what we do now," said Alan Hall, IT project manager at NCDC. "If we didn't have broadband, we wouldn't be able to move all this data in a timely manner and get it to researchers who need it ... it is absolutely critical and broadband is a must to be able to do what we do."

"As more data comes in and out every day, we need high-speed connections to realize all these data sets," added Preston Carter, an IT specialist at NCDC who works on network operations and storage. "We have better download rates now and as others get more speeds soon, we will be ready as we continue to future-proof our infrastructure."

NCDC has seen astronomical spikes in data in recent years with new technology and higher-speed connections. On a typical day, about a terabyte of data comes in to be stored and archived - most in real-time. During major weather events, like Hurricane Sandy last fall, that would jump three-to- six times that amount.

NCDC was incorporated with all civil weather entities as part of NOAA in 1970. Twelve years later, the organization was renamed the National Climatic Data Center and has remained housed at the Veach-Baley Federal Building since 1995.

Today, data comes to NCDC from not only land-based stations but also from ships, buoys, weather balloons, radars, satellites, and even sophisticated weather and climate models. In the past 10 years, NCDC's digital archive experienced a six-fold increase from 1 petabyte to 6 petabytes. With increasing sophistication of data collection equipment, data is expected to exceed 15 petabytes by 2020.

The United States has made tremendous investments in Earth-observing satellites over the past five decades. Despite remarkable success, great potential remains in the nation's archived measurements for climate change applications.

NOAA's new Climate Data Record Project promises to unleash the potential of this data to address critical climate questions. But again, doing this type of work today would not be possible without high-speed, low latency broadband. *WRAL Tech Wire any time: Twitter, Facebook*

# The Daily Advance

Date: Thursday, November 29, 2012  
 Location: ELIZABETH CITY, NC  
 Circulation (DMA): 9,935 (42)  
 Type (Frequency): Newspaper (D)  
 Page: 4  
 Section: Main  
 Keyword: MCNC

## Benefits of broadband cable coming into focus

**M**any things that will happen in the year ahead that we can't yet see, but one of them that is coming into clear focus is the completion of a \$144 million project to bring high-speed broadband cable to all counties in the Albemarle.

Large Internet users are eagerly awaiting the March target date for completion of the second phase of building 1,200 miles of broadband infrastructure through eastern North Carolina.

Broadband — a far cry from the days of dial-up Internet connection — is the fastest Internet technology currently available. While many residents already have access to broadband through providers such as CenturyLink and Time Warner, the need for greater bandwidth by schools, colleges, hospitals, libraries and government buildings will soon be met.

The project was kicked off more than two years ago with Gov. Beverly Perdue announcing that \$115 million in federal stimulus money had been obtained to extend broadband service to 69 rural counties.

The benefitting counties encompass nearly 6 million residences, or about 66 percent of the state's population, and 160,000 businesses, or about 68 percent of businesses in the state. Among the counties to benefit are Pasquotank, Camden, Currituck, Perquimans, Chowan and Gates.

The largest grant awarded, \$75.8 million, went to the nonprofit Microelectronics Center of North Carolina — based in Research Triangle Park — which followed another \$39.9 million awarded to MCNC in January 2010. There was also a \$24 million grant from the Golden LEAF Foundation and \$8 million from MCNC's endowment. Today, the total project cost is estimated at \$144 million.

The project has received much praise from area business leaders, educators and elected officials.

"The world we live in today is defined less and less by distance and more and more by connections," U.S. Sen. Kay Hagan, D-N.C., said last year. She noted that broadband "has quickly become as important to a community's success as traditional infrastructure" such as highways, rail lines, sewer and water systems.

It means North Carolina will be able to compete on equal footing with other states, when it comes to offering the best in technology.

Along with offering a great location to live, work and raise a family — close to growing southeastern Virginia and the coastal N.C. Outer Banks — area economic development leaders will soon have an added enticement, allowing them to go after larger companies that require broadband.

The result will be an expanded tax base, good paying jobs, and economic growth that benefits us all.

"I can't think of a company that doesn't want the fastest broadband that is available," said Currituck's Economic Development Director Peter Bishop.

Also, Camden's Economic Development Commission is already looking at getting high-speed service to the county's new Eco-Industrial Park on U.S. Highway 17. Economic Developer Charlie Bauman said offering that service will be as important as providing water and sewer at the eco-park.

Others are also excited. Albemarle Hospital, which already has broadband capabilities, sees a benefit by having a backup cable in case its main connection is lost, and doctors and patients will more easily be able to access medical

records and talk to physicians electronically.

The new line will connect many major institutions, but won't go everywhere. Nevertheless, Elizabeth City is already calculating how much it will cost to extend the broadband line a couple miles to the Elizabeth City Regional Airport and aviation park, where new jobs are expected.

Considering the potential benefits of widely available broadband to schools, medical facilities and industry, this project will have immense impact on the Albemarle region in the years ahead. It's just now coming into focus.

### **OUR VIEW**

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### **The issue**

A new broadband cable line that will serve the Albemarle will be installed by the end of March.

### **Our position**

While some argue that high-speed Internet is already available, the broadband network will offer additional connections to schools, colleges and hospitals, governments and be a valuable tool in helping to attract new business and industry.

**August 2011:**

## **MCNC begins Round 2 of Golden LEAF Rural Broadband Initiative**

*Historic event showcases NCREN's capabilities with virtual groundbreaking in four locations*



**KANNAPOLIS, N.C. (Aug. 12, 2011) – MCNC** <sup>[3]</sup>, the private, not-for-profit operator of the North Carolina Research and Education Network (NCREN), hosted a Statewide Virtual Groundbreaking Ceremony today in four locations throughout the state to highlight the start of construction on Round 2 of the of the Golden LEAF Rural Broadband Initiative (GLRBI).

The GLRBI is funded through grants from U.S. Department of Commerce's Broadband Technology Opportunities Program (BTOP) and significant matching funds from private donations and investments including a \$24 million investment from the Golden LEAF Foundation. The GLRBI will greatly expand the reach and capacity of NCREN in northeastern, north central, western and south central North Carolina.

*"Today, we can link several sites via HD video for a one-time event. The GLRBI expansion, when complete, will allow us to host hundreds of these sessions simultaneously across the state. It will impact all facilities and institutions connected to NCREN. It will broaden the way teachers teach, students learn, doctors provide care, and for citizens at a local library searching to find a job." -- Joe Freddoso, MCNC President*

## and CEO

The high-definition simulcast event was hosted at Asheville-Buncombe Tech Community College, Elizabeth City State University, the North Carolina Research Campus in Kannapolis, and UNC Pembroke. The event leveraged the existing video capabilities of NCREN. These video capabilities and capacity for HD video use among NCREN connectors will greatly expand as a result of the GLRBI.

"Thanks to the Recovery Act, this project is creating jobs and will support continued innovation and expanded economic and educational opportunities in North Carolina," said Lawrence E. Strickling, Administrator of the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA).

MCNC received federal approval to begin GLRBI phase 2 construction in late June. Since that time, MCNC has mobilized efforts and worked to finalize all necessary permits and materials to begin construction.

The Round 2 project is three-times the size of MCNC's BTOP Round 1 project. Those areas of construction for Round 2 include 1,200 miles of broadband infrastructure through 79 counties in North Carolina. Sixty-nine of these counties include significant areas that meet the federal definition of "underserved" for access to affordable broadband services.

*"Thanks to the Recovery Act, this project is creating jobs and will support continued innovation and expanded economic and educational opportunities in North Carolina." --*

Lawrence E. Strickling, Administrator of the  
U.S. Department of Commerce's NTIA



The total second phase project cost of \$104 million was funded by two sources. The first was a federal BTOP grant of \$75.75 million awarded in August 2010 through the NTIA. The BTOP investment was matched by \$28.25 million in private donations including the \$24 million investment from the Golden LEAF Foundation.

The total investment for both Round 1 and Round 2 of the broadband infrastructure build is \$144 million and includes an investment of \$8 million in funds from the MCNC endowment that was used as matching funds for the Round 1 project. This level of investment represents one of the largest in broadband infrastructure in North Carolina history. The majority of the project funds have been spent with private-sector engineering, construction, materials, and technology companies who will assist with the build. No direct funding from the State of North Carolina was required, and MCNC estimates the expansion of NCREN will create or save 2,500 engineering, construction, and manufacturing jobs in the state.

"MCNC is excited to begin the second phase of building North Carolina's highway to the future. We want to thank our state and federal leaders for their continued support for the Golden LEAF Rural Broadband Initiative," said Joe Freddoso, president and CEO of MCNC. "Today, we can link several sites via HD video for a one-time event. The GLRBI expansion, when complete, will allow us to host hundreds of these sessions simultaneously across the state. It will impact all facilities and institutions connected to NCREN. It will broaden the way teachers teach, students learn, doctors provide care, and for citizens at a local library searching to find a job."

To date, MCNC has awarded contracts for Round 2 to the

following firms: CommScope for fiber-optic cable and materials; Edwards Telecommunications, Fiber Technologies, and Globe Communications for construction and fiber installation, and Kimley-Horn & Associates for engineering design, project planning, and related services.

All construction is to be complete by 2013.

Mr. WALDEN. Thank you very much to all of our panelists for your testimony.

Mr. Freddoso, thank you especially for yours here at the end.

In my district, 70,000 square miles—regular watchers of our hearings know I have used this before—but it would stretch from the Atlantic to Ohio, larger than just about any State east of the Mississippi. And so I am very familiar with very rural areas—remote areas—that lack broadband.

And so my view here is that 4 percent is a lot of my district that didn't have access to broadband and that the federal money should go into those areas where it is really difficult to make a financial case for broadband on a commercial basis. If we are going to spend money out, that is where it should have gone. That is my point in this oversight hearing and in the arguments I made, frankly, when this bill was being marked up a number of years ago to say go serve the unserved areas first, the places you all have talked about, and avoid overbuilding where we already have commercial networks, which by the way will be made less viable because the government has come on with another competitor on top. And so this leads to this oversight.

Probably most of this money has been spent appropriately. We will find out over time whether or not we got our money for it. Obviously, in your areas, you feel it has and it has got great benefit. And we have seen that in some projects even in my own district, an Indian reservation that frankly, the incumbent carrier hadn't done much there and, you know, they got one of these grants and now they got broadband. That made sense. And same in another area in central Oregon where it made sense to fill in.

One of my questions, though, is how is this money getting spent? Where are the stewards of the taxpayers' dollars? I hear about this in every town hall I have. I have done 18 so far this year in 18 counties.

And, Ms. Eilers, you have heard our discussion here today about the West Virginia audit. You all looked at some of these questions for us kind of at a top level. Have you had a chance to review the West Virginia audit in any detail? Because it is, to me—and this is my money in effect—it is pretty damning.

Ms. EILERS. I have reviewed the West Virginia report. Yes.

Mr. WALDEN. And my understanding is that there may be a delta here of about \$9 million that maybe didn't have to be spent and that they didn't follow their own contracting rules and laws. Is that—

Ms. EILERS. I am not going to speak for the West Virginia report. But yes, based on my reviews, it does appear—

Mr. WALDEN. And so wouldn't it make sense whether—I know Mr. Strickling has said, look, we have spent this money. It is out. It is allocated, whatever. But going forward if one of these programs were to spring up again or money get put out, what recommendations would you have for these agencies to make sure that sort of waste doesn't occur that has been identified in the West Virginia audit? Did they need to do a site analysis? Does that need to be a requirement? How do we prevent this from happening again?

Ms. EILERS. I mean, both the West Virginia auditor and our audit team cited that there should have been a detailed study of all the locations to size the routers appropriately. So yes, we were looking for that same due diligence.

Mr. WALDEN. And are you confident now, knowing what we know, that the agencies will either have put those requirements into their RFPs or whatever going forward or are they still were they were? Or can you tell?

Ms. EILERS. As I understand it—and I can just speak for how they are looking at West Virginia right now—they are going back and doing some due diligence on the sites to—

Mr. WALDEN. Right.

Ms. EILERS [continuing]. Make an appropriate size, if you will, of the communications ability. For the other grants, I can't speak to the other 255 grants and how this would impact them.

Mr. WALDEN. You know this really came to our attention, as I recall, from a newspaper article somebody shared with me. And that kind of led the Committee into its look and our questions to you. And I don't know if that is what triggered the auditor or not in West Virginia, but it raises a troubling set of questions about how the government's money—the taxpayers' money—is actually being spent.

Mr. Kirchhof, Mr. Smith, this overbuild issue is something that seems to me there is always going to be a little bit because you have got to connect somewhere, right? So you are always going to have some overbuild. But I was really concerned, Mr. Smith, especially in your Vermont discussion, about how the middle mile got overbuilt and the last mile didn't get built in effect. And aren't we really after the last mile that—I mean you need both. I get the notion that more people using the internet means you need more capacity on the overall internet. I get that. I understand that. It is not the number of subscribers per se, it is both. But it is the amount of data that is being transmitted back and forth so you need capacity, but you also need access. So from your perspective, is it last mile, is it middle mile, is it both but not overbuild?

Mr. SMITH. Mr. Chair, from my perspective, it is last mile in Vermont. I mean, no one has invested more in broadband in Vermont than FairPoint over the last few years. And I think it is safe to say that, you know, the horse is out of the barn now. I mean, this is for future reference but it is safe to say I would think most Vermonters feel that if you are going to use money, use it for the last mile and not overbuild an existing network that provides the same service as the networks being built, and actually, the fiber being put up on the same polls that the fiber that we are running on. So it is an issue.

Mr. WALDEN. My time has expired. Do you have any disagreement with that, Mr. Kirchhof?

Mr. KIRCHHOF. I don't, Mr. Chairman. The only thing I would add is you do need both, right, in some cases. That is why you need to go area-by-area and do an evaluation to see what is needed there. I think we do have probably a little bit of a fundamental disagreement on how you define middle mile. To us middle mile is very similar to the federal interstate system, that you use the backbone to be able to get that traffic out to the world, right, but you

rely on the local roads and the state highways to provide that. So I think there is a fundamental disagreement with what we consider middle mile.

Mr. WALDEN. All right. Thank you all again for your participation.

I now turn to my friend and colleague from Colorado, Ms. DeGette, for 5 minutes.

Ms. DEGETTE. Thank you very much, Mr. Chairman.

Mr. Smith, you said in Vermont the middle mile is not the issue; it is really the last mile. But you are speaking for Vermont, right?

Mr. SMITH. I am——

Ms. DEGETTE. Yes.

Mr. SMITH [continuing]. Where I most know it. And I——

Ms. DEGETTE. Where you most know. And here is the other thing though, I mean, our concept is to get this broadband everywhere. And so actually, the last mile providers benefit from the middle mile, right?

Mr. SMITH. Well——

Ms. DEGETTE. If they build out the middle mile, then the last-mile providers benefit from that, right?

Mr. SMITH. That is right——

Ms. DEGETTE. And FairPoint, in fact, has been paid \$7 million as a vendor to these BTOP grantees, right?

Mr. SMITH. Say that again? I am sorry.

Ms. DEGETTE. FairPoint has been paid approximately \$7 million as a vendor to BTOP grantees?

Mr. SMITH. Yes, I am not familiar with that number but I will look.

Ms. DEGETTE. But they have been paid money. I mean, they have benefited from some of this federal money, right?

Mr. SMITH. I am sure that we have had middle-mile participants giving money to FairPoint for some services.

Ms. DEGETTE. Vermont Telecommunications Authority, right?

Mr. SMITH. Oh, I see what you are saying.

Ms. DEGETTE. Yes.

Mr. SMITH. OK. OK.

Ms. DEGETTE. Yes.

Mr. SMITH. Vermont Telecommunications Authority has——

Ms. DEGETTE. And Vermont Telephone Company, right?

Mr. SMITH. Vermont Telephone Company.

Ms. DEGETTE. ION NewCo and Maine Fiber, you have got money from them, right?

Mr. SMITH. Let me just go back, Congresswoman, to sort of go from there. We have got money to build last-mile——

Ms. DEGETTE. Right.

Mr. SMITH [continuing]. From the VTA.

Ms. DEGETTE. Right.

Mr. SMITH. Absolutely.

Ms. DEGETTE. Right.

Mr. SMITH. OK.

Ms. DEGETTE. And that is some of this federal money. They are getting the federal money and then they are giving it to——

Mr. SMITH. In the case of the VTA, I believe it is all state money.

Ms. DEGETTE. OK. Well, we can check that out. But, you know, the whole point is we are trying to get broadband to everybody, right, Mr. Abraham?

Mr. ABRAHAM. Yes.

Ms. DEGETTE. I mean, it doesn't help you if you have the last mile if you don't have the middle.

Mr. ABRAHAM. That is right.

Ms. DEGETTE. You need it all, right? And also you, too, Mr. Freddoso, right?

Mr. FREDDOSO. Right, Ms. DeGette. I think the leap we have to take care here is that you are looking at a critical infrastructure now. So you have got to look at it from both perspectives. The last mile in a lot of rural areas is going to move towards wireless.

Ms. DEGETTE. Right.

Mr. FREDDOSO. Wireless needs to find fiber as quickly as possible for backhaul traffic.

Ms. DEGETTE. Right.

Mr. FREDDOSO. Our providers in North Carolina have told us that their deployments into rural areas like some of the eastern parts of the State that Congresswoman Ellmers represents is going to be 4G LTE or WiMAX or Wi-Fi. There is not enough middle-mile fiber right now along specific routes in the area. We did this verification because we were trying to serve schools—

Ms. DEGETTE. Right.

Mr. FREDDOSO [continuing]. That take that backhaul traffic.

Ms. DEGETTE. OK.

Mr. FREDDOSO. The second piece of this is that it is critical infrastructure.

Ms. DEGETTE. Yes. Right.

Mr. FREDDOSO. And you are not going to run a hospital that you are putting on healthcare information exchange or telehealth on one single fiber connection to that hospital.

Ms. DEGETTE. Right.

Mr. FREDDOSO. And that is what the middle-mile serves directly.

Ms. DEGETTE. Right.

Mr. FREDDOSO. So you need multiple paths.

Ms. DEGETTE. And you know something else I was thinking about while I was sitting here, Mr. Kirchhof, in looking at your map is, you know, the whole purpose of these BTOP and BIP programs was so that we could build out these systems but then they wouldn't be dependent on federal dollars for the rest of their existence. And so in doing that, I suppose you would have to have some kind of business model. Otherwise, to do these 5 percent that aren't built out right now, then you would have to just subsidize them indefinitely. Do you understand? Does that make sense to you?

Mr. KIRCHHOF. Thank you, Congresswoman. I do understand, but I guess what I would be concerned about is, we agree with Secretary Strickling on the 50,000 foot level—

Ms. DEGETTE. Right.

Mr. KIRCHHOF [continuing]. Of what we are all trying to do.

Ms. DEGETTE. Right.

Mr. KIRCHHOF. But when it came down to what is being done in Colorado, we believe you should have done an area-by-area assess-

ment to look at what the needs were. Are they middle mile? Are they the last mile?

Ms. DEGETTE. Right.

Mr. KIRCHHOF. Instead, what we believe has happened is the goal ended up to be to build a statewide network for the government to be in the telecom business for the long haul instead of reinforcing or using existing facilities. So if the goal is to build a sustainable model for the government to be in the telecom business, then I think that what they are doing is probably accurate. But if it was to come in and provide broadband to unserved and underserved areas, I don't believe that is what they have done.

Ms. DEGETTE. Right. I mean, I don't know. I am not here to defend anybody. But what I am hearing is that EAGLE-Net is trying to get contracts for some of the existing company and access some of the existing fiber so that they can build out into some of these underserved areas. And I think what we might have here—I was talking to the Chairman about this—is we really do need to all sit down. And I will make the same offer to you that I made to the previous witness, which is if I can do something with Mr. Gardner to sit down and try to sort this all out, you know, we are happy to sit down and do it.

We actually had delegation breakfast yesterday morning where we all sat down and said, you know, people be surprised of how we can work together in a bipartisan way in our delegation because we don't want to see private, you know, telecom companies being hurt by this government program. But on the other hand, we all have an interest in having this be built out to communities like Mr. Abraham's and Mr. Freddoso's. I think you would agree with that, too.

Mr. KIRCHHOF. I do, thank you, Congresswoman.

Ms. DEGETTE. Thank you.

Mr. GARDNER. [Presiding] The gentlelady's time has expired.

And I will yield myself 5 minutes. To Mr. Smith and Mr. Kirchhof, I mentioned to Mr. Padalino the question about whether or not you have concerns or know of concerns in the industry about the ability to repay RUS loans if competition by government-backed BTOP programs were to interfere with their business model. Are there concerns, Mr. Kirchhof, that you have heard of, know about?

Mr. KIRCHHOF. Yes, thank you, Mr. Gardner. I think what we are concerned about is that what is being proposed as middle mile is actually putting fiber facilities directly to an end-user customer and then encouraging that customer to leave member's network and to go with EAGLE-Net. As you know, because of where you live, the larger government institutions—schools, community anchor institutions—provide a source of revenue to those companies today. And so if you remove that revenue—and yes, Mr. Strickling said that we are not providing to residents and businesses—that is true—but those are also the high-cost, low-revenue customers. So the community anchor institutions are a very important part of our financing. So depending on if a company lost a number of those, it could hurt them financially.

Mr. GARDNER. So let me follow up with that, too, because I think you bring up an interesting point. If an anchor institution like a school or library bought more bandwidth or was provided with

more bandwidth than they needed, could they turn around then and sell that excess bandwidth?

Mr. KIRCHHOF. In our belief, yes. And in fact I have stated in my testimony that, in fact, we think that they are subsidizing potential new competitors to come into the market. And in many cases we want that. I understand that. But in rural communities, as I said before, there is a limited amount of revenue to support a limited amount of networks to be built there.

Mr. GARDNER. Mr. Kirchhof, do you believe that there is overbuild in Colorado?

Mr. KIRCHHOF. My members do definitely believe that. When EAGLE-Net is laying fiber literally right next to the existing fiber optics, we believe that is an overbuild.

Mr. GARDNER. Mr. Smith?

Mr. SMITH. I definitely believe there is an overbuild in Vermont and I believe there is an overbuild in New Hampshire and I believe there is an overbuild in Maine, although I am primarily concentrated on Vermont.

Mr. GARDNER. And Mr. Kirchhof, going back to you, have the terms of the House Joint Resolution in Colorado been met? Do you believe it was focused on unserved and underserved areas and not in competition with the private sector? Has that been adhered to?

Mr. KIRCHHOF. No, I do not believe that, particularly the section you highlighted earlier.

Mr. GARDNER. And a couple of other questions that I have for you relating to today's testimony, following up on that statement, EAGLE-Net clearly has gone beyond its mission at that point. Would you agree?

Mr. KIRCHHOF. Yes.

Mr. GARDNER. And are there areas of the State that still need fiber in the ground where EAGLE-Net has not gone?

Mr. KIRCHHOF. Well, from our understanding—and they have made changes to their network—but we believe that the western slope, while there may be some service coming from EAGLE-Net, there is certainly not going to be as much as there is on the eastern plains.

Mr. GARDNER. Do you think that their business model is sustainable?

Mr. KIRCHHOF. I don't know. I don't have any ability to know that.

Mr. GARDNER. I understand.

Mr. KIRCHHOF. But having said that, you know, our companies have been in business for decades and we struggle occasionally and we require subsidies from you to make that work. So I don't know how you can sustain that model going forward.

Mr. GARDNER. And in the testimony that Mr. Strickling presented, he talked about how—you have also mention this in your testimony—were supportive of EAGLE-Net's efforts. But there was an element almost of sour grapes that was trying to be implied in terms of the opposition and concerns with EAGLE-Net today over the grant. But as I believe, you were bidding on apples and oranges. Is that correct?

Mr. KIRCHHOF. Well, I would say I did take exception to the fact that it does sound like it is sour grapes. But we have been trying



for 3 years to work with EAGLE-Net to get something done. There was an RFP that was submitted by a group of northeast Colorado companies that was rejected. I don't know the reason. I heard today it was financial reasons, but I don't know if that was the only reason that was out there.

Mr. GARDNER. Some of the letters that I have received, and I don't know if you have had a chance to see them or not, but they were submitted for the record, one talking about Blanca, others talking about PC Telecom where they said they were trying to work with NTIA trying to convince them that, hey, if you use this infrastructure, we could save you \$20 million, I think, was the Blanca letter where they said we could save \$20 million if you use this infrastructure, but they never received a response. Do you believe that money was wasted by and through the overbuild?

Mr. KIRCHHOFF. I can't speak to the savings that those companies are suggesting, but I really believe that there were opportunities for more efficiencies, to be able to take that money then and spend it where it is really needed.

Mr. GARDNER. I see that my time has expired. The gentleman from Vermont is recognized for 5 minutes.

Mr. WELCH. Thank you very much, Mr. Chairman.

Mr. Smith, thank you so much for coming and it is good to have you here.

Many of us on this panel do represent rural areas. And this is an open-ended question. Would you have suggestions for this panel about what policies the Federal Government could pursue that would be best helpful in deploying a full range of broadband to our rural areas?

Mr. SMITH. I do, Congressman. I think, you know, in retrospect looking at how this program rolled out, I don't think there was enough emphasis on the last mile. You know, in our State and in other States, particularly in northern New England, the middle mile isn't the issue. I understand there are other States where the middle mile maybe the issue. There is plenty of competition in the middle mile. In fact, there is a lot of competition going to the very anchor institutions that we talked about. So putting on a government-funded middle-mile program in those sort of States makes no sense at all because what you are doing is just undercutting the private investment.

We have invested \$200 million in northern New England—in Maine, New Hampshire, and Vermont. You undercut that investment. So what I would say is, particularly in areas where we are familiar with, concentrate on the last mile. And—

Mr. WELCH. So is it your thought that policy would be helpful whether it was our district in Vermont or Ms. Ellmers' district where she is in eastern—you are applying this generally to rural areas?

Mr. SMITH. Right. And Congressman, I think that is where the downfall the program lies because there are different needs in different places. And if I was going to give some advice, I would say look at the regions in terms of what their specific needs are.

In our region, it is last mile. It is not middle mile; it is the last mile. The other thing that I would do sort of, you know, now that

everything is sort of out the door, I would monitor these programs continuously in terms of what is being spent.

The third thing that I would do, is that any unspent money needs to come back to the Treasury in terms of what happens. And the fourth thing I would do is hold these entities to deadlines that they have promised to obtain. So those are the sort of things off the top of my head that I can think of.

Mr. WELCH. Well, thank you very much. Mr. Abraham and Mr. Freddoso, we have heard the argument from some of the incumbent broadband providers that there was no need for Recovery Act funding. They can't compete with networks funded in part with public dollars and BTOP recipients are overbuilding their networks. What has been your experience with getting private investment for the deployment of broadband in your communities?

Mr. ABRAHAM. When we started this project, we went to our private providers and asked them to participate. My county commissioner went with me and said, why don't you let Bruce leverage this money and help you get this? And they said we don't really want to mess with a government project. We have got plenty of infrastructure out there. And then I said, well, if you can't do that, could you show us where your infrastructure is? So well, no. I mean, as an economic development guy, I would like to know where the water and sewer lines are. And they said that was proprietary information.

So when this started there was kind of wall between us and the private providers. Since then, we have met with all of them and talk about interconnections and working with them to get places where they want to go because we have very robust network in the areas where they don't now, but—

Mr. WELCH. Mr. Freddoso, thank you.

Mr. FREDDOSO. Thank you, Mr. Welch. I think an important fact to know is that we are a private nonprofit and we have been operating this network for 25 years. So we have built really good relationships with our private sector service providers in North Carolina.

We had similar discussions to what Mr. Abraham had in Georgia. But let me give you one example. We had to upgrade one route, one connection between Rocky Mount and Greenville—part of it touches Congresswoman Ellmers' district. And we get a quote of 5 times the price for 2 times the bandwidth. And the reason was is that we lack fiber availability. The carrier lacked fiber availability.

So we took it upon ourselves to partner with them, figure out where they had availability, lease from them as part of the BTOP program, but then build in the gaps in the State so we could serve these anchor institutions. And we serve all of K through 20 public education. Their need is growing greatly. But this also now offers North Carolina an opportunity to be a test bed for some these wireless technologies in the last mile, work with these private sector service providers to make fiber available to them on attractive terms to allow them to deploy these services in areas that they couldn't reach before.

So our stories are a bit different. I don't know Colorado. I don't know Vermont. But I know that we did the diligence upfront to

make certain that the overbuild was kept to a minimum to inter-connect points.

Mr. WELCH. OK. Thank you. I yield back.

Mr. GARDNER. The gentleman yields back. The gentlelady from North Carolina is recognized for 5 minutes.

Mrs. ELLMERS. Thank you, Mr. Chairman.

My question is for Mr. Freddoso, and I have been listening carefully to your testimony. My questioning is about the opinion from the private sector that the middle-mile network has been overbuilt. You just gave us information that you built a very strong relationship with the private sector. With government-subsidized entities there is an opportunity to pick lucrative places to serve rather than build the underserved areas?

Mr. FREDDOSO. I would agree with Mr. Smith and Mr. Kirchhof. There has to be some regional assessment, Congresswoman Ellmers, of what is available in those areas. I believe that we are entering a time, particularly for rural economic development and for rural healthcare, that more than one path of fiber is going to be needed into some rural communities.

Mrs. ELLMERS. Yes.

Mr. FREDDOSO. You are very familiar, obviously, with the healthcare industry being a nurse. As we move more into telehealth for critical areas that touches part of your district and the healthcare providers that work, if we are doing telehealth over these connections, I wouldn't want one route of fiber into that hospital.

Mrs. ELLMERS. Yes.

Mr. FREDDOSO. If we are delivering healthcare based on these connections, it would be like saying I have one road in and out of the hospital and if it is blocked by a car wreck—

Mrs. ELLMERS. Yes.

Mr. FREDDOSO [continuing]. I can't get to the hospital. If I have one path of fiber to a hospital and that gets cut, I don't want healthcare to stop in the hospital.

Mrs. ELLMERS.

Mr. FREDDOSO. I don't want to healthcare to effectively stop. So you have got to be smart about those things.

Mrs. ELLMERS. Right. So what I am hearing you say is that although some may view overbuild in one instance, there may also be a need for additional infrastructure.

Mr. FREDDOSO. Yes, exactly.

Mrs. ELLMERS. Now—

Mr. FREDDOSO. Exactly. And you are familiar with the parts of the State—one more example, and I am sorry.

Mrs. ELLMERS. Sure.

Mr. FREDDOSO. But you are familiar with the parts of the State and Rutherfordton and Shelby—

Mrs. ELLMERS. Yes.

Mr. FREDDOSO [continuing]. That have attracted a lot of data centers. Facebook is not going to build a data center in Rutherfordton, North Carolina, unless they have three or four paths of fiber alternatives there. If they get one fiber cut and their data goes down from that data center, it costs them literally millions of dollars. They could build their own fiber and justify that based on

the return on investment. So it has got to be a regional approach. You have got to look at what the economic drivers and what the education drivers are in those regions——

Mrs. ELLMERS. Yes.

Mr. FREDDOSO [continuing]. And understand what the infrastructure is needed to serve those.

Mrs. ELLMERS. Yes. And you do agree that the underserved areas should definitely be a focus as well?

Mr. FREDDOSO. Absolutely. And we had a requirement of the grant that we had to terminate at least one endpoint on every segment that we built in underserved area.

Mrs. ELLMERS. Yes.

Mr. FREDDOSO. And we have done that in North Carolina through the implementation.

Mrs. ELLMERS. OK. Mr. Kirchhof, would you agreed with some of the comments that Mr. Freddoso has made in relation to your geographical area?

Mr. FREDDOSO. Thank you, Congresswoman. Yes, I would. And I am sitting here thinking that is the model that I wish we could have used in Colorado to be quite frank because it sounds against working very well.

Mrs. ELLMERS. Yes. Yes. Well, thank you. And I appreciate that.

Now, Mr. Freddoso, along this line of thinking, I know that in your testimony you point out that you are 50 miles from completing the 2,600 middle-mile network. Where are you now with subsidized funding? Are you up and running and sustainable?

Mr. FREDDOSO. Oh, yes. We have operated the network, as you know, Congresswoman for 25 years——

Mrs. ELLMERS. Yes.

Mr. FREDDOSO [continuing]. With the community anchor institutions as our key constituents on the network. We can operate the network, financially and fiscally, with those endpoints on the network and keep prices relatively flat. We are depending on interest in the fiber strands for commercial use in rural parts of the State and we are seeing strong demand for those.

So, for example, wholesalers are coming to us and wanting to buy fiber to supply a data center. Or they are wanting to buy fiber to the tower in rural areas to deploy 4G LTE services——

Mrs. ELLMERS. Yes.

Mr. FREDDOSO [continuing]. Enhancing the broadband offerings in those areas. So it is a large part of our sustainability plan to close those deals, but we feel very confident will be able to have a sustainable model for the long-term, serve those education and healthcare institutions that we serve.

Mrs. ELLMERS. So in your opinion—and I have got 10 seconds left—you will or will not need additional federal funds?

Mr. FREDDOSO. We will not need additional federal funds.

Mrs. ELLMERS. OK. Thank you, sir. And I yield back the remainder of my time.

Mr. GARDNER. The gentlelady yields back at this time. Seeing no more questions, I want to thank the panel. I ask that the witnesses——

Ms. DEGETTE. Mr. Chairman, before——

Mr. GARDNER. The gentlelady from Colorado?

Ms. DEGETTE. I would ask unanimous consent to put into the record some more letters that I was just handed regarding this EAGLE-Net situation. I think they complete the record.

Mr. GARDNER. Without objection.

[The information appears at the conclusion of the hearing]

Ms. DEGETTE. Thank you.

Mr. GARDNER. And the members will have 10 days to submit additional items for the record. And I want to thank the witnesses for being here today.

And this meeting is adjourned.

[Whereupon, at 1:03 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

#### PREPARED STATEMENT OF HON. LEONARD LANCE

I thank our witness for joining us today and providing their respective insights into the Broadband Technology Opportunities Program. Like many stimulus bill programs I think the goals of the BTOP are laudable. Particularly in today's information based economy we should be finding ways to ensure that those who live in the most rural communities have access to the true broadband internet connections. More broadband access for Americans means more opportunities for professional development and education.

Unfortunately, after reviewing the information provided to the subcommittee in preparation for this hearing I am left with significant concerns about the true efficacy and efficiency of the use of taxpayer funds under this program. It is true that there are a number of success stories, instances where consumers who were truly "un-served" by any commercial broadband provider now have access due to this program. At the same time there seems to be a troubling amount of evidence of waste and abuse under this program.

In particular, the numerous instances where BTOP grantees have overlapped existing broadband infrastructure rather than build out to new truly un-served areas is disturbing to me. Each of these instances represents waste of hundreds of thousands of taxpayer dollars. We have witnesses on our second panel today who will talk about some specific and egregious cases and I have read a number of press reports of others such as rural schools being connected to second or even third high speed connections that they don't need while other rural communities continue to rely on dial up access only.

The funds the government uses to promote and expand broadband access rightfully belong to all of our constituents and we must always act as responsible stewards of that money. Allowing one commercial entity to overbuild another using taxpayer funds, thereby putting the incumbent provider who built the network with either private funds or loans, at a competitive disadvantage while at the same time leaving other consumers in the dark is not being responsible with our constituents money.

I am also concerned with some of the testimony provided by the Commerce Department Inspector General's Office and how it in some ways conflicts with the testimony provided by the NTIA relating to how the projects that have received the BTOP funds are coming along. The NTIA tells us that for the most part these projects are moving along and meeting their markers for completing their projects by the end of September. At the same time the Inspector General's Office testimony implies that a considerable number of these projects are woefully behind in using the provided funding with only seven months left until the projects are meant to be completed.

In conclusion, I will reiterate that while I find the goals of the BTOP to be laudable I am very concerned that the program, in reality, has not done the best job possible in accomplishing its goals while at the same time living up the fiduciary responsibilities of the federal government.

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#### PREPARED STATEMENT OF HON. BRUCE L. BRALEY

I'm glad to see the Subcommittee tackling the issue of broadband expansion this early in the Congress, because there is an important link between broadband expansion and economic development. Providing access to broadband services around the

country, and especially in rural areas, increases the strength of local economies and improves the quality of life for American families. It's good for Congress to take a look at the effectiveness of some of our broadband investments, and, even though this hearing is focused on the Recovery Act, I hope we don't lose sight of the broader positive impacts of our ongoing investments in rural broadband, and the impact on families, businesses and communities in rural areas.

There are many Iowa telecom companies that have had a long and successful history with the USDA Rural Utilities Service. RUS has done a great job in my home state, under the leadership of our Rural Development Director Bill Menner, and there are thousands of Iowans who now have broadband service thanks to RUS programs. In fact, many of these investments in Iowa and in other rural states are only possible because of the public/private partnership between rural providers, RUS and the Universal Service Fund.

For example, OmniTel Communications in Floyd County, Iowa, serves a number of communities, including some very rural parts of North Iowa. Funds from the Recovery Act allowed them to replace old technology in some communities, and to build fiber to higher cost, remote communities that were previously too far out for broadband. Much of this area had no broadband, no video, and no other advanced services. This is an example of an investment working, where it needs to work, and thousands of Iowa families, businesses and students benefiting as a result.

Another successful RUS project was a \$7 million loan for Interstate Communications in Truro, south of Des Moines, to extend fiber to exchanges in Truro, St. Charles and St. Marys. The network expansion has helped the I-35 School District and has developed a space that can be used to recruit a call center, and the jobs to come with it, to St. Charles. This is a real example of economic development thanks to these types of investments in rural broadband.

All of that said, I recognize that not everywhere is a success story. And it's frustrating to see when loans or grants go where they aren't needed, or are used in ways that aren't targeted, or are duplicative. The focus should be on the customer—those families, students and businesses who are put at a competitive disadvantage because they don't happen to live in a place that has affordable access to this type of technology.

About 150,000 Iowans are still unserved. As we examine these needs, I'd be interested to hear about lessons learned that can be applied in the future. I would hope we all agree on some of the goals: serving those areas that need broadband, and doing it in a way that is using taxpayer money smartly and effectively. Thank you to the witnesses for being here today, and I look forward to today's testimony. Thank you Mr. Chairman.

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February 26, 2013

Chairman Greg Walden  
Subcommittee on Communications and Technology  
U.S. House Committee on Energy and Commerce

Ranking Member Anna Eshoo  
Subcommittee on Communications and Technology  
U.S. House Committee on Energy and Commerce

Dear Chairman Walden, Ranking Member Eshoo, Members of the Subcommittee on Communications and Technology:

The Schools, Health and Libraries Broadband Coalition (SHLB Coalition or “Shell-bee” Coalition) respectfully submits the following views in support of the Broadband Technology Opportunities Program (BTOP) and asks this statement to be entered into the record of the Subcommittee hearing entitled “Is the Broadband Stimulus Working?” scheduled for Wednesday, February 27, 2013.<sup>1</sup>

The SHLB Coalition is extremely pleased with the progress made by the BTOP program in bringing affordable, open, high-capacity broadband services to community anchor institutions across the country. Community anchor institutions are the “third leg of the stool” of an economically vibrant community (along with business and residential users).<sup>2</sup> Unfortunately,

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<sup>1</sup> The SHLB Coalition is a broad-based coalition consisting of representatives of schools, health care providers, libraries, private sector companies, for-profit and not-for-profit broadband providers, state and national research and education (R&E) networks, municipalities, philanthropic foundations, consumer organizations and others. All members of the SHLB Coalition share the common goal of bringing affordable, open, high-capacity broadband to community anchor institutions (CAIs) across the United States. For more information, visit [www.shlb.org](http://www.shlb.org).

<sup>2</sup> NTIA defines anchor institutions as “schools, libraries, medical and healthcare providers, public safety entities, community colleges and other institutions of higher education, and other community support organizations and entities.” [http://www.ntia.doc.gov/legacy/broadbandgrants/guidance/Glossary\\_01-29-10\\_v6.pdf](http://www.ntia.doc.gov/legacy/broadbandgrants/guidance/Glossary_01-29-10_v6.pdf).

the needs of community anchor institutions for high-capacity bandwidth are often overlooked or misunderstood. The BTOP program<sup>3</sup> is wisely designed to address the shortage of high-quality broadband services for community anchor institutions. Our members report that the BTOP program is extending Middle Mile broadband infrastructure where it is needed, helping consumers subscribe to broadband services, improving educational access to technology, reducing the cost and increasing the quality of medical care, and providing millions of people with high-speed Internet access who otherwise would not have it.<sup>4</sup>

**1. The Vast Majority of BTOP Projects Are Successfully Bringing High-Speed Internet Services to Underserved Communities.**

The SHLB Coalition appreciates that the Subcommittee is exercising its responsibility to oversee this federal program to ensure that it is meeting its objectives. Despite occasionally critical press accounts, the real “story” about the BTOP program has been its great success. Almost all the BTOP grants are successfully meeting the urgent broadband needs of anchor institutions and their communities. Of the 233 grants that were initially awarded, 221 projects are successfully nearing completion and bringing enormous benefits to 7,200 communities across the country.<sup>5</sup> The BTOP program is in the process of connecting 20,000 community anchor institutions with “future-proof” broadband capacity that will allow them to meet their demands for high-speed, high-quality Internet connections for decades. Members of Congress should be proud of the role they played in investing to improve America’s broadband infrastructure and for enhancing America’s economic growth through broadband technologies and services.

**2. The BTOP Infrastructure Grant Program Is An Essential Component of a Comprehensive National Strategy to Improve the Nation’s Broadband Capabilities.**

The BTOP Infrastructure grant program is one piece of a comprehensive broadband strategy enacted by Congress in 2009 to address the nation’s broadband deficiencies. This comprehensive approach provided funding for broadband adoption, for public computer centers, for state broadband mapping and planning, as well as for infrastructure deployment.

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<sup>3</sup> This statement focuses on the BTOP infrastructure grants, which are the focus of this hearing. It should be noted, however, that the BTOP program also provided funding for Sustainable Broadband Adoption projects, Public Computer Center projects, and broadband mapping and planning. By providing funding for such a wide variety of broadband projects, the BTOP program reflects a balanced and comprehensive approach to improving the nation’s broadband needs.

<sup>4</sup> Separate from the BTOP program, the Rural Utility Service (RUS) has funded \$3.5 billion in BIP projects that will bring broadband service to an additional 2.8 million households, reaching nearly 7 million people, 360,000 businesses, and 30,000 anchor institutions across more than 300,000 square miles.

<sup>5</sup> “NTIA Administrator Strickling Delivers Remarks at the Brookings Institution on Broadband Technology Opportunities Program,” Jan. 16, 2013, available at <http://www.ntia.doc.gov/press-release/2013/ntia-administrator-strickling-delivers-remarks-brookings-institution>.



The comprehensive package of programs accommodated the needs of many stakeholders in the broadband ecosystem, including incumbent private sector companies primarily focused on broadband adoption. In crafting this balanced approach, Congress also recognized that anchor institutions deserve improved broadband connections whether they are located in urban, suburban or rural areas of the country. Congress wisely decided that, if a hospital needs a fiber connection for life-saving telemedicine services, or if a school or library needs fiber to provide distance learning or job-training, it should not be denied such a connection because the surrounding residential consumers have DSL service.<sup>6</sup>

**3. The BTOP Program Wisely Recognizes that Community Anchor Institutions Require Much More Bandwidth Than the 3-4 Mbps Standard That Was Set for Residential Consumers.**

Schools, libraries, community colleges, health clinics, museums, public media, and other CAIs are “multi-user environments” that may have 10 or 50 or 200 or more computers accessing the Internet simultaneously and sharing the same broadband connection. A single individual computer user at one of these institutions may need a 1.5 Mbps bandwidth simply to run a distance learning class or a job-training video – if dozens of users are engaged in online learning, testing, researching, creating content and engaging in on-line collaboration at the same time, the CAI may need 100 Mbps or even more.

For this reason, the FCC’s National Broadband Plan Goal #4 said that community anchor institutions in every community in the country should have 1 Gigabit per second (Gbps) broadband service by the year 2020. This reflects the fact that anchor institutions’ demands for enhanced Internet access are growing by leaps and bounds. For instance, a recent report prepared by the Columbia Telecommunications Corp. of the broadband needs of community anchor institutions in Kansas found that “the need for bandwidth by schools, libraries, and hospitals is growing dramatically.”<sup>7</sup> K-12 schools in particular, are implementing “ubiquitous computing” solutions that encourage students and teachers to have laptops, smartphones, tablets and other mobile devices that they can use for on-line learning at all times of the day.

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<sup>6</sup> The statutory language in Section 6001 of the American Recovery and Reinvestment Act (ARRA) does not apply the terms “unserved” or “underserved” to the anchor institutions. These terms are used to describe service to “consumers residing” in unserved or underserved areas in Section 6001(b)(1) and (b)(2), but are not used in the provisions that govern the deployment of broadband to anchor institutions in sections (b)(3), (b)(4) or (b)(5). In other words, the statutory language allows anchor institutions in any geographic location of the country to receive funding for broadband connections, whether or not the surrounding residential customers have broadband service.

<sup>7</sup> Building the Broadband Future: The Communications Needs of Kansas Schools, Libraries, and Hospitals, January 31, 2013, available at <http://www.ctcnet.us/KansasCAINeeds.pdf>.

To give another example, the State Educational Technology Directors Association (SETDA) issued a report last year comparing the broadband available to schools with the broadband that they need for the future.<sup>8</sup> SETDA recommends that schools have external Internet connections to an Internet service provider of 100 Mbps for every 1,000 students and staff. These recommendations increase in the 2017–18 school year to 1 Gbps for every 1,000 students and teachers for external connections, and 10 Gbps for internal network connections, “in anticipation of future technologies not yet conceived.” Indeed, online assessments entail large numbers of students working online simultaneously—a function that simply cannot be accommodated, even in a small school, over copper-based Internet access.

A growing number of states are beginning to administer tests to their students online. Beginning in 2014, the 46 states and the District of Columbia that have adopted the Common Core State Standards will administer ‘next generation’ assessments almost exclusively online.<sup>7</sup> These tests will require the transmission of high-definition videos and sound files simultaneously, generating enormous demands for increased bandwidth.<sup>9</sup>

Several factors make community anchor institutions very different from residential users:

- First, the applications are increasingly bandwidth-intensive. Videoconferencing does not just involve a single low-resolution video; next generation videoconferencing involves simultaneous graphics and presentations, involving multiple locations at once.
- Second, K-12 schools and libraries are increasingly using “cloud computing,” which means that workstations need a strong enough broadband connection to access material in the cloud. Coupled with cloud computing is a growing trend of adopting a “thin client” approach which reduces the cost of the computer because information is stored on the network rather than in the computer itself.
- Third, public access computers used by students and library patrons often share the same broadband connection with teachers and staff of schools and libraries.
- Fourth, schools, libraries and public media centers typically offer free Wi-Fi, which is used by students, patrons and other consumers when they bring their own devices (smartphones, tablets, laptop computers, etc.). These devices place additional demands on the community anchor institutions’ broadband connection.
- Fifth, additional bandwidth must be provided for support and maintenance. All computers now have a regular cycle of software patches, virus scanner updates, and new feature additions. Because many community anchor institutions lack the human

<sup>8</sup> Fox, *et al.*, 2012, “The Broadband Imperative: Recommendations to Address K–12 Education Infrastructure Needs,” Washington D.C.: State Educational Technology Directors Association (SETDA). [http://www.setda.org/c/document\\_library/get\\_file?folderId=353&name=DLFE-1515.pdf](http://www.setda.org/c/document_library/get_file?folderId=353&name=DLFE-1515.pdf).

<sup>9</sup> Ian Quillen, “Bandwidth Demands Rise as Schools Move to Common Core,” *Education Week: Digital Directions*, October 17, 2012, Vol. 6. at 19-20. <http://www.edweek.org/dd/articles/2012/10/17/01bandwidth.h06.html>.

and financial resources to run caching servers and schedule updates to run during low demand, these support and maintenance needs must often be incorporated during normal business hours.

#### **4. Concerns About “Overbuilding” to Anchor Institutions Are Misplaced.**

There are several reasons why the concerns expressed about alleged “overbuilding” are misplaced:

##### **i. Community Anchor Institutions Need High-Quality Bandwidth.**

Some observers allege that the BTOP program has improperly sponsored “overbuilding” because the private sector networks already provide 3 or 4 Mbps service to anchor institutions. This is like saying students do not need computers because they already have calculators. The burgeoning use of broadband services by students, teachers and administrative staff at schools and libraries is simply overwhelming existing broadband capacity. Community anchor institutions must have very high-capacity and high-quality bandwidth to serve the educational, medical and information needs of their communities.

Smartphones, tablets, laptop computers and desktop computers are increasingly being integrated into classroom teaching and learning. Medical clinics need to transmit medical images and patient records to specialists simultaneously. Libraries provide digital literacy training to dozens of consumers to help promote broadband adoption. Some schools are seeing their bandwidth demands increasing by 200% in a single year. In all these cases, the community anchor institution will need substantially greater higher quality bandwidth than a residential user because they often serve dozens, or even hundreds, of Internet-connected devices simultaneously.

##### **ii. Community Anchor Institutions Need Affordable Rates.**

Even where fiber may be available in the community, it may not be accessible if the provider is charging rates that are beyond the community anchor institutions’ budget. Schools, libraries, medical clinics have suffered extreme budget reductions over the past few years, and they often cannot afford to pay the rates offered by the incumbent provider. BTOP grant recipients are often able to provide fiber-based services to community anchor institutions at rates that are substantially less than those of the incumbent provider.

iii. **Community Anchor Institutions Need the Fiber Connection at their Specific Location.**

Even if an incumbent provider may have a fiber optic cable deployed somewhere in the community, it may not serve the needs of the anchor institution unless there is a way to connect directly to that fiber. If, for instance, the existing fiber cable is located in the city business district, across town, or is inaccessible, providing funding to a new fiber deployment project may be the only way to serve that community anchor institution.

iv. **Community Anchor Institutions Sometimes Need Route Diversity.**

Some community anchor institutions, particularly those involved with public safety, need multiple fiber connections from a diversity of suppliers to ensure that they have adequate Internet connectivity in times of natural disaster, terrorist attacks or other emergency situations.

v. **Community Anchor institutions Need Higher-Quality Internet Connections than Residential.**

Because of their role in providing essential services to their communities, anchor institutions require higher-quality bandwidth than typically demanded by residential users. The BTOP program wisely funds networks that have extremely low latency and low packet-loss.

vi. **The 3 Mbps/4 Mbps Standard was Designed for Residential Consumers, not Community Anchor Institutions.**

Arguing that a community anchor institution is already “served” if it has 3 or 4 Mbps service not only misunderstands the typical broadband needs of anchor institutions, it also misunderstands the origins of the FCC’s standard of measurement. The FCC established the 3 Mbps (download) and 768 kbps (upload) as the minimum standard for residential consumers, not for CAIs. In 2011, the FCC stated:

Since the 3 Mbps/768 kbps benchmark was calculated with household usage in mind, it is likely that such a level of connectivity is insufficient for an entire school, which may have dozens, hundreds, or even thousands of students seeking to use the school’s broadband connection simultaneously.<sup>10</sup>

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<sup>10</sup> 2011 *Seventh Broadband Progress Report*, 26 FCC Rcd at 8036–37, para. 56.

**vii. Community Anchor Institutions Often Have Difficulty Obtaining the Bandwidth They Need.**

Despite their needs for high-capacity, high-quality bandwidth, community anchor institutions often have difficulty obtaining it. For instance, the FCC's 2011 survey of E-Rate institutions revealed as many as 80 percent of E-Rate recipients said that their broadband connections do not fully meet their needs, and 78 percent of recipients say that they need additional bandwidth.<sup>11</sup> The survey results suggest that E-Rate recipients face challenges when trying to provide students higher-bandwidth applications. Furthermore, when NTIA released the National Broadband Map, it found that community anchor institutions were "largely unserved" and that two-thirds of surveyed schools and 96% of libraries subscribe to speeds slower than 25 Mbps.<sup>12</sup>

Ever since the demand for broadband services began about a decade ago, the private sector has had an opportunity to fulfill the demands of community anchor institutions for higher quality bandwidth. Many private sector companies have done so, providing fiber and coaxial cable services to thousands of anchor institutions across the country. Unfortunately, in many other cases, the private sector decided that there was no business case to deploy high-capacity bandwidth. To its credit, the BTOP program has filled the gaps in broadband facilities to thousands of anchor institutions that were not otherwise able to obtain them.

**5. The BTOP Program is a Cost-Effective Investment in America's Future.**

The BTOP program is a cost-effective investment in improving America's broadband capabilities and economic growth. Rather than funding the build-out of Last Mile facilities to connect homes and businesses, the BTOP program focuses on providing Middle Mile capacity to anchor institutions and the community. This maximizes the number of communities that will benefit from having a high-capacity broadband "pipe" available. The fiber optic networks being deployed under the program are "scalable" (additional capacity can be provided simply by changing the electronics at either end of the fiber "pipe" or "lighting up" dark fiber strands), which means they will be able to accommodate growing Internet traffic needs for decades into the future.

Furthermore, the BTOP program also wisely includes an interconnection requirement that is designed to stimulate greater broadband deployment by the private sector and other providers. This open interconnection obligation is consistent with the "comprehensive community" approach to ensure that these public investments in broadband networks meet local needs and

<sup>11</sup> 2010 E-Rate Program and Broadband Usage Survey: Report, Federal Communications Commission, Wireline Competition Bureau, DA 10-2414, released Jan. 6, 2011, available at [www.fcc.gov](http://www.fcc.gov).

<sup>12</sup> <http://www.ntia.doc.gov/press-releases/2011/commerce%C3%A2%E2%82%AC%E2%84%A2s-ntia-unveils-national-broadband-map-and-new-broadband-adoption-survey>

interests. By encouraging and enabling community anchor institutions to share high-capacity broadband network assets, the program leverages local community investments to benefit more than one public purpose.

**6. The BTOP Program Addresses only a Fraction of the Need for More Bandwidth.**

According to some estimates there are 200,000 to 350,000 community anchor institutions<sup>13</sup> nationwide. It is estimated that the broadband networks built with BTOP funding will eventually connect 20,000 or more community anchor institutions.<sup>14</sup> While this is significant, this will address only about 10% of all the anchor institutions across the country. NTIA has already acknowledged that the program will only connect 10% of all K-12 schools in the country.<sup>15</sup> Thus, even after the current BTOP program completes its network build-out, the majority of communities across the country will still be in need of a high-capacity Middle Mile network serving the needs of community anchor institutions.

Respectfully Submitted,



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Executive Director  
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<sup>13</sup> The National Broadband Plan web site estimates 328,000 Community Anchor Institutions, although the number of libraries cited (22,165) is higher than the ALA estimates of slightly less than 17,000. See, <http://www.broadbandmap.gov/summarize/nationwide>. Internet2 estimates the number of anchor institutions at approximately 200,000. See, <http://fiatfoss.fcc.gov/ecfs/document/view?id=7021700239>.

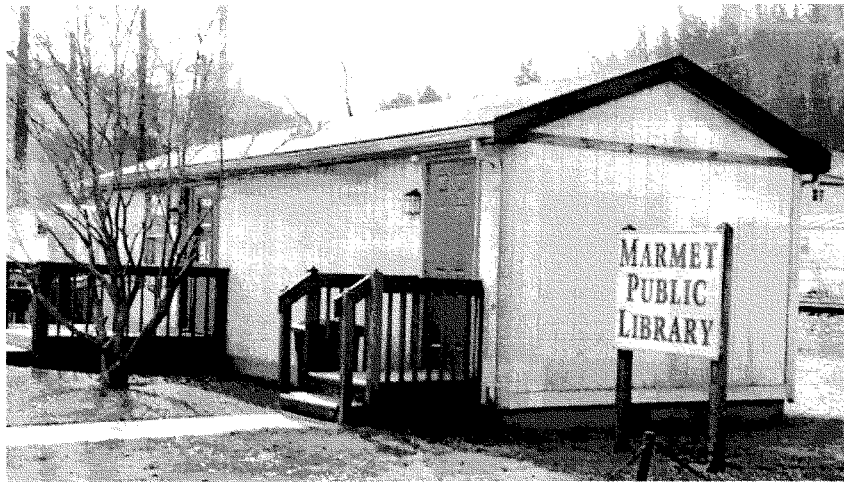
<sup>14</sup> <http://www.ntia.doc.gov/press-release/2013/ntia-administrator-strickling-delivers-remarks-brookings-institution>. ("Our grantees are in the process of connecting more than 20,000 community anchor institutions in 5,100 communities.")

<sup>15</sup> Id. ("For schools, our program will bring 100 megabits per second service to less than 10 percent of the nation's K-12 schools. Another 30 percent, it is estimated, already receive broadband service at the speeds recommended by the school technology directors association. That leaves around 60 percent of our schools still needing upgrades in order to deliver the quality of education that our students need in the 21<sup>st</sup> century.")

## Why a one-room West Virginia library runs a \$20,000 Cisco router

Cisco, West Virginia wasted \$5M on enterprise-class gear.

by Nate Anderson- Feb 25 2013, 6:40pm EST



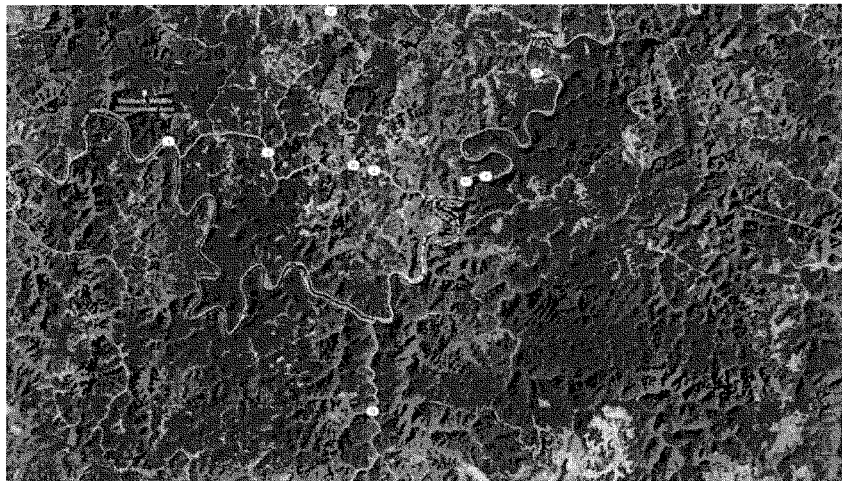
Yes, this library has a Cisco 3945 router.

Marmet, West Virginia is a town of 1,500 people living in a thin ribbon along the banks of the Kanawha River just below Charleston. The town's public library is only open Thursdays, Fridays, and Saturdays. It's housed in a small building the size of a trailer, which the state of West Virginia describes as an "extremely small facility with only one Internet connection." Which is why it's such a surprise to learn the Marmet Public Library runs this connection through a \$15,000 to \$20,000 Cisco 3945 router intended for "mid-size to large deployments," according to Cisco.

In an absolutely scathing report (PDF) just released by the state's legislative auditor, West Virginia officials are accused of overspending at least \$5 million of federal money on such routers, installed indiscriminately in both large institutions and one-room libraries across the state. The routers were purchased without ever asking the state's libraries, cops, and schools what they needed. And when distributed, the expensive routers were passed out without much apparent care. The small town of Clay received seven of them to serve a total population of 491 people... and all seven routers were installed within only .44 miles of each other at a total cost of more than \$100,000.

In total, \$24 million was spent on the routers through a not-very-open bidding process under which non-Cisco router manufacturers such as Juniper and Alcatel-Lucent were not "given notice or any opportunity to bid." As for Cisco, which helped put the massive package together, the legislative auditor concluded that the company "had a moral responsibility to propose a plan which reasonably complied with Cisco's own engineering standards" but that instead "Cisco representatives showed a wanton indifference to the interests of the public in recommending using \$24 million of public funds to purchase 1,164 Cisco model 3945 branch routers."

In other words, the project has been a stellar example of what not to do and how not to do it.



Clay, WV, a tiny outpost among the mountains, has 7 Cisco 3945 routers within .44 miles of each other.

### **A million here, a million there**

The routers in question were purchased as part of a much larger grant from the Broadband Technology Opportunities Program (BTOP), which passed out several billion dollars to help upgrade broadband networks across America as part of President Obama's initial stimulus package in 2009. West Virginia's cash was meant to wire up the many "community anchor institutions" such as libraries, schools, police, and hospitals across the state with Internet access delivered over fiber-optic lines. As part of the project, the state also had to purchase some sort of router for each institution. Instead of "right-sizing" the routers for their intended destinations, the state group of officials charged with implementing the grant decided they would make things easy by purchasing the exact same router and installing it everywhere, even in the most rural locations they planned to reach.



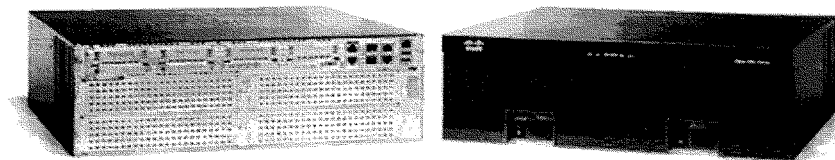
This became controversial in 2012 when local newspapers brought the issue to light and questioned whether the state had not just been boondoggled. The *Charleston Gazette* noted an official in the state's Office of Technology had actually e-mailed his colleagues to say "this equipment may be grossly oversized for several of the facilities in which it is currently slated to be installed" but that the warning was not heeded. The issue quickly escalated to Congress, where officials from the executive branch were grilled about the West Virginia situation and whether the federal government had exercised enough oversight of the project.

The state of West Virginia has now weighed in with its own report on the routers, and it makes for mind-boggling reading. Consider, for instance, how routers were purchased for the state police. When the West Virginia State Police purchased their own routers a few years earlier, they chose Cisco model 2xxx machines at a cost of only \$5,000 or so apiece, with only a single Cisco 3xxx model purchased for the largest deployment. In 2010, when the state received its grant money, no one asked the State Police what they wanted or needed; indeed, the police were "never contacted" at all by the Grant Implementation Team. (This was a widespread problem; the report notes no capacity or user needs surveys were ever done before the money was spent). Instead, the team simply ordered 77 Cisco 3945 routers at a cost of \$20,661 apiece—that's one \$20,000 router for every 13.7 state police employees—and sent them off to the police. (Each router can handle several hundred concurrent users.)

Had the Grant Implementation Team replaced 70 of these routers with the cheaper model, the state could have saved \$1.4 million. And that's assuming that the routers were even needed to begin with—in many cases, they were not.

Such cost savings could have been found all over the state. Nearly all of the West Virginia's 172 libraries could have saved \$16,000 per router, saving the state \$2.8 million more. Many of the state's public schools are likewise small institutions that could have easily used smaller routers and saved another \$3.68 million. In total, another \$5+ million could have been spent on tech that was actually useful for the state's residents.

What was the grant team thinking?



Cisco's 3900 series of routers.  
Cisco

## How it happened

The state Office of Technology contends the massive routers might save the state money in the long run by supporting cheap VoIP systems instead of standard telephone lines. But the legislative auditor notes that each of the 3945 routers can handle 700 to 1,200 VoIP lines, which means that the 1,164 routers purchased by the state could support up to 1.39 million lines. As the auditor's report dryly notes, only a single library in the entire state has more than eight phone lines; most have one or two. (None use a VoIP system anyway.)

Ironically, the routers can't even be used for VoIP in some key cases. The state police already have a VoIP-based phone system, but the new 3945 series routers did not come with "the appropriate Cisco VoIP modules" to work with the system. The state now has to spend another \$84,768 to purchase those modules; without them, the state police can't use the routers, only two of which are actually installed and operating. (For those keeping score at home, this means that 75 \$20,000 routers are depreciating in a state police warehouse somewhere in West Virginia.)

The report also lays a good deal of blame on Cisco and on the company's engineer for the project. The engineer told the auditor he was simply following the state's instructions, which required him to spec out a proposal using only routers with "internal dual power supplies"—hence the 3945s. As the auditor dug into the story, demanding to know when this exact request was made, the Cisco engineer said it originated with the state Department of Education. But the engineer was "unable to provide the legislative auditor with any e-mails or other documentation" to this effect.

The auditor began digging, speaking to many people in West Virginia state government who had been involved with the project. The Department of Education told him that it "did not request or require that the routers for the state's schools have internal dual power supplies. Education would not have made this requirement because unless a school has two power sources the feature of dual power supplies would have no use." A network engineer for the Department of Education confirmed that he had not requested such a feature.

So the auditor went to the state's Office of Technology, which was also involved in the project. An employee there said that dual power supplies had come up, but only for "24/7/365 locations such as regional jails and DHHR state hospitals." VoIP support was discussed "but not required," he added, and he concluded by saying, "It was never implied to put each feature in all routers."

Cisco defended itself by saying it had drawn up a complete spreadsheet of its proposed bid, and the state had reviewed it. If it didn't need or want these features, or if it thought the routers were too large, it should have said so.

The legislative auditor was also apparently quite peeved by this entire investigation. The auditor's office sent off a fairly testy e-mail to Cisco noting that the 3945 routers were not appropriate for most

West Virginia deployments—even according to Cisco's own literature. "I would appreciate an explanation as to why you believe the 3945 routers are not oversized and misconfigured for hundreds of locations," the auditor concluded, "and, thus, a significant over expenditure of millions of dollars for Cisco equipment." The Cisco rep responded the state had reviewed his spreadsheets and not objected and that the 3945s were large enough to allow for future expansion.

The auditor then asked the legislature's own tech team what they used. The West Virginia legislature at peak times can have over 600 internal users and numerous guests accessing "multiple Web servers, up to eight simultaneous live audio webcasts, multiple SQL servers, and multiple Google search appliances located in the Legislature's server farms." Despite all this, the legislature doesn't even use a router but instead runs a cheaper Cisco switch... and it has never exceeded capacity.

The auditor asked one of the legislature's network specialists if he would even want a 3945 router; the man said no because "it greatly exceeds the Legislature's needs." And yet somehow more than 1,000 of them had been sent to the very furthest, most rural corners of the state.

## Debarment

The report finds plenty of blame to go around. The ultimate cause of the fiasco, it says, was the fact the grant implementers did not conduct a capacity or use study before spending \$24 million. They also used a "legally unauthorized purchasing process" to buy the routers, which resulted in only modest competition for the bid. Finally, Cisco is accused of knowingly selling the state larger routers than it needed and of showing a "wanton indifference to the interests of the public."

Getting any of the money back seems unlikely at this point, but the legislative auditor does have one solid recommendation to make. The State Purchasing division should determine whether Cisco's actions in this matter fall afoul of section 5A-3-33d of the West Virginia Code, and whether the company should be barred from bidding on future projects.

Cisco tells Ars "the criticism of the State is misplaced and fails to recognize the forward-looking nature of their vision. The positive impact of broadband infrastructure on education, job creation, and economic development is well established, and we are committed to working with the State to realize these benefits for the people of West Virginia now and into the future."

As for that \$5+ million the state could have saved, it would have paid for 104 additional miles of fiber.



February 26, 2013

Chairman Greg Walden  
Subcommittee on Communications and Technology  
Committee on Energy and Commerce

Ranking Member Anna Eshoo  
Subcommittee on Communications and Technology  
Committee on Energy and Commerce

**RE: Is the Broadband Stimulus Working?**

Dear Chairman Walden, Ranking Member Eshoo, Members of the Subcommittee on Communications and Technology:

The National Association of Telecommunications Officers and Advisors (NATOA)<sup>1</sup> has long advocated for increased broadband deployment and adoption. We believe that increased access to affordable, high-speed broadband is essential to spur economic growth and development, improve the educational opportunities and experiences for our children, and provide badly needed telemedicine services to all Americans. But as we have seen, the private sector is not always willing or able to provide these services to all parts of our country due to financial or other logistical considerations. This is why our association has repeatedly expressed our support for the BTOP and BIP programs.

One of the BTOP projects being looked at by this Subcommittee at its scheduled February 27, 2013 hearing is the Colorado-based EAGLE-Net project. Attached is an October 23, 2012 letter NATOA, along with the Benton Foundation, sent to Assistant Secretary Larry Strickling in support of this project. What we said then is just as relevant today – we urge that the aggressive public relations campaign waged against this and other BTOP and BIP projects not serve to diminish the important job-creating, competition-enhancing accomplishments of these vital programs that are bringing advanced communications services to our schools, libraries and other anchor institutions across our nation.

Sincerely,

Steve Traylor  
Executive Director

<sup>1</sup> NATOA is the national association that represents the communications needs and interests of local governments, and those who advise local governments. NATOA's membership includes local government officials and staff members from across the nation whose responsibility is to advise and implement telecommunications policy for the nation's local governments. These responsibilities range from cable franchising, rights-of-way management and government access programming to information technologies and Institutional Network (INet) planning and management.



October 23, 2012

Lawrence E. Strickling  
 Assistant Secretary for Communications and Information  
 Administrator, National Telecommunications and Information Administration (NTIA)  
 U.S. Department of Commerce  
 1401 Constitution Ave., NW  
 Washington, D.C. 20230-0002

Dear Assistant Secretary Strickling:

We write in regard to the EAGLE-Net project—the important middle-mile statewide Colorado fiber initiative that was funded by NTIA under BTOP. The EAGLE -Net program and model are exemplary, and exactly the kind of project that our members and stakeholders support as furthering the public interest in communications. EAGLE-Net plans to create a statewide fiber infrastructure with a combination of newly constructed fiber optics and leased fiber (where such fiber is available on the market).

EAGLE-Net's network will reach every school district in Colorado and, in partnership with local providers, will have the potential to reach every school and library in Colorado. Its planned infrastructure reaches into the most rural, mountainous, hard-to-reach parts of the state. As a result of these partnerships and the new fiber, schools and libraries in Colorado will have access to high-bandwidth fiber-based services at prices that reflect that the network is connected to the Internet backbone, removing the pricing disparity so often faced by rural areas relative to urban and suburban areas because of their distance from an Internet point of presence, such as that in Denver.

At the same time as delivering this tremendous capacity to community anchor institutions, EAGLE-Net will provide non-discriminatory, open access to any and all qualified private sector providers who choose to use its infrastructure—thus bridging, for the commercial sector, that same divide that currently exists between suburban and urban areas on the one hand, and rural areas on the other. The emergence of a fiber-based competitive market on those routes will open up rural markets and enable cost-effective access to those markets for private entities that wish to serve residential and small business customers.

We understand that there has been significant opposition to this new fiber, and to the potential for competition in underserved rural areas. We also understand that a range of allegations have been made about the management of the project. In this regard, we have great confidence that NTIA—which has done an exemplary job of creating and overseeing BTOP—has more than adequately overseen the EAGLE-Net project. And for that reason, we are quite dubious about wild allegations made by self-interested parties that oppose EAGLE-Net.

National Association of Telecommunications Officers and Advisors

3213 Duke Street, 4530 Alexandria, Virginia, 22314 (703) 519-8035, (703) 997-7050 • FAX: www.natola.org

October 23, 2013

Page 2

We certainly hope that the aggressive public relations campaign that has been mounted by EAGLE-Net's opponents does not serve to put this important job-creating, competition-enhancing network at risk—thereby depriving the school children, library users, and rural residents of Colorado of such a significant investment in their future.

We note, too, that if this opposition to EAGLE-Net is allowed to succeed, the precedent that would be set could have the effect of putting at risk similar initiatives throughout the country (funded by BTOP or otherwise) by inviting similar anti-competition campaigns.

We thank you and your staff for the efforts made over the past few years to use BTOP to enable the potential of broadband in rural America.

Sincerely,



Steve Traylor  
Executive Director, NATOA



Charles Benton  
Chairman, Benton Foundation

cc: Governor John Hickenlooper  
Senator Mark Udall  
Senator Michael Bennet  
Representative Diana DeGette  
Representative Jared Polis  
Representative Scott Tipton  
Representative Cory Gardner  
Representative Doug Lamborn  
Representative Mike Coffman  
Representative Ed Perlmutter

## The New York Times

February 11, 2013

### Waste Is Seen in Program to Give Internet Access to Rural U.S.

By EDWARD WYATT

AGATE, Colo. — The bank is gone from this once-thriving ranching and farming community on Colorado's windblown eastern plain, as are the dairies, the hotel and the Union Pacific depot. The post office remains, at the corner of Main Street and First Avenue, the intersection of the town's two paved streets.

There is not much that is modern in Agate, except at the 11-student elementary school, which has three high-speed fiber optic Internet connections — more than nearly every school in Denver, 70 miles to the west, and, for that matter, just about any school in the country. And it is something, the school says, that it doesn't need.

The latest chapter in Agate's recent broadband boom came thanks to the \$4 billion Broadband Technology Opportunities Program, part of the Obama administration's 2009 economic stimulus effort. The aim of the grant program is to extend high-speed Internet access to parts of the country that had little or none of it because private companies said it was too expensive to build.

"These investments have the potential to reshape our nation," said Lawrence E. Strickling, an assistant commerce secretary and the administrator of the National Telecommunications and Information Administration, which runs the federal grant program. "We know that Americans who don't have access to the Internet are increasingly cut off from job opportunities, education resources, health care information and even government services."

But local phone companies have complained about waste or unfair competition, like using some of the grants to build fiber networks where they already exist — including, in Colorado, in the easily accessible eastern plains that include Agate — rather than where they are most needed, in rural mountain towns.

Nationally, \$594 million in spending has been temporarily or permanently halted, 14 percent of the overall program, and the Commerce Department's inspector general has raised questions about the program's ability to adequately monitor spending of the more than 230 grants.

In Illinois, for example, a \$12 million broadband grant was sanctioned when a subcontractor was caught routing fiber optic cable through neighborhoods where its project engineers lived. A \$39 million grant in

Arizona was suspended over questionable expenditures on travel, transactions that appeared to involve conflicts of interest and other unbudgeted activities.

Broadband grants in Alabama and Louisiana, totaling \$140 million, were terminated over undocumented expenditures and failure to adhere to construction plans and schedules. Four other grants, worth \$42 million, returned the money before even getting off the ground.

Here in Agate, two high-speed connections already existed in the school, which had been teaching students from kindergarten through 12th grade. Now the oldest students are fifth graders, and the school says the high-speed fiber optic service is of little use and beyond its means. (It has requested bids for a slower-speed connection to replace it.)

Agate's third fiber optic connection was among the projects built with funds from a \$100 million grant to an education consortium called Eagle-Net. The grant has been suspended since December, when officials discovered that Eagle-Net had changed nearly all of its plans for wiring the state. Four months earlier, Eagle-Net was warned about questionable spending and lack of budgetary controls, according to Commerce Department documents.

Congress is preparing to take a closer look at the overall program. Representative Cory Gardner, a Colorado Republican whose district includes Agate, said in an interview Monday that the House subcommittee overseeing the grant program was preparing for a hearing into possible program waste.

Eagle-Net says it has tried to work with the rural telecom companies. Gretchen Dirks, a spokeswoman, said several of the rural telephone companies now raising objections supported Eagle-Net's plans in the beginning.

Ms. Dirks also said Eagle-Net had not been avoiding mountain areas. "The more difficult-to-reach areas of Colorado, due to diverse geographic and weather conditions, have been slated for completion in 2013 since the very beginning of the funding process," she said.

Obama administration officials say that the problem with certain grants, including Eagle-Net's, are being addressed. But it is misleading, they say, to focus on the 14 grants that have been suspended or terminated when most have been successful. (Five of the programs whose grants were suspended are back up and running.)

Among the more promising, Mr. Strickling said, were a \$102 million program in Arkansas that has paid for high-speed video and data links between rural doctors' offices and the state university's medical center



in Little Rock, and a \$33 million grant to build a 1,000-mile fiber loop linking communities in rural northern Georgia to Atlanta.

Rural areas certainly suffer a lack of high-speed Internet access. While about 88 percent of urban households in the United States have access to high-speed cable Internet service, only 40 percent of rural households do, according to the Federal Communications Commission and the Commerce Department.

About 20 percent of United States households have access to fiber optic Internet service, the fastest connection, compared with 86 percent in Japan and two-thirds in South Korea. But the Eagle-Net experience in Colorado demonstrates that in the haste to get broadband everywhere, some grant planners appeared not to have taken into account the current condition of infrastructure.

Among the earliest fiber optic connections that Eagle-Net turned on, for example, was not in a remote, unserved area but in the Cherry Creek School District, located in a wealthy Denver suburb.

Ben Startzer, chief information officer for Cherry Creek schools, said in an interview that before Eagle-Net came to visit, the district already had a fiber optic connection that operated at 300 megabits per second — 100 times faster than the average residential broadband speed. The schools didn't need the new network, Mr. Startzer said, but it allowed the district to nearly double its speed while increasing the network's backup redundancy.

A two-hour drive to the east, in Flagler, Colo., the 180-student public school, which serves prekindergarten through 12th grade, also recently got a third fiber optic connection, thanks to Eagle-Net, whose cable was installed underground within a few feet of fiber optic cables already laid by Eastern Slope Rural Telephone.

Eastern Slope's network was financed in part by an \$18 million loan from the Department of Agriculture's Rural Utilities Service — which, unlike Eagle-Net's grant, has to be repaid.

"Here you have a quasi-governmental agency that has free federal money and is spending it to provide the exact same service that is already there, competing against companies that are borrowing federally backed money," said Senator Greg Brophy, a Colorado state legislator whose district covers a large swath of rural northeastern Colorado.

The types of local government institutions that Eagle-Net is focusing on are often the largest customers of the rural telecommunications companies, said Kevin Felty, president of the Colorado Telecommunications Association and president of Plains Cooperative Telephone.

Revenue from those larger entities supports affordable residential service in the area, he said.

Ms. Dirks of Eagle-Net said that if local institutions were happy with the service they already had, they would not have welcomed a new provider.

One of those enthusiastic about Eagle-Net is Brainstorm Internet, of Durango, Colo. Russ Elliott, president of Brainstorm, said connecting to Eagle-Net had allowed his company to offer substantially faster service that costs less to provide than before. "They came in and said 'What can we do to help you get to these rural communities?' " he said.

In Agate, however, Daniel Hollembeak, general manager of the Agate Mutual Telephone, whose headquarters are in a mobile home across a dirt lot from the school, said Eagle-Net's wiring of schools and other government institutions would drive companies like his further toward the brink.

"We employ local people," he said. "If Eagle-Net takes away these institutions, it will have a big negative effect on the company."

**COLORADO BOCES ASSOCIATION**

January 16, 2013

Mr. Larry Strickling  
 Assistant Secretary for Communications and Information  
 National Telecommunications and Information Administration (NTIA)  
 1401 Constitution Avenue, Room 4898  
 Washington, D. C. 20230

Dear Mr. Strickling,

This letter is written by the Colorado BOCES Association to strongly support the Eagle-Net Alliance and their implementation of the NTIA Grant in Colorado. The Eagle-Net Alliance work is essential to all school districts (especially rural school districts) and BOCES in Colorado.

The Colorado BOCES Association and the nineteen (19) BOCES in Colorado are comprised of 169 of the 178 school districts in Colorado as members. All of these 169 school districts and nineteen (19) BOCES strongly support the Eagle-Net Alliance for the following reasons.

Eagle-Net is:

- Building a statewide middle-mile high-speed broadband network that will connect all school districts and BOCES in over 170 Colorado communities.
- Offers local carriers a choice for middle-mile network access at a lower cost.
- Creating a robust and redundant system that compliments and enhances existing infrastructure and is governed by representatives from across the state on the Eagle-Net Board (a public-private alliance board).

Under the existing system without the Eagle-Net middle-mile broadband network, school districts and BOCES in many parts of the state have very limited access to affordable and reliable increased bandwidth. This increased affordable and reliable bandwidth is necessary for students to participate in distance learning programs, online learning programs, etc. Several BOCES currently provide distance learning and online programs for their member districts and desperately need more bandwidth. This Eagle-Net Alliance program will provide a much needed service and reduce the digital divide between rural, suburban and urban communities and benefits all students in the Colorado K-12 education system. An individual student's zip code in Colorado currently determines the access to information and the quality of education received. This Eagle-Net Alliance Network will help level the playing field for students and schools that are currently underserved with inadequate broadband capacity.

In my 40 plus years in education in Colorado, historically as a school administrator in rural Colorado, I have personally experienced situations where a local telephone company provider charged school districts more to offset costs to their other consumers. Also, I have recently become aware of a situation where students in a rural school in Colorado were unable to take a college entrance test at their school due to lack of broadband capacity and, therefore, the students had to travel a significant distance to the college to complete the entrance exam. The Eagle-Net Alliance program will provide fiber with increased broadband capacity to this school. This increased broadband capacity was not historically

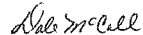
Page 2

provided by the local telephone company as it was not feasible as a business venture and thus, the school would have remained vastly underserved for the foreseeable future without the Eagle-Net Project.

In addition, I want to point out that Eagle-Net is a choice and local providers, schools, etc. are not required to buy through Eagle-Net. Each local provider makes that choice.

Again, The Colorado BOCES Association strongly supports the Eagle-Net Alliance Project. It is essential to all school districts and BOCES throughout Colorado (especially rural Colorado) to allow students the appropriate learning opportunities.

Sincerely,



Dale McCall, Executive Director  
Colorado BOCES Association  
11274 Weld County Road #17  
Longmont, CO 80504  
Email: [dale.mccall@wildblue.net](mailto:dale.mccall@wildblue.net)  
Cell: 970-381-0720  
Home: 970-785-2064  
Fax: 970-785-6324  
Website: [www.coloradoboces.org](http://www.coloradoboces.org)

cc: Colorado's Federal Legislative Delegation



4101 South Bannock Street • Englewood, CO 80110-4606  
Phone 303.762.8762 • Fax 303.762.8697 • www.co-case.org

October 8, 2012

**Letter of Support for EAGLE-Net, from CASE and CASSA**

EAGLE-Net is a lifeline being developed in Colorado that will be the first of its kind network. It will allow remote and rural areas to compete, and from the perspective of education leaders, is going to allow 21<sup>st</sup> Century learning to take place. The 170 communities being connected will allow equal access to bandwidth at a competitive rate. Anymore, broadband is not a "nice to have," it is a "need to have" in order to keep our communities vital and to ensure the free flow of knowledge.

The grant and governance of the project is something that we think is moving Colorado in the right direction. For schools, this additional broadband capacity allows students more equal access to the bandwidth needed to learn remotely and, ultimately, to take online tests with quick turnaround. For example, a rural student who currently has minimal access to high-speed Internet could use EAGLE-Net's network for a faster, reliable connection, resulting in quicker test response time. Additionally, as Colorado educators work to instill 21<sup>st</sup> Century skills in students, delivered in an online or blended environment, they need the advanced connectivity.

When you look at coursework offered in a large suburban high school and compare it to rural Colorado, it is clear that abundant bandwidth is critical for delivering quality distance learning programs to schools. As the state moves to embrace new content standards, assessments, and evaluation systems that require significant professional learning, we must seek to support videoconferencing, online interactive tools, and other training aids.

It is only by working together that local, state, and federal government entities can share resources and information over a secure and cost-effective network. This includes shared software and cloud services, training classes, and connecting public safety systems and other resources that may be too costly for some of the smaller entities to afford on their own. Additional bandwidth is the only way to truly connect services and economic development opportunities to smaller communities.

Reliability is the key. EAGLE-Net offers a redundant pathway into communities who may not currently have one. Redundancy helps maintain a healthy and consistent broadband connection into and out of a community.

I just want to thank you for your continued support of this critical program for the future of Colorado's youth and the economic well-being of our great state.

Sincerely,

Bruce H. Caughey  
Executive Director

**CASE Departments**

CAES Colorado Association of Educational Specialists • CAESP Colorado Association of Elementary School Principals • CALET Colorado Association of Leaders in Educational Technology  
CASPA Colorado Association of School Personnel Administrators • CASSA Colorado Association of Superintendents and Senior Administrators  
CASSP Colorado Association of Secondary School Principals • DBO Department of Business Officials



**Colorado Association of School Boards**  
 1200 Grant Street  
 Denver, Colorado 80203-2306  
 Phone: (303) 832-1000 • (800) 530-8430  
 Fax: (303) 832-1086  
[www.casb.org](http://www.casb.org)

November 2, 2012

*Via Email: [esloan@ntia.doc.gov](mailto:esloan@ntia.doc.gov)*

Elaine Sloan  
 Federal Program Officer  
 National Telecommunications and Information Administration  
 1401 Constitution Ave., Room 4898  
 Washington, D.C. 20230

Dear Ms. Sloan:

In brief introduction, I am the Executive Director of the Colorado Association of School Boards (CASB). CASB's members are nearly every one of the 178 locally elected school boards in Colorado. CASB and its local boards strongly support EAGLE-Net. EAGLE-Net is building the broadband capacity our schools need to deliver a 21<sup>st</sup> century curriculum to our students at an affordable cost.

Today's students come to school to learn what they need to know to thrive in tomorrow's society. So in addition to civics, the three R's, the arts, history, and science, public schools must help students learn to use technology. That technology, in turn, can help students learn civics, the three R's, the arts, history, and science better than ever before. Whether a child grows up on a busy city street, in a quiet neighborhood, or along a dusty, slow dirt road, the internet access provided at her public school is essential to her academic success and must be consistently available, reliable, and fast.

Yet in much of Colorado, we have failed to provide adequate internet service to public schools and other essential public entities. As a result, many students do not learn to navigate the rich landscape of today's best source of information. As students train to compete in a global economy, access to the full range of services and opportunities available through reliable, high-speed broadband internet is not a matter of luxury; it's a matter of urgent necessity. And our state's record of supplying broadband to some students, but not to all, is a matter of inequity.

EAGLE-Net's work will level the playing field for Colorado students by connecting communities across the state to the same quality of broadband access enjoyed by the Front Range. Some will receive broadband services for the first time; others will receive enhancements to existing infrastructure, ensuring network reliability. Colorado and each and every one of its 178 school districts will benefit.

EAGLE-Net's grant work began in 2010, and the grant funding runs out in August of 2013. With less than a year remaining, some voices are calling for a halt to EAGLE-Net's project in the interests of competing utility companies, companies that have historically failed to offer affordable broadband to local public entities. Students cannot wait for market conditions to permit companies to offer schools affordable rates. The high dollar value of this generous grant attests to high costs associated with building the broadband infrastructure Colorado's schools need. Facing shrinking budgets and rising technology demands, neither the state of Colorado nor school districts can afford the deals offered by the private sector. The NTIA grant allows EAGLE-Net to offer a deal schools can afford now. EAGLE-Net's dedicated leaders and staff, individuals hailing from localities across Colorado, work hard to deliver what they promise.

Wiring an entire mountainous state in three years is an ambitious, complex project. Decisions about logistics, order, and scheduling will naturally raise questions, but as local community meetings with EAGLE-Net reveal, such questions have reasonable answers. EAGLE-Net, bound by its grant terms, is well monitored by both its knowledgeable Board of Directors and its sophisticated grant providers. Moreover, EAGLE-Net is a transparent organization with a comprehensive website detailing its current work and network plan, providing quarterly progress reports, and noting its agreements with local service providers regarding use of its middle-mile connections. There is no evidence EAGLE-Net has departed from the primary purpose of its work, and no good will come from stopping this badly needed work to spend months hunting for a reason to cease operations.

As CASB knows well, and as the growing stack of support letters demonstrates, EAGLE-Net has already succeeded in many unserved and underserved areas. This is no time to stop the work. With less than a third of the grant period remaining, EAGLE-Net is racing the clock to serve the remaining schools, libraries, and other public entities still hoping this program will open the gateway of opportunity for their communities. These communities need this program, this state needs this program, and this program needs support.

EAGLE-Net has CASB's and its members' ongoing support. I hope EAGLE-Net and the Colorado students it serves can count on your support, as well.

Sincerely,



Kenneth DeLay  
Executive Director

Cc: Randy Zila, CEO, EAGLE-Net Alliance (Via email: [randy.zila@co-eaglenet.net](mailto:randy.zila@co-eaglenet.net))

**From:** Scott Thomassen [scott@dascomp.com]  
**Sent:** Thursday, October 11, 2012 4:44 PM  
**To:** Larry Strickling; Anthony G. Wilhelm; Laura Dodson; Elaine Sloan;  
[sarah\\_hughes@bennet.senate.gov](mailto:sarah_hughes@bennet.senate.gov); [jennifer\\_rokala@markudall.senate.gov](mailto:jennifer_rokala@markudall.senate.gov);  
[mike.bennett@mail.house.gov](mailto:mike.bennett@mail.house.gov); [morris.price@mail.house.gov](mailto:morris.price@mail.house.gov); [joe.rall@mail.house.gov](mailto:joe.rall@mail.house.gov);  
[andy.schultheiss@mail.house.gov](mailto:andy.schultheiss@mail.house.gov); [andy.merritt@mail.house.gov](mailto:andy.merritt@mail.house.gov); [danielle.radovich@mail.house.gov](mailto:danielle.radovich@mail.house.gov);  
[nicholas.zupancic@mail.house.gov](mailto:nicholas.zupancic@mail.house.gov); [randy.zila@co-eaglenet.net](mailto:randy.zila@co-eaglenet.net); [patrick.swonger@co-eaglenet.net](mailto:patrick.swonger@co-eaglenet.net)  
**Subject:** Support for Eagle-Net and other broadband initiatives.

To all concerned,

As members of the Delta County Local Technology Planning Team we believe that support for any initiative that brings or improves broadband internet service to the rural areas of the State of Colorado are very important to our economic future.

The effort Eagle-Net is making within our state to put significant new infrastructure in place for the benefit of education, is just such an initiative. We hope that Eagle-Net lines will carry important new capabilities for high speed internet access to many of the rural educational and anchor institutions who need them most. As these lines are built, they may also provide new paths for startup companies to provide internet and telecom services, competitive with what is available in larger cities. In our rural areas these services are desperately needed for our economic future.

Whether it is by public or private effort, the Delta County Local Technology Planning Team is in support of any legitimate effort to improve the backbone of internet infrastructure. We cannot sustain our communities with the completely inadequate service we currently suffer. We encourage anyone concerned to consider what's best for all of the communities that would benefit the most from better service, rather than what's best those few who believe they will continue to benefit from the lack of competition in their markets.

Thank you,  
Members of the Delta County Local Technology Planning Team

Glen Black  
City of Delta

Anthony Cooper  
Delta County School District 51

Bruce Hovde  
Delta County Commissioner

John Latta  
Information Technology  
Delta County

Scott Thomassen  
Businessman and concerned citizen  
Classic Computers of Delta



Tom Huerkamp  
Businessman and concerned citizen  
President  
ProSpace Interiors of Delta

Kirby Clock  
District Manager  
Delta County Ambulance District

Mary Cooper  
Delta City Counsel

Sarah Carlquist  
Director  
Delta County Economic Development

Gyneepher Thomassen  
President  
Delta Area Chamber of Commerce

**From:** Hammond, Robert [[mailto:hammond\\_r@cde.state.co.us](mailto:hammond_r@cde.state.co.us)]  
**Sent:** Friday, October 05, 2012 2:52 PM  
**To:** Anthony G. Wilhelm  
**Subject:** Colorado EAGLE-Net Alliance

Dear Mr. Wilhelm,

I am writing to make you aware of the EAGLE-Net Alliance in Colorado, a critical organization for Colorado's future. As Colorado Commissioner of Education I have worked first hand with EAGLE-Net Alliance and believe in and support their work. We supported their original grant application and continue to support their work as they build their infrastructure.

EAGLE-Net is building a first-of-its-kind statewide middle-mile high-speed broadband network that will connect to about 170 Colorado communities, offering local carriers a choice for middle mile network access at a lower cost and greater access for their customers. EAGLE-Net is currently working to create a robust and redundant system that complements and enhances existing infrastructure. Having a redundant network is not a luxury, it is necessary to ensure network reliability. Especially given the increasing data demands on our schools and districts across the state.

We strongly believe this work will have a positive impact on quality of life, increased access to educational support, and student achievement across Colorado. For schools, additional broadband capacity allows students more equal access to the bandwidth needed to take timed, online tests. For example, a rural student who currently has minimal access to high speed Internet could use EAGLE-Net's network for a faster, reliable connection, resulting in quicker test response time. Abundant bandwidth is also critical for delivering distance learning programs to schools across Colorado to support videoconferencing, online interactive tools, and blended and online learning options. As districts must deal with diminishing resources, a reliance on alternative instructional models is critical.

The project always envisioned that local, state and federal government entities could share resources and information over a secure network that is time and cost effective. Shared software, cloud services, online training, public safety connectivity and other resources that may be cost prohibitive to smaller entities can become affordable and accessible through EAGLE-Net's infrastructure. By adding additional bandwidth options and availability, smaller communities will be able to have services and economic development opportunities that may be eluding them today.

Please consider supporting this effort and the important work EAGLE-Net has underway. Thank you for your consideration and please don't hesitate to contact me if you have any questions.

Best regards,

Robert K. Hammond  
 Commissioner of Education  
 Colorado Department of Education

**Robert K. Hammond** | Commissioner of Education | Colorado Department of Education | 201 E. Colfax Ave., Denver, CO 80203 | tel 303.866.6646 | [www.cde.state.co.us](http://www.cde.state.co.us)

**EATON SCHOOL DISTRICT RE-2**

Dr. Randy Miller  
Superintendent  
(970) 454-3402  
(970) 454-5193 Fax

200 Park Avenue  
Eaton, Colorado 80615

October 11, 2012

Larry Strickling  
Assistant Secretary for Communications and Information  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Ave., Room 4898  
Washington, DC 20230

Dear Assistant Secretary Strickling,

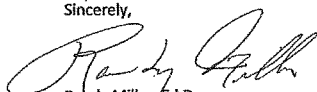
I am writing you in support of EagleNet Alliance for Eaton School District. We will soon be able to tap into twice the amount of bandwidth for the same cost that we are paying now by going through EagleNet. This will allow us to expand our technology throughout the district, as we are piloting laptops at the middle school and are looking to expand into grades 6-12. Eaton School District would not be able to cover these costs without EagleNet.

As part of Centennial BOCES (Board of Cooperative Educational Services) our premise from the start was to provide the middle-mile and help make internet a possibility for all of Colorado schools. By creating a robust and redundant system it will only enhance existing infrastructure. I understand there is some concern that this creates competition and may cause some business to lower their rates. I do not see that as a problem at all. In fact, I believe this is healthy and will ultimately benefit the students, staff and parents at Eaton.

Eaton School District continually strives to improve student achievement and with more pressure from state and federal government we need to take advantage of everything we have. EagleNet will help our school prepare and be ahead of all of the demands placed upon us. We will now be better able to share resources with other local, state and federal government entities. Once again this can only serve to help everyone at our school district.

In closing, EagleNet will only serve to help communities like ours to better serve our students and community. Please feel free to contact me if you have any questions or would like more information on EagleNet and Eaton School District.

Sincerely,



Randy Miller, Ed.D.  
Superintendent

Cc: Dr. Randy Zila, CEO EagleNet  
Eaton School District Re-2 Board of Education

Administration  
 Dr. Michelle Johnstone  
 Superintendent  
 Cyndi Hofmeister  
 Director of Learning  
 Services  
 Tracy Amen  
 HR Spec/Executive Assistant

**Brush Public Schools**  
**Re-2(J)**  
 P.O. Box 585 - 527 Industrial Park Road  
 Brush, CO 80723  
 Telephone (970)842-5176 Fax (970)842-4481

Board of Education  
 Don Dillehay  
 Michael Olson  
 Frank Phillips Jr.  
 Marty Stratman  
 Margo Neesh  
 Blaine Uhrig  
 Warren Walker

October 2, 2012

Lawrence E. Strickling  
 Assistant Secretary for Communications and Information  
 National Telecommunications and Information Administration  
 U.S. Department of Commerce  
 1401 Constitution Ave., NW  
 Washington, D.C. 20230

RE: EagleNet Alliance

Dear Assistant Secretary Strickling,

Brush School District is a small rural district with 1500 students. Through Eagle-Net we will be able to utilize world class broadband services provided directly to us by the same carrier that has been our service provider in the past. EagleNet is creating a robust and redundant system that compliments and enhances existing infrastructure. Having a redundant network is not a luxury – it's a necessity to ensure network reliability. Redundancy helps maintain a healthy and consistent broadband connection into and out of a community.

What this means for Colorado:

Beyond what EagleNet can do for us and other school districts, it will allow for local, state and federal government entities to share resources and information with each other over a secure network for cost savings, and time efficiency. This includes shared software and cloud services, training classes, connecting public safety systems and other resources that may be too costly for some of the smaller entities to afford on their own. By adding additional bandwidth options and availability, smaller communities will be able to have services and economic development opportunities that may be eluding them today. This can be a win-win situation for not only Colorado communities but also small internet providers in Colorado as well.

What this means for Brush School District:

Here in the Brush School District we are pushing forward to use technology in the classroom, provide distance learning opportunities, and support concurrent enrollment. In the classroom, teachers are better able to differentiate instruction which increases student achievement. Increasingly districts are coming together to provide educational opportunities for students, in our instance we just received a



*Making a difference in our world...student-by-student*

USDA Grant that creates distance learning for the Brush School District and three significantly smaller rural districts. Through the distance learning labs we will offer additional science, technology, and post secondary learning opportunities. Through distance learning we are able to offer concurrent enrollment with Morgan Community College, and will soon have the opportunity to reach beyond Morgan County. Our school facilities are becoming more equipped with Promethean Boards and Mimeo Teach in every classroom which allows for team teaching, differentiated instruction, and an increase in student engagement. As we work to increase educational opportunities for our students the need for technology and broadband increases drastically. We are thankful that we have this opportunity today and the ability for greater broadband opportunities in the future. The limitlessness is an incredible opportunity for rural Colorado.

As you are aware, school districts are faced with great budget constraints. In our school district we will be able to reach broadband levels that were not previously available for an amount significantly less than we have paid in the past for inferior service. We need to focus on every opportunity to reduce the expenses that we can while facing the need to increase services especially in the area of internet technology. Our internet services will increase exponentially over time while the cost will be reduced to a fraction of the prior costs as a result of the infrastructure that EagleNet is providing in Colorado.

We are members of the Centennial BOCES group that prepared the original and the second application seeking a grant from the U S Department of Commerce's Broadband Technology Opportunities Program (BTOP) in coordination with the American Recovery and Reinvestment Act (ARRA). C-BOCES represents a major portion of the northeast corner of Colorado, including school districts in Morgan, Weld, Larimer and Boulder Counties. The very premises of our application dealt with the tremendous need in rural Colorado for AFFORDABLE broadband connectivity. Colorado rural areas need to be able to be on an equal playing field with other states with fast broadband service. Only a few of the 178 school districts in Colorado are on an equal playing field with most of the nation. It seems that those few that are, may be paying a much higher rate for the broadband services than many of their equals across the nation.

It was from the very beginning, an intent to not offend or distance those who were already making an effort to provide quality internet. There was never intent to take away clients and customers that the current providers were attempting to provide. The purpose is to allow all providers to make available outstanding service at a price that school districts with meager incomes could afford to use. The administration of the grant and the services have moved from our BOCES (Board of Cooperative Educational Services) into a state-wide governmental service group with dynamic state-wide representation with members that have a diverse and appropriate understanding of the type of services that EagleNet was created to provide.

EagleNet does not provide service directly to any of the users of their services. They are a middle-mile provider. To get the broadband services that they are establishing to the end user, there must be a local carrier. What EagleNet is able to do is give the local provider an option for what should be a new opportunity to provide less expensive services to those school districts, libraries, junior colleges and universities as well as other local governmental institutions a greatly reduced cost of a greater level of service to internet in Colorado.

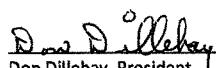
No one has ever been able to do this in Colorado before. This grant of \$100.6 million has given the kids of Colorado an opportunity that puts them in the position of being competitive with the kids in big cities of the east coast and the west coast where these types of services already exist. Indeed we are already seeing new opportunities that are afforded us in distance learning that was only a dream a few months ago.

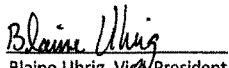


*Making a difference in our world...student-by-student*


We stand in support of EagleNet Alliance and we ask you to support this initiative. In an era of decreasing resources, we are able to increase learning opportunities for our students and those in all of the school districts of Colorado as well as the libraries, colleges, universities and local governmental entities at a much lower cost. We invite you to visit the Brush School District or call with questions. We would be proud to show each and every one who has an interest in the future of EagleNet Alliance to see what it has already done for us.


Sincerely,

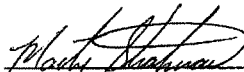
  
Don Dillehay, President


  
Blaine Uhrig, Vice President

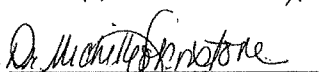
  
Margo Mesch, Secretary/Treasurer

  
Mike Dixon, Member

  
Frank Phillips, Jr. Member

  
Marty Stratman, Member

  
Warren Walker, Member

  
Dr. Michelle Johnstone, Superintendent

Cc:

Anthony Wilhelm  
Elaine Sloan  
Laura Dodson  
Senator Mark Udall  
Senator Michael Bennet  
Representative Cory Gardner  
Representative Diana DeGette  
Representative Doug Lamborn  
Representative Ed Perlmutter  
Representative Jared Polis  
Representative Michael Coffman  
Representative Scott Tipton



*Making a difference in our world... student-by-student*



October 8, 2012

To whom it may concern:

eNetColorado is a statewide project whose mission is "to provide educators and districts statewide access to high quality content and resources that support the improvement of student achievement." We are working with 14 Boards of Cooperative Educational Services (BOCES) which are supporting over 150 of the smallest school districts in Colorado. We are working with these districts and BOCES to bring staff development and high quality content that will support classroom instruction in districts that lack some of the necessary and basic broadband access that many of the larger districts in Colorado already have access too.

Until the EagleNet Alliance was formed and began reaching out to these smaller rural districts they had little hope of being able to support access to many of the resources that the eNetColorado partnership of over 20 community organizations like the Museum of Nature and Science, History Colorado, Junior Achievement, and the Denver Art Museum and many others have developed to support students across the state of Colorado. Time after time we would hear from these districts that their local providers just could not provide and/or they could not afford the level of access necessary to support the students and teachers in these districts to access these outstanding resources.

As eNetColorado works to identify high quality resources that all students in Colorado should have access to it seems imperative that a project like the EagleNet Alliance be in place and supported by local, state, and national governments. The Eagle-Net Alliance is providing the necessary broadband access so there are opportunities for the smallest school districts and communities in Colorado to provide their students online access to the best possible learning resources. It also seems imperative that through government and private partnerships, which the Eagle-Net Alliance supports, local communities and companies can better work together to ensure all residents in our rural communities have sufficient broadband access to support their current and future needs.

I have been an educator in Colorado for over 40 years and believe that the Eagle-Net Alliance offers the best hope and opportunity for our smallest schools and communities to have the access they need to meet the demands on the 21<sup>st</sup> century.

Sincerely,

*Dan Morris*

Director, eNetColorado  
303-917-3922  
danmorris@enetcolorado.org


**District Support Center**

715 West Platte Avenue  
 Fort Morgan, Colorado 80701  
 970-867-5633  
 Fax: 970-867-0262  
[www.morgan.k12.co.us](http://www.morgan.k12.co.us)

October 15, 2012

Anthony Wilhelm  
 Director, Broadband Technology Opportunities Program  
 1401 Constitution Ave., Room 4898  
 Washington, DC 20230

RE: EagleNet Alliance

Dear Director, Anthony Wilhelm,

The Morgan County School District has been and continues to be a strong supporter of the EagleNet Alliance.

Our support for this project has remained steadfast since the beginning. In rural Colorado there is very little opportunity for high speed internet access. We do not have the vast amount of companies that can/will provide internet access at speeds which are needed and at an equivalent price of metro areas. We understand that it does not meet their business models for profitability. Even though we understand, it is hard to explain to school staff and students that their internet cannot be upgraded to higher speeds because of the location of where they live and the higher costs for the internet, which is due to the lack (or non-existence) of competition.

Morgan County School District believes in this project because cooperation of all the school districts within the state of Colorado will bring better services at a much lower cost, as evident with our communities' model. The Morgan County School District has been in cooperation with the City of Fort Morgan Government (which oversees the public library) and the Morgan County Government for over seven years to provide higher internet connectivity between all entities. All three of the entities could not have obtained our current level of services without the cooperation to install and run fiber optics between all separated entities. As a group we are at the point of requiring faster internet services to avoid the daily slowdowns, but are unable to upgrade due to the high cost.

Growth and change is easily feared by individuals and businesses because of a scarcity mentality. The completion of the EagleNet project will not only provide a robust and redundant system that complements and enhances existing infrastructure but also provide economic benefits to those communities. This project will connect 170 Colorado communities and if it provides similar opportunities that we have gained by cooperating with just our three local governments, the results will far surpass the projected outcomes.

Sincerely,

Ron Echols, Superintendent

Brian Amack, Director of Technology



## Weld County School District RE-1

Gilcrest • LaSalle • Platteville

P.O. Box 157  
14827 W.C.R. 42  
Gilcrest, CO 80623  
Phone 970-737-2403  
Fax 970-737-2516  
Metro 303-629-9337

Dr. Jo Barbie, Superintendent  
Scott Spearnak, Director of Learning Services

October 23, 2012

Mr. Lawrence E. Strickling  
Assistant Secretary for Communication and Information  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Dear Assistant Secretary Strickling:

Weld County School District RE-1 is a small rural school district north of Denver, Colorado. The school district's enrollment is approximately 2,000 students. Weld RE-1 is a member of the Centennial Board of Cooperating Education Services. As Superintendent of Schools, I currently serve on the Superintendent's Advisory Council for Centennial B.O.C.E.S and on the EagleNet Alliance Board of Directors as a Centennial B.O.C.E.S. representative.

Weld RE-1 was one of the first school districts in Colorado to deploy a 1:1 laptop initiative at the high school level. The district was also one of the first school districts to establish wifi solutions in all schools and buildings in conjunction with the laptop initiative. Due to the 1:1 laptop initiative and wifi solutions demands, broadband services expanded far beyond the T-1 line that was initially available to the school district. Only through EagleNet was the school district able to expand to meet the demands of students and staff. The cost to purchase almost 50 times the amount broadband needed was made affordable by the efforts of EagleNet. This entity created a robust and redundant system that complimented and enhanced existing infrastructure. It is only through the EagleNet Alliance and the U. S. Department of Commerce's Broadband Technology Opportunities Program (BTOP) grant that Weld RE-1 was able to expand its broadband and it is only through this grant that all 178 school districts and 170 municipalities in Colorado will have a similar opportunity.

From the very beginning, it was never the intention of EagleNet to offend entities already providing internet services. There was never intent to capture customers from current providers. The purpose was to provide affordable internet access to school districts across the state. EagleNet is a middle-mile provider.

### BOARD OF EDUCATION

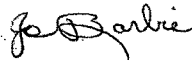
Marsha Harris President	Randy Ray Vice President	Ken Garcia Secretary	David Eckhardt Treasurer	Steve Reams Director	Nancy Sarchet Director
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Our Total Commitment is to Provide an Exemplary Education and Safe Environment for all Students

The end user must use a local provider. EagleNet is able to give the local provider an option for what should be a new opportunity to provide less expensive services to school districts, libraries, junior colleges, universities and local governments. The BTOP grant will provide children across the state opportunity that puts them in the position of being competitive with children all over the United States.

Weld County School District RE-1 strongly supports the EagleNet Alliance and the school district asks for your support. It is only through the effort of EagleNet and the BTOP grant that Weld RE-1 is able to provide technologically rich and ever expanding learning opportunities for our students. The school district invites you to visit our schools in LaSalle, Gilcrest and Platteville. We are extremely proud of the technology that has been made possible by our partnership with EagleNet.

Sincerely,



Dr. Jo Barbie  
Superintendent of Schools

pc: Anthony Wilhelm, Director – Broadband Technology Opportunities  
 Laura Dodson, Director – BTOP Infrastructure Projects  
 Elaine Sloan, Federal Program Officer  
 Senator Michael Bennet  
 Senator Mark Udall  
 Representative Corey Gardner  
 Representative Diana DeGette  
 Representative Doug Lamborn  
 Representative Jared Polis  
 Representative Michael Coffman  
 Representative Ed Perlmutter  
 Representative Scott Tipton

#### BOARD OF EDUCATION

<b>Marsha Harris</b> President	<b>Randy Ray</b> Vice President	<b>Ken Garcia</b> Secretary	<b>David Eckhardt</b> Treasurer	<b>Steve Reams</b> Director	<b>Nancy Sarchet</b> Director
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Our Total Commitment is to Provide an Exemplary Education and Safe Environment for all Students



Joining forces to enrich educational  
opportunities for Northwest Colorado

P.O. Box 773390  
325 7th Street  
Steamboat Springs, CO 80477  
970-879-0391 • FAX 970-879-0442

October 9, 2012

**East Grand Schools**

P.O. Box 125  
Granby, CO 80446  
970-687-2581

**Hayden Schools**

P.O. Box 70  
Hayden, CO 81639  
970-276-3864

**North Park Schools**

P.O. Box 798  
Walden, CO 80480  
970-723-3300

**South Routt Schools**

P.O. Box 158  
Oak Creek, CO 80467  
970-736-7313

**Steamboat Springs Schools**

P.O. Box 774388  
Steamboat Springs, CO 80487  
970-879-1530

**West Grand Schools**

P.O. Box 515  
Kremming, CO 80445  
970-724-3217

Mr. Larry Strickling  
Assistant Secretary for Communications and Information  
National Telecommunications and Information Administration (NTIA)  
1401 Constitution Avenue, Room 4898  
Washington, D. C. 20230

Dear Mr. Strickling,

This letter is written by the NW Colorado BOCES to support the Eagle-Net Alliance and their implementation of the NTIA Grant in Northwest Colorado. The Eagle-Net Alliance work is essential to school districts in Northwest Colorado.

The NW Colorado BOCES works with seven rural school districts in the northwest corner of Colorado and the completion of this project is very important to the infrastructure needs in this area of the state. Eagle-Net is creating a robust and redundant system that compliments and enhances existing infrastructure and is governed by representatives from across the state on the Eagle-Net Board (a public-private alliance board).

Under the existing system without the Eagle-Net middle-mile broadband network, school districts and our BOCES have very limited access to affordable and reliable increased bandwidth. This increased affordable and reliable bandwidth is necessary for students to participate in distance learning programs, online learning programs, etc. This Eagle-Net Alliance program will provide a much needed service and reduce the digital divide between rural, suburban and urban communities and benefits all students in the Colorado K-12 education system.

Recently the Eagle-Net Alliance met with school and community stakeholders in the northwest region with the meeting location in Steamboat Springs. Many questions were discussed and participants seemed to have a better understanding of the project including timelines and the focus of the project.

The NW Colorado BOCES supports the Eagle-Net Alliance Project. It is essential to all school districts and BOCES throughout Colorado (especially rural Colorado) to allow students the appropriate learning opportunities.

Sincerely,

Jane Toothaker  
NW BOCES Executive Director

## TOWN OF DOLORES

Incorporated 1900  
420 Central Avenue • P. O. Box 630  
Dolores, Colorado 81323  
Phone (970) 882-7720

October 11, 2012

Scott Tipton  
United States Representative  
#10 West Main Street, Suite 107  
Cortez, CO 81321

RE: September 17<sup>th</sup> Letter to Lawrence Strickling

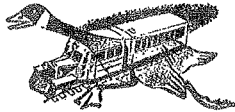
Dear Mr. Tipton:

I recently read the letter sent to Lawrence Strickling, dated September 17, 2012 and signed by the Republican Congressional representatives for Colorado asking that the EAGLE-Net project be put on hold. I am troubled by this position and even more so that the Town of Dolores, where a current construction project is underway may be stalled by these actions. The Town of Dolores is getting ready to install a fiber optic back-bone within town that will connect with the EAGLE-Net project and ultimately supply the Town Hall and Library with a much faster internet connection than is currently available. In addition, EAGLE-Net has just completed the installation of conduit to both the Dolores School District RE-4a school administration building and the school complex.

The intent of this "open access" network that the Town and EAGLE-Net are pursuing is not only to extend a superior infrastructure to our anchor institutions but to allow private providers an opportunity to establish their services in town. We welcome the competition and the resulting menu of options that could become available to our residents and businesses.

It appears, from your letter, that several internet providers are concerned about the EAGLE-Net project indicating that they were able to supply a similar product in rural Colorado. In the case of Dolores, two separate companies own fiber optic infrastructure that passes through town but they have yet to provide these services here. I find their argument a bit disingenuous and feel that their lack of action in our community helps legitimize the efforts underway by EAGLE-Net and the Town.

If EAGLE-Net is stalled, there will be little reason for the Town of Dolores to continue with its fiber build that was funded by the Department of Local Affairs. We are dependent on EAGLE-



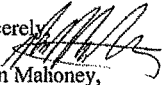
"HOME OF THE GALLOPING GOOSE"  
DOLORES' CENTENNIAL  
YEAR 2000

Net to be able to piggy-back on their "middle-mile" fiber optic infrastructure to reach the "outside world." We are also working under a similar timeframe as EAGLE-Net and must complete our build by the end of 2013. The last thing we need is for the money already spent on this cooperative project to go to waste.

I would like to see EAGLE-Net fulfill their promise here in Dolores and in order to do so, we need a commitment from them which may vanish if they are put on hold. There will undoubtedly be extra cost to re-start such a project if their contractors are forced to re-mobilize after being pulled off the job.

If you have any questions regarding our local efforts or our experience with EAGLE-Net, please do not hesitate to contact me at the Dolores Town Hall (970) 882-7720 or [manager@townofdolores.com](mailto:manager@townofdolores.com).

Sincerely,

  
Ryan Mahoney,  
Town Manager



October 5, 2012

We are writing this letter in support of the Eagle-Net Alliance BTOP grant initiative, that is investing in critical communications infrastructure and increasing broadband access to public institutions and private service providers through a statewide broadband network.

Massive Networks is working with Colorado Eagle-Net to provide an extreme diverse and scalable private network for the medical industry which is by far more secure than traversing the public internet. When connected to an Ethernet connection the customer can access a (PNT) Private Network Transport on the Massive Private Cloud to access Collocated gear or Managed Hosting Solutions or access public Internet

EAGLE-Net is building a first-of-its-kind statewide middle-mile high-speed broadband network that will connect to about 170 Colorado communities, urban and rural. Public and private healthcare facilities in cities, counties, schools, clinics and even first responder locations (fire and police) will benefit from the improved broadband access and new virtual hosted healthcare solutions.

Abundant bandwidth is also critical for delivering telemedicine and tele-health applications, distance learning programs to schools providing nursing and EMS programs and other robust cloud based online interactive tools, and other training aids.

Local, state and federal government entities can share resources and information amongst one another from both urban to rural environments over a secure statewide network for cost savings, and time efficiency. This includes shared software and cloud services connecting public safety systems and other resources that may be too costly to enable singularly or on their own in rural areas.

We stand in support of Eagle Net Alliance and we ask you to support this initiative as well. In an era of decreasing resources, we are able to increase or improve healthcare resource access for doctors, clinics, hospitals, students and first responders at a much lower cost. We invite you to call with any question you may have.

Sincerely,

Kevin Flake  
181 Inverness DR w  
Englewood CO. 80112  
[www.massivenetworks.net](http://www.massivenetworks.net)  
[kflake@massivenetworks.net](mailto:kflake@massivenetworks.net)  
303-800-1300 ex 5001



322 Main Street \* PO Box 232 \* Mead, CO 80542 \* 970-535-6323

October 1, 2012

To whom it may concern;

My name is Gary Shields and I am the owner of K2 Communications, LLC (K2), we are a family owned CATV franchise serving the community of Mead, Colorado and Mead is centrally located between Ft. Collins and Denver along the Interstate 25 corridor.

I am writing this letter to you so that you will know about the positive impact that EagleNet Alliance has had upon the K2 business model and the community of Mead, CO.

In 2002, I purchased the operating assets of the Mead system at a bankruptcy auction and in May of 2005 we introduced the first high speed internet connection (other than dial-up) to the Mead Community. At that time, the only available bandwidth services in the area were T-1 lines and from May of 2005 to December 2008, we supported the entire community on 2 T-1 lines, a total of 3 Mbps.

In June of 2008, we began working with Qwest to install a DS-3 circuit (45 Mbps) and I was told it would take approximately 6 weeks to deliver this service, 6 MONTHS later; we finally turned up the DS-3 circuit and have operated on that circuit until just 2 weeks ago.

Recently, the bandwidth demand from our customers had exceeded our capacity on the DS-3 circuit and has existed that way for the past 11 months (since November 2011). I credit this increased bandwidth demand to three basic issues:

1. Expanded Uses for the Internet-expanded uses of the internet such as TiVO, Roku, Playstations, Netflix, Blockbuster, Amazon and Apple TV have contributed significantly to customer bandwidth demand.
2. New homes being built- In the past 18 months there have been approximately 165 homes built within our service area, this is more than 10% growth for the homes passed within our service area.
3. Open Range Communications bankruptcy- when Open Range Communications went out of business, we picked up the majority of their subscribers within our service area. Open Range is a good example of a bad program for federal funding. I say this because they were a company implementing an unproven technology that had invaded our service area by representing that it was underserved and made us ineligible for USDA funding.

Until recently, our only option for additional bandwidth appeared to be adding another DS-3 circuit thru an incumbent provider. Not only was this option undesirable because it did not make technological sense, but also that it would have doubled our cost of bandwidth.

And now with all of the above being said, I can now get to the point of this letter which is to let you know that I support EagleNet Alliance. In the short time that I have been involved with EagleNet, we have been able to increase our bandwidth capacity nearly 7 fold while decreasing our month costs by more than \$500 per month over the single DS-3 circuit. A further illustration of (2) DS-3 circuits would be that we have been able to secure more than 3 times the bandwidth at a savings of nearly \$3,500 monthly.

In addition to the benefits of expanded bandwidth and better pricing, my association with EagleNet has allowed me to expand my service offerings and to look further into deploying services in other areas both locally and across the state that were previously unavailable to me. These opportunities were unavailable because of the lack of bandwidth availability and lack of connectivity throughout the state.

I guess that my final point would be: that for a very long time there has been a condition that appeared to exist where there were very few municipalities across the state of Colorado that had adequate bandwidth available to local service providers and ultimately to residential end users. I believe that EagleNet Alliance has done more in the past few months to even the divide of bandwidth availability than would have been possible over the next decade had they not been funded.

In my estimation, funding of EagleNet alliance is tax payer money well spent. I believe this not only because of what they have done for me and my business but because of my interaction with the EA team. I have been able to have discussions with their management team, executives and board members and I believe that they have the right personnel in place to accomplish their mission and that they have a firm understanding on what has been lacking in Colorado.

I appreciate you taking the time to read this letter and would be happy to discuss my support of EagleNet Alliance with you at length if you would like further clarification or understanding from me.

Best Regards,

Gary Shields  
K2 Communications, LLC  
[gary.shields@k2cable.net](mailto:gary.shields@k2cable.net)  
970-535-6323





October 23, 2012

Lawrence E. Strickling  
 Assistant Secretary for Communications and Information  
 Administrator, National Telecommunications and Information Administration (NTIA)  
 U.S. Department of Commerce  
 1401 Constitution Ave., NW  
 Washington, D.C. 20230-0002

Dear Assistant Secretary Strickling:

We write in regard to the EAGLE-Net project—the important middle-mile statewide Colorado fiber initiative that was funded by NTIA under BTOP. The EAGLE-Net program and model are exemplary, and exactly the kind of project that our members and stakeholders support as furthering the public interest in communications. EAGLE-Net plans to create a statewide fiber infrastructure with a combination of newly constructed fiber optics and leased fiber (where such fiber is available on the market).

EAGLE-Net's network will reach every school district in Colorado and, in partnership with local providers, will have the potential to reach every school and library in Colorado. Its planned infrastructure reaches into the most rural, mountainous, hard-to-reach parts of the state. As a result of these partnerships and the new fiber, schools and libraries in Colorado will have access to high-bandwidth fiber-based services at prices that reflect that the network is connected to the Internet backbone, removing the pricing disparity so often faced by rural areas relative to urban and suburban areas because of their distance from an Internet point of presence, such as that in Denver.

At the same time as delivering this tremendous capacity to community anchor institutions, EAGLE-Net will provide non-discriminatory, open access to any and all qualified private sector providers who choose to use its infrastructure—thus bridging, for the commercial sector, that same divide that currently exists between suburban and urban areas on the one hand, and rural areas on the other. The emergence of a fiber-based competitive market on those routes will open up rural markets and enable cost-effective access to those markets for private entities that wish to serve residential and small business customers.

We understand that there has been significant opposition to this new fiber, and to the potential for competition in underserved rural areas. We also understand that a range of allegations have been made about the management of the project. In this regard, we have great confidence that NTIA—which has done an exemplary job of creating and overseeing BTOP—has more than adequately overseen the EAGLE-Net project. And for that reason, we are quite dubious about wild allegations made by self-interested parties that oppose EAGLE-Net.

National Association of Telecommunications Officers and Advisors

3213 Duke Street, #695, Alexandria, Virginia, 22314, (703) 519-8035, (703) 997-7080 • FAX: www.natona.org

October 23, 2013

Page 2

We certainly hope that the aggressive public relations campaign that has been mounted by EAGLE-Net's opponents does not serve to put this important job-creating, competition-enhancing network at risk—thereby depriving the school children, library users, and rural residents of Colorado of such a significant investment in their future.

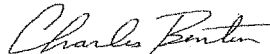
We note, too, that if this opposition to EAGLE-Net is allowed to succeed, the precedent that would be set could have the effect of putting at risk similar initiatives throughout the country (funded by BTOP or otherwise) by inviting similar anti-competition campaigns.

We thank you and your staff for the efforts made over the past few years to use BTOP to enable the potential of broadband in rural America.

Sincerely,



Steve Traylor  
Executive Director, NATOA



Charles Benton  
Chairman, Benton Foundation

cc: Governor John Hickenlooper  
Senator Mark Udall  
Senator Michael Bennet  
Representative Diana DeGette  
Representative Jared Polis  
Representative Scott Tipton  
Representative Cory Gardner  
Representative Doug Lamborn  
Representative Mike Coffman  
Representative Ed Perlmutter



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MAIN OFFICE  
1713 MT. LINCOLN DRIVE WEST  
LEADVILLE COLORADO 80461  
p 719.486.2603 f 719.486.2109  
WWW.MTNBOCES.ORG

October 22, 2012

Mr. Larry Strickling  
Assistant Secretary for Communications and Information  
National Telecommunications and Information Administration (NTIA)  
1401 Constitution Avenue, Room 4898  
Washington, D. C. 20230

Dear Mr. Strickling,

I am writing to strongly support the Eagle-Net Alliance and their implementation of the NTIA Grant in Colorado, which is essential to improving educational opportunities in the ten rural school districts that are members of the Mountain Board of Cooperative Educational Services (Mountain BOCES).

All of our school districts support the Eagle-Net Alliance because Eagle-Net provides affordable, reliable increased bandwidth necessary for students to participate in distance learning programs and make use of online learning tools and opportunities, reducing the digital divide between rural and urban communities and providing more equal access for rural students. Eagle-Net would also improve district access to all sorts of education related opportunities—including sharing of resources, professional development, and economic development—all of which would improve the quality of education for all students in Colorado's K-12 education system.

Eagle-Net is

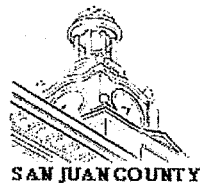
- Building a statewide, middle-mile, high-speed broadband network that will connect all school districts and BOCES in more than 170 Colorado communities
- Offering local carriers a choice for middle-mile network access at a lower cost
- Creating a robust redundant system that complements and enhances existing infrastructure—a necessity to ensure network reliability
- Governed by a board of representatives from across the state (a public-private alliance board)

In the interests of improving educational opportunities throughout Colorado, I strongly encourage you to support the Eagle-Net Alliance Project.

Sincerely,

Troy A. Lange  
Executive Director

cc: Senator Michael Bennet, Senator Mark Udall, Representative Michael Coffman, Representative Diana DeGette, Representative Corey Gardner, Representative Doug Lamborn, Representative Jared Polis, Representative Ed Perlmutter, Representative Scott Tipton, Executive Director Dale McCall of the Colorado BOCES Association, Eagle-Net CEO Randy Zila



Eagle-Net Alliance  
Attn: Randy Zila, Chief Executive Officer  
11800 Ridge Parkway, Suite 450  
Broomfield, CO. 80021

September 10, 2012

Dear Mr. Zila –

Thank you for your timely return correspondence to us dated August 28<sup>th</sup>. In addition, much appreciation to Chip White and Gretchen Dirks individually for visiting with us here in Silverton on September 5th and to the Eagle-Net Alliance (“ENA”) in general for removing any ambiguities with respect to Eagle Net’s intention to complete a fiber optic build to Silverton. We appreciate the definitive signs of progress and the answers to our specific questions and concerns, and greatly value the fact that you took these inquiries to heart as demonstrated in your detailed response. As you know, we have long advocated tirelessly for the installation of a fiber optic line to Silverton. As the last county seat in the State of Colorado without a fiber link, we have pushed, prodded, cajoled, harassed, and begged for various governmental and private entities to bring a fiber optic line into our community. In our 12 years of advocacy work, Eagle-Net is the only entity that has come forth with both a vision and the funding for a viable solution to our long standing telecommunications quagmire.

It is deeply reassuring that in response to the concerns and questions raised in our letter, Eagle-Net has reaffirmed its commitment to bringing a fiber line to the Silverton School and by association, the Silverton community. In support of that end, we appreciate your offer to keep us apprised of all relevant developments toward project completion including the execution of necessary contracts, acquisition of required permits, et cetera. In order to assist us all in that information-sharing process, please note that our designated local technology planning team, Operation Link-Up, meets regularly at 8:30 am on the second Tuesday of each month in the Silverton Town Hall. We would like extend a standing invitation for an ENA representative to attend or participate in that monthly meeting so as to report on any relevant progress. We feel that such participation will allow us respond from a more informed perspective to any further concerns we might receive from outside interests while also allowing for a productive collaboration process between us from a planning standpoint.

As you well know – and as Mr. White and Ms. Dirks observed personally upon their recent visit to Town – the community has acted with what it believes to be reasonable reliance on ENA’s impending fiber build as it has undertaken state-of-the-art improvements to the school’s communications systems, which are now capable providing 10 gigabyte broadband-based educational services. But such services are possible only via a presently-lacking, ground-based connection to the outside world. With ENA having pledged to establish such a connection, the school will be able to actually employ the tools it provided for itself in anticipation of the ENA project completion.

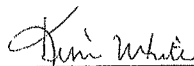
In similar fashion through joint participation in the Southwest Colorado Open Access Network (“SCAN”) project, the Town and County have dedicated significant financial and human resources to the construction of an inter-community fiber optic ring meant to connect all public facilities in town. In the course of committing their respective grant match amounts to this state Department of Local Affairs-funded enterprise, the Town and County have continued to operate under the assumption that this local fiber ring would not exist in a technological void. Rather, the respective governments have acted on the basis of ENA’s repeated assurances that this locally funded asset would be connected to a regional fiber optic extension that ENA has pledged to extend northward up the U.S. 550 corridor at least to Silverton if not beyond.


Please note that notwithstanding the long-awaited benefits an ENA fiber connection will confer upon us as a County, a county seat, and a school district, we have always maintained – and we will continue to maintain – that the completion of these improvements represents far more than merely a large step toward the solution to the Silverton-San Juan County technological divide. Rather, we and other leaders in our surrounding communities feel that this build represents a crucial undertaking in shoring up the entire region’s economic development potential, all along the U.S. 50/550 corridor from Durango to Grand Junction. On behalf of not only the local residents we represent here in Silverton, but for those business interests and residents all along this vastly underserved corridor, we are once again thankful for the enhanced connectivity ENA promises for the region on a collective basis. All of southwest Colorado spoke though the Governor’s Bottom-Up Economic Development Plan process of the need to expand broadband access throughout underserved areas in the region and we see ENA responding to that universal plea through its completion of this component of its larger statewide network creation.

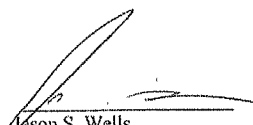
So again, while we are sure a myriad of unanswered questions and host of logistical and technical complications remain, we would like to continue to offer our unyielding support to Eagle Net in whatever form that may take as your organization continues in good faith to move forward with brining expanded connectivity to our community and broader region. We sense that we are as close to a solution as we have ever been given Eagle Net’s recent assurances to us and have confidence that your goal to link every school district in the state with a fiber connection is sincere. On our end, know that Operation Link Up’s persisting goal is to bring fiber optics to our school and other public-sector facilities through whatever means feasible and reasonable. With that in mind, if ENA’s solution involves the installation of fiber from the south alone, trust that Link-Up will remain committed to closing the gap between Silverton and Ouray to the north thereby providing a seamless fiber path along this portion of the Western Slope in order to level our area’s playing field with respect to both educational opportunities and economic development potential.

We appreciate that you have taken on the challenge of providing a solution that no one else has been willing or able to do. We look forward to a successful 2013 fiber build and remain ready to help problem-solve in whatever manner we can.

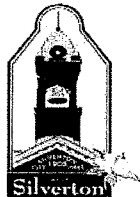
Most Sincerely,

  
Kim White, Superintendent  
Silverton School District

  
William Tookey  
San Juan County Administrator

  
Jason S. Wells  
Silverton Administrator

CC: Larry Strickling, Assistant Secretary for Communications and Information  
Representative Greg Walden, Chairman of the Communications Subcommittee  
Representative Terry Lee, Communications Subcommittee  
Jonathon Adelstein, RUS Administrator  
Jessica Zufolo, RUS Deputy Administrator  
Tom Yemerell, Chairman of the Southwest Colorado Council of Governments  
Congressman Scott Tipton Gardner  
Senator Mark Udall  
Senator Michael Bennet



Representative Scott Tipton  
835 E. Second Avenue, Suite 230  
Durango, CO 81301

Representative Mike Coffman  
1222 Longworth HOB  
Washington, D.C. 20515

Representative Cory Gardner  
213 Cannon HOB  
Washington, DC 20515

Representative Doug Lamborn  
437 Cannon House Office Building  
Washington, DC 20515

September 26, 2012

Dear Congressmen,

We are writing to you in response to your joint letter dated September 17<sup>th</sup> and directed to National Telecommunications & Information Administration ("NTIA") Administrator, Lawrence E. Strickling. In this communication, you collectively called for an immediate halt to telecommunications build-out efforts currently underway across the State of Colorado through the NTIA-funded Eagle-Net Alliance ("ENA") project. In light of this request, we wish to advise you of our opposition to such extreme measures and of our general support for ENA's organizational mandate to bring enhanced telecommunications abilities to unserved and underserved areas such as ours.

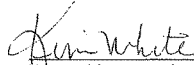
Insofar as ENA has expressed its intent to complete a fiber optic build to our community where the entirety our communications systems has long subsisted via only a tenuous microwave link to the greater world, we feel that ENA's plans to complete this connection northward up the U.S. 550 corridor will not only serve the primary objective of affording our school system the use of much needed 21<sup>st</sup> Century technology, but also the secondary effect of providing our entire region with the infrastructure it needs to expand economically in these challenging times. We thus feel that any cessation of ENA's progress in Southwest Colorado would necessarily dampen the prospects of positive growth in the region, thus placing us at a distinct economic disadvantage as other states and nations continue to build out their telecommunications networks in such a manner as to afford interests in both the public and private sectors crucial opportunities to succeed and aptly serve their constituencies in the global marketplace.

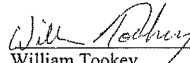
We recognize that ENA has suffered wide criticism for purportedly not focusing resources more acutely in the most technologically disadvantaged areas of the state and we stand firmly with our other underserved mountain communities in calling for the organization to use this federal grant award as an opportunity to deliver state-of-the-art connectivity where the private sector has failed to do so. But we

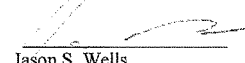
feel that putting ENA's expansion plans "on hold," as you have called for, while the Department of Commerce undertakes an exhaustive audit of the program would be not only wasteful and inefficient, but counterproductive as such a measure would undoubtedly depress both the educational opportunities ENA seeks to afford as well as the secondary economic benefits that might be realized via a strong and redundant fiber connection from Durango to Grand Junction.

Though this build may not completely close what we have come to call the "Silverton Gap," its completion would mark a substantial step in that direction and stands to serve as a tremendous success story in one part of rural, underserved Colorado. We thus view any attempt to subvert this effort and those in other underserved communities across the state as an impediment to our respective abilities to compete both educationally and commercially on a technologically even playing field. So again, we object here to your call to put the ENA project on hold and will continue to oppose to any efforts to curtail what we view as substantial progress in the realm of telecommunications advancement. We hope that in response to this plea, you will take our firm and united position under strong advisement as you continue to scrutinize the ENA build-out.

Most Earnestly,

  
Kim White, Superintendent  
Silverton School District

  
William Tookey  
San Juan County Administrator

  
Jason S. Wells  
Silverton Administrator

CC: U.S. Senator Mark Udall  
U.S. Senator Michael Bennet  
U.S. Representative Diana DeGette  
U.S. Representative Jared Polis  
U.S. Representative Ed Perlmutter  
Larry Strickling, Assistant Secretary for Communications and Information  
Representative Greg Walden, Chairman of the Communications Subcommittee  
Representative Terry Lee, Communications Subcommittee  
Jonathon Adelstein, RUS Administrator  
Jessica Zufolo, RUS Deputy Administrator  
Tom Yennerell, Chairman of the Southwest Colorado Council of Governments



## STATE OF COLORADO

OFFICE OF THE GOVERNOR  
136 State Capitol Building  
Denver, Colorado 80203  
(303) 866 - 2471  
(303) 866 - 2003 fax



Bill Ritter, Jr.  
Governor

March 22, 2010

The Honorable Lary Strickling  
Assistant Secretary of Commerce  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Ave. NW  
Washington, D.C. 20230

Dear Assistant Secretary Strickling:

I would like to express my support for the Colorado Community Anchors Broadband Consortium (CCABC) application for the BTOP grant. CCABC is uniquely suited to optimize grant funding and efficiently deliver broadband capacity to our state's underserved rural communities.

Colorado is currently ranked 42<sup>nd</sup> in the nation for overall broadband connectivity. Our expansive geography has left many of our rural communities disconnected and subject to technological platforms which are out-of-date and incapable of meeting current broadband needs. Should CCABC secure this grant, it would have an immediate impact on the educational standard and economic vitality of Colorado's rural and agrarian communities, positioning them to be more economically diverse and economically stable.

The public-private partnership and collaboration of the organizations which form the CCABC provide a unique spectrum of technical expertise, development capabilities and preexisting infrastructure which can be built upon. By leveraging these assets the CCABC will be able to quickly and cost-effectively implement broad band expansion across the state.

I strongly endorse the CCABC application for the BTOP grant and encourage you to support them in delivering broad band to Colorado's underserved rural communities.

Sincerely,

A handwritten signature in dark ink, appearing to read "Bill Ritter, Jr.", written in a cursive style.

Bill Ritter, Jr.  
Governor

Concerning Colorado's application to the Broadband Technology Opportunities Program

Whereas, Colorado's communities in rural and remote areas continue to lack sufficient access to and infrastructure for broadband internet services; and

Whereas, Colorado is ranked 42<sup>nd</sup> out of 50 states in broadband connectivity; and

Whereas, the Broadband Technology Opportunities Program, administered by the US Department of Commerce, National Telecommunications and Information Administration, is a grant program dedicated to implement and increase broadband access in areas that currently lack such services; and

Whereas, the state recognizes the value of supporting public, private and government collaboration; and

Whereas, the state along with local governments; leaders in the Health Care industry, K-12 community, Community Centers, Libraries, Community Colleges and Higher Education; and leading private companies in Colorado have developed an innovative application for the BTOP grant, Colorado Community Anchors Broadband Consortium (CCABC) Grant Application, to build, upgrade, extend and deliver high-speed broadband internet connectivity; and

Whereas, these entities have come together in a public/private collaboration of the Centennial Board of Cooperative Educational Services, a non-profit Colorado educational services corporation, under its Educational Access Gateway Learning Environment Network (EAGLE-NET); and

Whereas, the CCABC Grant Application will invest up to \$150,000,000 in the broadband infrastructure and access of the state of Colorado; and

Whereas, the CCABC Grant Application will also connect 178 K-12 School Districts serving over 2,000 schools and 800,000 students, 16 Community Colleges, 26 Libraries, 12 BOCES, 2 Institutions of Higher Education, Public Safety, Healthcare, Cities, and Counties, providing Internet, Internet II and Wholesale Capacity to 177 communities; and

Whereas, the CCABC Grant Application will enhance delivery of broadband internet services, such as high definition video/audio distance learning, adult education and training opportunities, health care oriented professional development, medical services from urban health care programs, and broadband services to homes and businesses by private sector partner broadband service providers; and

Whereas, the CCABC Grant Application has the support of the Colorado K-12 education community, including the Colorado Department of Education, the Colorado Association of School Executives, the Colorado Association of School Boards, the Colorado Education Association, and the Colorado BOCES Association

Be It Resolved by the \_\_\_\_\_ of the Sixty-seventh General Assembly of the State of Colorado, the \_\_\_\_\_ concurring herein:

We, the members of the General Assembly of the State of Colorado, are in complete support of the Colorado Community Anchors Broadband Consortium Grant Application under consideration by U.S. Department of Commerce, National Telecommunication Information Administration through the Broadband Technology Opportunities Program.

Be it further resolved that we, the members of the General Assembly of the State of Colorado, lend our support to this proposal and respectfully request a favorable consideration of the funding of this application to assist in the implementation of our statewide broadband network.



## COLORADO DEPARTMENT OF EDUCATION

201 East Colfax Avenue • Denver, Colorado 80203-1799  
303.866.6600 • [www.cde.state.co.us](http://www.cde.state.co.us)

Dwight D. Jones  
Commissioner of Education

Robert E. Hammond  
Deputy Commissioner

March 22, 2010

The Honorable Larry Strickling  
Assistant Secretary of Commerce  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

Re: Comprehensive Community Infrastructure Grant Application – March 26, 2010  
Colorado Community Anchors Broadband Consortium

Dear Mr. Strickling:

With regard to education reform, Colorado has become a state to watch as we implement several key initiatives – among them real-time assessments, the Colorado Growth Model (a longitudinal, student-data system), the implementation of an educator identifier system and online resources for teachers and parents via SchoolView.org. Providing universal access to broadband services is critical to maintaining this forward momentum.

Colorado Community Anchors Broadband Consortium's proposal features a strategic plan to deliver high-speed Internet connectivity through an expansion of service capabilities to communities across the state. What's more, this strategy, which specifically targets schools and districts, has tremendous support from the governor, the state legislature, the Colorado State Board of Education and other education stakeholders, as indicated by the signatures on the following page. Even the department of transportation and private investors recognize its immense value and are providing in-kind matches valued at more than \$10 million toward achieving statewide ubiquitous broadband.

At present, however, many rural areas across Colorado have inadequate Internet service and many communities – suburban, urban and rural – lack sufficient broadband capacity to make optimal use of these resources. A Comprehensive Community Infrastructure grant will provide for the expansion of this capacity and be a great catalyst in advancing educational opportunities for all of Colorado's citizens.

Most sincerely,

Dwight D. Jones  
Commissioner of Education

**cde** Improving  
Academic  
Achievement

The Honorable Lany Stocking  
Page 2  
March 22, 2010



Dale McCall, Executive Director  
Colorado BOCES Association



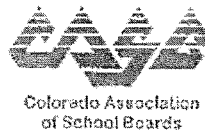
John Heffy, Executive Director  
Colorado Association of School Executives



Ken DeLay, Executive Director  
Colorado Association of School Boards

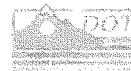


Tony Salazar, Executive Director  
Colorado Education Association



## STATE OF COLORADO

DEPARTMENT OF TRANSPORTATION  
 Deputy Executive Director  
 4201 E. Arkansas Avenue  
 Denver, CO 80222  
 (303) 757-9208  
 (303) 757-9655 Fax



March 23, 2010

The Honorable Larry Strickling  
 Assistant Secretary of Commerce  
 Administrator  
 National Telecommunications and Information Administration  
 U.S. Department of Commerce  
 1401 Constitution Ave. NW  
 Washington, D.C. 20230

Re: National Telecommunications Information Administration (NTIA)  
 Broadband Technology Opportunities Program  
 OMB Control Number 0660-0034  
 Comprehensive Community Infrastructure Grant Application – March 26, 2010  
 Colorado Community Anchors Broadband Consortium

Dear Assistant Secretary Strickling:

The Colorado Department of Transportation (CDOT) is pleased to support the Colorado Community Anchors Broadband Consortium Grant Application, which is being submitted by the Educational Access Gateway Learning Environment Network (EAGLE-Net). EAGLE-Net is a non-profit entity, which was formed in 2007 by the Centennial Board of Cooperative Educational Services (Centennial BOCES) as an aggregator of K-12 enabling connector circuits. EAGLE-Net, for purposes of this application, has brought together a strong public/private consortium of partners including Community Colleges, Healthcare, Higher Education, K-12 Schools, Libraries, Municipalities, Public Safety, other Community Anchor Institutions and Telecommunications and Broadband Service Providers, and also has developed a plan to build, upgrade, extend, and deliver high-speed broadband Internet connectivity to these Community Anchor locations throughout Colorado.

CDOT believes this grant opportunity offers much-needed high-speed broadband services to unserved and underserved rural areas of the State of Colorado that currently have either very little or no broadband services at all. Providing these essential broadband services to Colorado's rural schools, libraries, medical and healthcare providers, community colleges and institutions of higher learning, public safety and law enforcement agencies and residents in these areas, will foster technological advances, improvements and efficiencies in telemedicine, distance learning and business and entrepreneurial opportunities resulting in economic growth and job creation.

The Honorable Larry Strickling  
March 22, 2010  
Page Two

The Department believes so strongly in the benefit and value of this project to the citizens and entities of Colorado that it is committing more than \$10 million dollars of in-kind services in the form of CDOT Rights-of-Way, environmental clearance assistance, construction management on the interstate corridors, permits, oversight as needed, and project-ready plans for two interstate corridors. CDOT believes this level of in-kind match unequivocally demonstrates the Department's level of support for this grant application and subsequent project, and requests your favorable consideration of the grant funding to assist in the implementation of much-needed broadband Internet services to Community Anchor locations throughout Colorado.

Sincerely,

A handwritten signature in cursive script, reading "Margaret M. Catlin".

Margaret Catlin, P.E.  
Deputy Executive Director  
Colorado Department of Transportation

cc: Russ George CDOT Executive Director  
Pam Hutton, CDOT Chief Engineer  
Heather Copp, CDOT OFMB Director  
Ken DePinto, CDOT ITS Branch Manager  
File

811-50124-10  
01/19/2010  
RONALD J. MAKES  
Executive Director



**DEPARTMENT OF LABOR AND EMPLOYMENT**  
OFFICE OF THE EXECUTIVE DIRECTOR  
699 17th Street, Suite 1200  
Denver, Colorado 80202-3660

March 25, 2010

The Honorable Larry Strickling  
Assistant Secretary of Commerce  
Administrator  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Ave. NW  
Washington, D.C. 20230

Re: National Telecommunications Information Administration (NTIA)  
Broadband Technology Opportunities Program  
OMB Control Number 0660-0031  
Comprehensive Community Infrastructure Grant Application - March 26, 2010  
Colorado Community Anchors Broadband Consortium

Dear Assistant Secretary Strickling:

I am writing this letter in support of the Colorado Community Anchors Broadband Consortium Grant Application, which is comprised of Community Colleges, Healthcare, Higher Education, K-12 Schools, Libraries, Municipalities, Public Safety, and other Community Anchor Institutions. These entities have been brought together via a public/private collaboration of the Centennial Board of Cooperative Educational Services (Centennial BOCES), a non-profit Colorado educational services corporation, under its Educational Access Gateway Learning Environment Network (EAGLE-Net). These entities also include Telecommunications and Broadband Service Providers desiring to expand their service capabilities to Community Anchors, businesses, and consumers, in part through the use of NTIA Broadband Technology Opportunities Program grant funding.

The Colorado Community Anchors Broadband Consortium (CCABC) has defined and developed a much needed plan to build, upgrade, extend, and deliver high-speed broadband Internet connectivity to Community Anchor locations throughout Colorado. The project will enable delivery of broadband Internet services such as:

- High-definition video/audio distance learning
- Adult education and training opportunities including access to information, research, and online and distance learning
- Health care oriented professional development
- Medical services from urban health care programs
- Broadband services to homes by private sector partner broadband service providers



Business broadband services by private sector partner broadband service providers

CDLE is in full support and desires to become a participant in this program. We believe that the CCABC plan and grant application has been developed in the true spirit of the requirements for funding under the BDOE Grant program. We respectfully request your favorable consideration of the Grant funding requested to assist in the implementation of our statewide broadband Community Anchor network.

Sincerely,



Donald J. Mares  
Executive Director  
Colorado Department of Labor & Employment



## COLORADO DEPARTMENT OF EDUCATION

201 East Colfax Avenue • Denver, Colorado 80202-1799  
303.865.6600 • [www.cde.state.co.us](http://www.cde.state.co.us)

Dwight D. Jones  
Commissioner of Education

Robert K. Hammond  
Deputy Commissioner

Kenneth E. Turner  
Deputy Commissioner

January 20, 2010

To Whom It May Concern:

It is without hesitation and actual anticipation that I write this letter of support for the History Colorado/Colorado Historical Society proposal. Their statewide education system proposal is very much a reflection of my vision of the Social Studies education in Colorado. As the new social studies content specialist, a position that has been missing for over ten years in Colorado, this network would fill a long void within the state that would facilitate the connection of teachers, students, and resources.

I received my new position in October of 2008 and the first group to introduce themselves and want to partner with the Colorado Department of Education was the Colorado Historical Society. It seems there is a new wind blowing through our state that is focusing efforts on collaboration and partnerships.

History Colorado has demonstrated its leadership capabilities before in past partnerships. The Colorado Department of Education along with the Colorado Historical Society, Colorado Humanities, Colorado Libraries, and Colorado Arts in Education Consortium began partnership just months after I arrived in order to train teachers throughout the state on "Picturing America," a National Endowment for the Humanities Initiative. The Historical Society was a leader in this effort.

The network of partners and sites in the proposal is a thrilling prospect for social studies instruction and education in Colorado. I look forward to the possibilities of such an exciting project.

Sincerely,

Dr. Brenda S. Barr, Social Studies Content Specialist  
Colorado Department of Education





**COLORADO  
DEPARTMENT  
OF PUBLIC SAFETY**

Office of the Executive Director  
700 Kuyling St.  
Suite 1000  
Denver, CO 80215-9585  
(303) 239-4338  
FAX (303) 239-4670

March 22, 2010

The Honorable Larry Strickling  
Assistant Secretary  
U.S. Department of Commerce  
1401 Constitution Ave., NW  
Washington, D.C. 20230

RE: Broadband Technology Opportunities Program, NTIA

Dear Mr. Strickling:

The Colorado Department of Public Safety believes Colorado's broadband connectivity availability ranks well below that of most other states. The state's capacity should be expanded for the sake of better public safety and effective educational and community services.

The Colorado Information Analysis Center, the Colorado State Patrol, the Colorado Bureau of Investigation and the Colorado School Safety Resource Center, which are all part of the Department of Public Safety, play roles that are vital to a wide variety of safety services to communities throughout Colorado. Unfortunately, many of the state's rural residents, schools districts and governmental agencies do not have adequate broadband Internet access. Training and communication access, as a result, can suffer in many of our remote locations. As much as any other state agency, the Department of Public Safety relies on effective communications networks within the state.

The Department of Public Safety supports the efforts of the Colorado Community Anchors Broadband Consortium in its efforts to improve broadband access through the NTIA grant program.

CDPS is pleased to join with Governor Bill Ritter, Jr., the Colorado Department of Education and the Colorado Department of Transportation in supporting this goal.

Sincerely,

Peter A. Weir  
Executive Director

Bill Ritter, Jr.  
GOVERNOR  
Peter A. Weir  
EXECUTIVE DIRECTOR  
Colorado State  
Patrol  
Colorado Bureau  
of Investigation  
Division of  
Criminal Justice  
Office of Preparedness,  
Security, and Fire Safety



<http://cdpsweb.state.co.us>

# Colorado

Office of Economic  
Development and  
International  
Trade

Steve Ritten, Jr., Governor  
Don Rappasohn, Director

January 25, 2010

Institute of Museum and Library Services  
IMLS Review Committee - National Leadership Grant  
1800 M Street, NW, 9th Floor  
Washington, DC 20036-5802

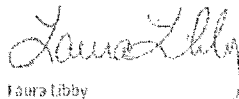
Dear IMLS Review Committee,

I am writing this letter in support of the Colorado Historical Society's grant request from the Institute of Museum and Library Services for a statewide education program. This program will provide students with a strong overview of our state's history and connect these stories with places in their communities.

The Colorado Tourism Office's Heritage Tourism Program has distributed grants to regional heritage tourism groups across the state to assist with the development and promotion of our state's historic sites. The focus of improving educational outreach by local sites responds directly to needs identified across the state through the Heritage Tourism Program's quality standards assessments. The Heritage Tourism Program has conducted these on-site assessments with historic sites and consistently we hear that historic sites would like to place a larger emphasis on educational programming with school-age students but do not have the content to conduct these programs. In partnership with the Colorado Historical Society's program we will be able to provide the tools to these sites that will increase their ability to reach this target audience. As an added benefit to being a part of the Colorado Historical Society's program, the local sites will have access to a larger network of resources that will help improve their overall interpretation and visitor experience.

Tourism has a significant impact on local economies and heritage tourism has provided opportunities for communities of all sizes to showcase their unique heritage assets to travelers. This program can flourish within the strong framework of partnerships while elevating the importance of heritage tourism and education in the cultural and economic health of the community. The Colorado Tourism Office looks forward to collaborating on this project.

Sincerely,



Laura Libby  
Heritage Tourism Program



## COLORADO DEPARTMENT OF EDUCATION

201 East Colfax Avenue • Denver, Colorado 80203-1799  
303.865.6600 • [www.cde.state.co.us](http://www.cde.state.co.us)

Dwight D. Jones  
Commissioner of Education

Robert E. Hammond  
Deputy Commissioner  
March 26, 2010

The Honorable Larry Strickling  
Assistant Secretary of Commerce  
Administrator  
National Telecommunications and Information Administration  
U.S. Department of Commerce  
1401 Constitution Ave. NW  
Washington, D.C. 20230

National Telecommunications Information Administration (NTIA)  
Broadband Technology Opportunities Program  
OMB Control Number 0660-0031  
Comprehensive Community Infrastructure Grant Application – March 26, 2010  
Colorado Community Anchors Broadband Consortium

Dear Assistant Secretary Strickling:

The **Colorado State Library** is writing this letter on behalf of the state's libraries in support of a second-round application by the public/private collaboration of the *Centennial Board of Cooperative Educational Services*, a non-profit Colorado educational services corporation for the *Educational Access Gateway Learning Environment Network* (EAGLE-Net) project.

These entities also include Telecommunications and Broadband Service Providers seeking to expand their service capabilities to Community Anchors, businesses, and consumers, in part through the use of NTIA Broadband Technology Opportunities Program grant funding.

The Colorado Community Anchors Broadband Consortium (CCABC) has defined and developed a much needed plan to build, upgrade, extend, and deliver high-speed broadband Internet connectivity to Community Anchor locations throughout Colorado. The project will enable delivery of broadband Internet services such as:

- High-definition video/audio distance learning
- Adult education and training opportunities including access to information, research, and online and distance learning
- Health care oriented professional development
- Medical services from urban health care programs
- Broadband services to homes by private sector partner broadband service providers
- Business broadband services by private sector partner broadband service providers

The community anchor locations include **26 separate library jurisdictions** representing more than **234,500 residents** in rural areas throughout the state. These locations are typically the least able to afford efficient and cost-effective broadband service.

- 1 -

The State Library is in full support of the proposal and will provide assistance as needed to assure successful implementation of the program. We fully believe Governor Ritter, education Commissioner Jones and members of the Legislature are supportive of libraries and recognize the need for internet connectivity improvements for residents; libraries are an essential part of connectivity, especially in rural areas of the state.

We consider the EagleNet grant application to have been developed in the true spirit of the requirements for funding under the BTOP Grant program. We respectfully request a favorable consideration of the Grant funding requested to assist in the implementation of our statewide broadband Community Anchor network.

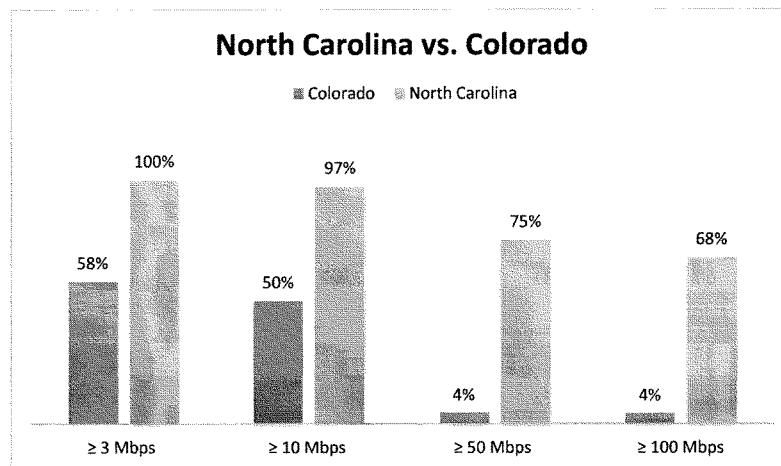
Sincerely,



.....  
Eugene Hamer  
Assistant Commissioner, Colorado State Library  
Colorado Department of Education  
P: 303-866-6733  
ehamer\_g@cde.state.co.us  
[www.ColoradoStateLibrary.org](http://www.ColoradoStateLibrary.org)



75 percent of schools in North Carolina have broadband over 50 Mbps compared to 4 percent of schools in Colorado



*Data as of June 30, 2012*

February 26, 2013

Chairman Greg Walden  
Subcommittee on Communications and Technology  
U.S. House Committee on Energy and Commerce

Ranking Member Anna Eshoo  
Subcommittee on Communications and Technology  
U.S. House Committee on Energy and Commerce  
Dear Chairman Walden, Ranking Member

Dear Chairman Walden, Ranking Member Eshoo, Members of the Subcommittee on Communications and Technology:

My name is Christopher Thurow Sr. and I am a resident of the State of Florida. I represented Bradford County Florida on the board of the North Florida Broadband Authority since its inception in 2009. I also served as the chair of the technical operations committee for the same. Bradford County has since withdrawn from participation in the program. I have more than 35 years of experience in in both the public and private sector, currently serving as Director of Information Technology in Bradford County Florida. I am providing my personal experience with the North Florida Broadband Authority which is a BTOP recipient and I am not representing any party other than myself.

The North Florida Broadband Authority was awarded a grant to provide ubiquitous middle mile gigabit broadband connectivity. More than 28 million dollars have been spent to date on this project and it is questionable if the recipient matching portion of the grant has been met.

There have been numerous miscalculations as to the intent, delivery, planning and funding for this particular BTOP program. Allegations of waste, fraud and abuse led to NOAA withholding funding and eventually led to the NTIA recommending the removal of the general manager, the legal firm and the grant compliance company that were managing the entire project. The investigation is still underway at the Office of the Inspector General. Seven of the original fourteen counties have withdrawn from the NFBA.

Currently the program has an estimated five thousand to twelve thousand dollars month total revenue. This revenue is not from the targeted middle mile users but is primarily end users that the NFBA has provided both equipment and installation at no charge to the user. Anchor institutions may comprise of 5-10 of these connections. The anchor institutions that were provided service had broadband capabilities already through the private sector.

The grant required sustainability to be met by January 31<sup>st</sup> 2013.



A low estimate of monthly expenses for the NFBA would be in the vicinity of three-hundred thousand dollars a month.

The NTIA program office has constantly modified program rules to accommodate the recipient however grant non-conformity persists. Indeed, at the expense of the grant the NFBA has hired a full time “lobbyist/law firm” to parlay with the NTIA and NOAA to make certain virtually all costs are grant eligible.

After no less than four “cost and sustainability studies” the NFBA late last year spent another one hundred thousand dollars on consulting fees to generate more of the same. The NTIA clearly wanted to hear about revenue sustainability and it didn’t mind spending taxpayer money to get the answers they were looking for. At this very moment the NFBA is spending taxpayer money on yet another sustainability study.

The revenue model is untenable thus the NFBA has clearly failed in its intended objective.

Christopher Thurow Sr.

Morrison, Florida

Christopher Thurow

Digitally signed by Christopher Thurow  
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Congressman Cory Gardner  
213 Cannon House Office Building  
Washington, DC 20003

RE: Congressional E & C Oversight Hearing- Is the Broadband Stimulus Working

Dear Congressman Gardner:

The following points have been summarized to provide a brief summary of the BTOP Grantee, EAGLENET and its overbuild of PC Telcom's operating area.

- ENA is established as a quasi-state agency and is restricted from selling to non-members (CO Senate Bill 152) which goes directly against their open access requirements within the BTOP grant.
- PCT has served and continuously upgraded its network in northeastern Colorado since 1906.
- PCT currently serves more than 10 CAIs via locally owned and maintained fiber optic network throughout several rural northeastern Colorado counties with available multi-gigabit capacities. Fiber middle mile and area schools have been served for approximately 10 years.
- PCT offered and EAGLE-Net (ENA) / NTIA agreed to a preferred lit services arrangement in February of 2012. PCT provided detailed network mapping and information to ENA and NTIA repeatedly throughout 2010, 2011 and 2012. There can be no question that ENA/NTIA knew that PCT's territory was fully served by fiber optic.
- In July and August of 2012, ENA/NTIA spent approximately \$4 million to construct new duplicative fiber optic systems throughout PCT territory, overbuilding routes already served by conduit containing a minimum of 24 strands of fiber optic (and thereby near infinite capacity as PCT deploys the latest dense wave division multiplexing technologies).
- Having overbuilt nearly 100% of PCT's fiber optic facilities connecting Community Anchor Institutions to high capacity and reliable broadband services, ENA/NTIA is actively courting all of PCT's highest paying customers with below-cost federal services. This is utterly contrary to federal law, state law and the promises ENA made to the state to serve unserved and underserved areas while partnering with carriers in already served areas. Collaboration was stressed repeatedly in ENA's pre-grant discussions and its application.
- PCT's backbone connection is on an industry compliant redundant ring that can failover to alternate routes in milliseconds offering redundant routes to ENA's single threaded network running more than 160 miles from Denver to the far northeastern corner of the state. ENA cannot maintain its network; it has neither the personnel nor experience; it simply used federal money to hire contractors and build network without any real idea of what it was doing.
- PCT has offered to assume ownership of the overbuilt network and maintain it for NTIA and ENA in a sustainable locally owned fashion that PCT can repay RUS loan of approximately \$8 million while retaining PCT's largest and most reliable institutional and commercial customers.
- Community leaders, county executives and more than 350 Coloradans across PC Tel's territory have repeatedly urged NTIA not to overbuild existing carriers and to remedy the overbuilds where they have.

Sincerely,

Vince Kropp, CEO/GM

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W W W . P C T E L C O M . C O O P

February 27, 2013

Representative Gardner  
United States Representative

re: Eagle Net

Dear Sir:

I want to first thank you for all you have done for the residents of rural Colorado to receive adequate and equal broadband service as our metropolitan counterparts. As Mayor of Bayfield we have witnessed businesses pass our community due to a lack of broadband service.

In the southwest both the local governments and the carriers recognize that we must work together to bring broadband to our residents and businesses. Our local carriers are working tirelessly to expand broadband in our area but lack the necessary capital to complete the job. Eagle Net represented a viable option to bring this to fruition. However, we will not sacrifice collaboration for money to accomplish our broadband initiatives.

Please find attached a document I support and personally hand delivered to Eagle Net's new CEO Mike Ryan on behalf of our local carriers outlining how we will continue to work collaboratively. Eagle Net is welcome to join the collaborative model we have established.

Thank you again Representative Gardner for your efforts to assist rural Colorado in our plight.

Dr. Rick K. Smith  
Mayor of Bayfield

<b>GOAL:</b>	To connect all municipalities in the region with a fiber network by maximizing the fiber investment made by the private sector, the Southwest Colorado Council of Governments (SWCCOG) and the federal government in southwest Colorado.
<b>FACTS:</b>	<p>Southwest Colorado has challenging terrain for fiber projects whether buried or aerial installations are contemplated.</p> <p>The local carriers have substantial investments in fiber routes throughout the southwest. The combined routes connect approximately 80% of the southwest (see attached map).</p> <p>The SWCCOG has a \$4 million fiber investment with major funding coming from Colorado's Department of Local Affairs (DoLA) connecting the schools and government buildings in each of its member municipalities.</p> <p>The local fiber loops connect the schools, libraries, municipal and county buildings together and bring them to a neutral location.</p> <p>Many of the SWCCOG's smaller municipalities partnered with the local carriers to complete their local fiber loops through a collaborative effort.</p>
<b>STATUS:</b>	<p>The southwest local fiber carriers currently connect 80% of its municipalities through a system of fiber routes.</p> <p>The southwest wireless carriers currently provide middle mile and last mile connectivity to customers with a backhaul services component as well.</p> <p>Each of the SWCCOG member municipalities has scheduled or completed a local fiber loop connecting schools, libraries, municipal and county government buildings.</p> <p>Eagle Net has installed empty conduit sporadically around the southwest, mainly in Montezuma and Dolores Counties.</p>

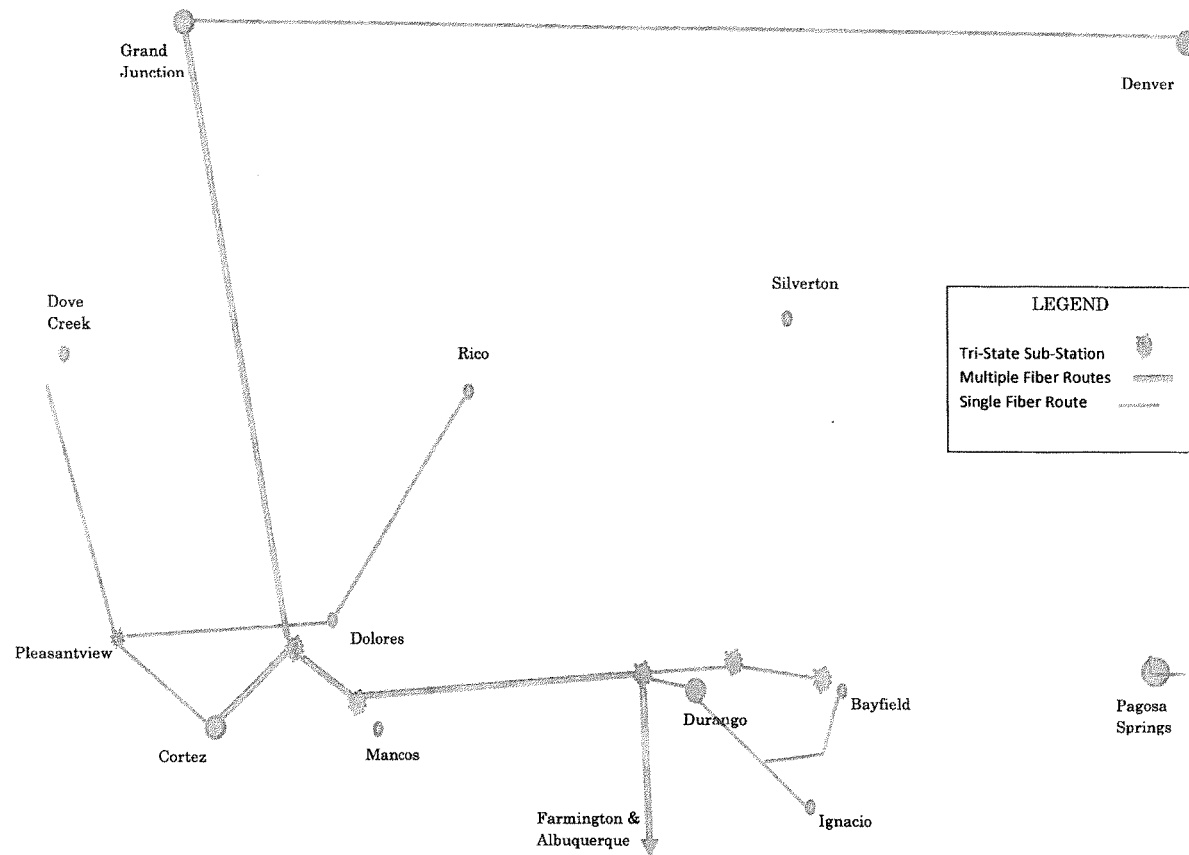
**COG Beliefs:** Oversight, transparency, accountability, and public access information are important components of all broadband development projects funded by tax payer's money.

Public funds allocated for broadband development may be used to compensate for the lack of private broadband investment in unserved and underserved communities, such as rural areas and low-income areas.

The SWCCOG defines underserved as: The ability of an organization to continually utilize applications and tools to meet the organizational mission and goals. As applications are enhanced with a need for increased broadband capabilities and the current infrastructure cannot support the increased need, the area is deemed underserved.

**OPTIONS:** The SWCCOG recognizes three plausible options for the NTIA and Eagle Net to complete the middle mile fiber network in the time allotted.

- 1) Eagle Net work cooperatively with the local providers to complete the middle mile fiber network utilizing local providers' assets currently installed. Elimination of duplicate/parallel fiber builds in order to maximize NTIA funding, local carrier investment and the DoLA funded SCAN project.
- 2) The SWCCOG assist NTIA and Eagle Net by facilitating a collaborative effort on Eagle Net's behalf between local carriers and NTIA to complete the middle mile fiber network utilizing local providers' assets currently installed. Elimination of duplicate/parallel fiber builds in order to maximize NTIA funding, local carrier investment and the DoLA funded SCAN project.
- 3) The SWCCOG and the local carriers collaborate to acquire the necessary funding to complete the middle mile fiber network utilizing local providers' assets currently installed. Elimination of duplicate/parallel fiber builds in order to maximize the funding, local carrier investment and the DoLA funded SCAN project.





February 25, 2013

Representative Cory Gardner  
213 Cannon HOB  
Washington, DC 20515

Dear Congressman Gardner:

This letter summarizes the experiences of Blanca Telephone / Jade Communications with regard to EagleNet and is to be incorporated into the record of the Committee on Energy and Commerce Subcommittee on Communications and Technology with regard to the hearing on Wednesday, February 27, 2013, at 10:30 a.m. in 2322 Rayburn House Office Building entitled "Is the Broadband Stimulus Working?"

Blanca Telephone / Jade Communications ("Blanca")

- Blanca is a family owned and operated provider providing high quality, locally owned and maintained telecommunications services in the San Luis Valley since 1937.
- The Blanca Telephone and Jade Communications service area is 6 times larger than the state of Rhode Island or 1.3 times larger than the state of Connecticut or just a little smaller than the entire state of New Jersey. It includes four of Colorado's persistent poverty counties.
- In square miles, Blanca Telephone's fiber optic broadband service territory spans 1000 square miles in counties where the population densities is 2.9 people per square mile. Jade Communications fiber and Microwave facilities span approximately 7327 square miles with an average density of 7.4 persons per square mile. Blanca Telephone has assiduously invested in these areas for 91 years to bring 21st Century network infrastructures to these extremely remote and hard to serve areas.
- Despite these enormous challenges of massive distances, and a harsh winter climate, depressed rural economies suffering from not only a continuing weak economy, but historical drought conditions, extremely low population densities and average income way below the national levels, Blanca Telephone has succeeded in building out more than 230 miles of advanced fiber optic network providing high speed Internet services to some of the most remote, hardest to serve areas in the United States. Schools and community anchors located in Costilla County are hundreds of miles away from larger population centers. The closest population center of any significance is 100 miles away. The Blanca Telephone Company serves approximately 1,000 residences, businesses and 1 school and Jade has over 11 towers that provide dedicated high capacity fixed wireless service to more than 1,500 residences, businesses, schools and libraries.
- Century-link (Qwest) is the major local exchange carrier in the San Luis Valley. They buried a fiber line many years ago. This fiber was the only lifeline to the outside world. When the fiber was cut, all of the

services; internet, cell phones, land line phones, e-mail, credit card machines and 911 were completely cut off and remain off until the fiber was spliced. I remember once we had no communications with the outside world for over 8 hours. The Blanca Telephone Company/Jade Communications took on the challenge and teamed up with TaosNet.net, an internet provider in Taos New Mexico. TaosNet.net, like Blanca Telephone Company/Jade only had one way in and one way of their respective Valleys. Together we teamed up and built a microwave route between the two companies. See [www.Chileroute.com](http://www.Chileroute.com). We discovered that we depended on the Chileroute on a daily basis. One day the Century-Link fiber was cut and the entire Century-Link emergency personal showed up at our office to call for help. With this history behind us, the Blanca Telephone Company constructed fiber optic conduit and multiple fiber count along a route from Alamosa to Walsenburg providing a new, robust, physically diverse high capacity connectivity for all of the San Luis Valley. This ensures the Valley's economic future, as no business will consider locating in an area with unreliable broadband where connectivity can go down for any appreciable amount of time. With this new build, Blanca can ensure that its customers will be served within milliseconds on diverse routes thereby assuring the continued progress of economic development in this area of Colorado.

- As Blanca Telephone and Jade Communications has repeatedly represented to EagleNet through multiple filings with the entity as well as multiple letters provided to NTIA, countless meetings, negotiations and Local Technology Planning Team sessions over the past several years, Blanca Telephone and Jade Communications network, service capabilities, customer service and pricing, rivals those of larger cities in the State of Colorado state or any state in the US. Blanca has supplied maps and other information to ENA and NTIA repeatedly.
- Blanca was the first to deploy high-speed fiber optic and next generation dedicated wireless broadband connectivity services throughout Costilla, Alamosa, Rio Grande, Saguache and Conejos Counties in the San Luis Valley.
- Blanca's network is capable of near-infinite capacity, is locally maintained, meets all industry standards and is supported by (three) diverse routes in and out of the San Luis Valley. Blanca provides three physically diverse middle-mile routes in and out of the San Luis Valley while other competing carriers provide an additional three diverse and redundant routes for a total of 6 diverse and redundant middle mile routes, exclusive of ENA, already serving the San Luis Valley.
- Blanca was more than willing to offer NTIA reasonable terms that would have saved them an estimated \$20 million, but NTIA with full advance knowledge that Blanca/Jade served almost every CAI in its service territory with high capacity broadband services chose instead to duplicate Blanca's high speed network with a second set of conduit, fiber optic, network access points, regeneration gear, and collocation facilities wasting tens of millions of federal dollars that could have been used for unserved and underserved areas in the western part of the state, such as those mentioned in the recent Wall Street Journal and New York Times articles.
- NTIA is now unfairly competing for Blanca's largest customers using federal grant dollars to offer below-cost services and telling them to disconnect Blanca's high-speed services in favor of the federal government's below cost services. Schools in La Veta, for example, now has three separate fiber optic systems connecting them. They are opting for government-sponsored connectivity simply because the taxpayers have footed the bill for this duplicative network.
- With only a handful of institutional customers to support millions of dollars of private investment including a recently completed fiber optic route between Walsenburg and Alamosa, NTIA has stranded Blanca's multimillion-dollar investment in a diverse underground route containing 48 fiber optic strand and harming long term economic development throughout the San Luis Valley.
- Blanca requests that fiber optic strands on overbuilt portions where it was providing compliant high capacity services to schools and community institutions be transferred to Blanca and other reasonable restitution be made.

Please fully examine NTIA's and EagleNet's activities in Colorado as they have refused to obey the mandates of federal law, ignored the express will of Colorado's communities, overbuilt fiber optic systems in the San



Luis Valley and statewide, and still insist that they somehow need to make a profit -- as if the federal government were ever charged with the duty to enter the telecommunications markets as a taxpayer funded entity and compete with the private market. This must be stopped and justice must be served for the many communities throughout the state harmed by duplicative and wasteful overbuilds as well as those deserving communities who never received a dime despite, for example, in the case of Gunnison Colorado, fiber optic cable hanging fully exposed on cattle fencing connected with a zip tie.

Thank you for your prompt attention in these matters.

Sincerely,



Alan Wehe, Manager

Blanca Communications / Jade Communications



February 25, 2013

Representative Cory Gardner  
 United States House of Representatives  
 213 Cannon HOB  
 Washington, DC 20515

Dear Congressman Gardner:

This letter summarizes the experiences of Southeast Communications, Inc. (SECOM) with regard to EagleNet Alliance (ENA) and is to be incorporated into the record of the Committee on Energy and Commerce Subcommittee on Communications and Technology with regard to the hearing on Wednesday, February 27, 2013, at 10:30 a.m. in 2322 Rayburn House Office Building entitled "Is the Broadband Stimulus Working?"

By way of introduction, Colorado is the nation's eighth largest state covering more than 104,000 square miles. It could contain the states of Maryland, Virginia, West Virginia, New Jersey, Connecticut, Delaware and Rhode Island and still have more than 4,000 square miles to spare.

SECOM's territory covers the counties of Baca, Bent, Crowley, Kiowa, Las Animas, Otero, Prowers and reaches into Cheyenne, El Paso, Huerfano, Lincoln, and Pueblo. Las Animas County alone covers 4,771 square miles. That's larger than the states of Delaware and Rhode Island combined and just short of the size of the entire state of Connecticut.

In square miles, SECOM's fiber optic broadband service territory spans 24,685 square miles in counties where the population densities are less than one person per square mile. Only three of these twelve counties have population densities above 10 persons per square mile.

To understand what it means to serve an area nearly 25,000 square miles in size consider that SECOM's service territory is more than twice the size of the state of Maryland, larger than the states of Vermont and New Hampshire combined, or larger than the states of Massachusetts and New Jersey combined. Stated otherwise, SECOM serves schools, hospitals, community colleges, municipal governments, fire departments, police stations, local businesses and everyday Coloradans in an area that is precisely half of the entire state of New York.

Under no circumstances can the federal government be allowed to enter into private telecommunications markets as a taxpayer subsidized competitor, which is exactly what ENA desires to do despite having a statutory charge of serving unserved and underserved

communities, which, as applied to Colorado exist almost entirely in specified areas in the western half of the state. As should be clear, ENA not only has failed to serve the western half of the state, they have overbuilt carriers, including SECOM in the eastern half of the state. This duplication of existing fiber optic and high capacity fixed microwave systems providing 100mbps and above while leaving the west unserved results in an egregious waste of taxpayer money. It harms the viability of carriers providing critical broadband infrastructures in eastern slope communities where community-based carriers have successfully operated for decades while leaving other communities without those infrastructures. The entire intent of the program has been turned inside out and has resulted in significant statewide harm. Nothing could be further from the direction Congress gave to the NTIA, from the promises made to the state by ENA, from the published statements in their grant applications, from the NTIA rules themselves, from the statements of the Colorado legislature who supported the grant on the condition that it cooperate and partner with existing carriers while ensuring unserved areas received appropriate infrastructures and from common sense.

In summary:

Southeast Communications (SECOM)

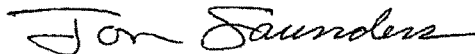
- SECOM has served southeastern Colorado with fiber optic since 1998.
- SECOM offers multi-megabit services throughout its 25,000 square mile territory including offering residential customers 100mpbs down / 50mbps up, which is far better than most urban customers receive not to mention these service offerings are at competitive prices.
- SECOM currently serves more than 250 Community Anchor Institutions (CAIs) via locally owned and maintained fiber optic network throughout 12 rural southeastern Colorado counties with available multi-gigabit capacities. These CAIs have been on-net to SECOM fiber optic since before the ENA overbuilds started. All of SECOM's network information was made available to ENA in advance of their overbuilds and SECOM responded to RFPs from ENA but they never replied.
- SECOM has also offered EagleNet Alliance (ENA) a preferred lit services arrangement that will provide service quality, reliability, maintenance and pricing that ENA concedes is superior in every respect to what it can offer.
- SECOM's offer provided ENA with a minimum of \$10 million in direct savings, while preserving SECOM's role as an effective provider of highly competitive, world-class fiber optic to the premises provider throughout southeastern Colorado. By the same token ENA would extend competitive neutrality to SECOM across the ENA network, thus ensuring continued competition throughout the state.
- This \$10 million could be redeployed to supply critical middle mile connectivity and boost economies in hard-hit Western slope communities including Silverton, Pagosa Springs, Mancos, Dolores, Bayfield, and Crested Butte.

- Since December 7, 2012 NTIA has not spoken with SECOM and recently began offering below-cost services in SECOM territory despite having the entire territory covered with fiber optic.

SECOM asks that the House Committee on Energy and Commerce Subcommittee on Communications and Technology expeditiously resolve the issues with ENA, ensure that no further overbuilding can occur, and properly dispose of ENA's assets in ways that are consistent with the express will of dozens of communities statewide whose county executives, economic development organizations, businesses and ordinary citizens of the State of Colorado who were promised an organization that would not overbuild, that would cooperate with the carriers and that would use taxpayer money only where there was actual need. The government must take responsibility and compensate those who have been harmed and ensure that such harm not recur whether through BTOP or some other federal program.

On behalf of dozens of county executives, communities throughout the southeastern corner of Colorado, and citizens statewide, please see to it that these issues are resolved completely, comprehensively, irrevocably and immediately.

Thank you,



Jon Saunders, General Manager,  
SECOM



**UNITED STATES DEPARTMENT OF COMMERCE**  
**The Assistant Secretary for Communications**  
**and Information**  
Washington, D.C. 20230

JUN 5 2013

The Honorable Greg Walden  
Chairman  
Subcommittee on Communications and Technology  
Committee on Energy and Commerce  
House of Representatives  
Washington, DC 20515

Dear Chairman Walden:

Thank you for the opportunity to testify on February 27, 2013 before the Subcommittee on Communications and Technology at the hearing entitled "Is the Broadband Stimulus Working?" I appreciate your forwarding additional questions for the record to me on March 28, 2013.

My responses to the questions are enclosed. If you or your staff have any additional questions, please do not hesitate to contact me or James Wasilewski, NTIA's Director of Congressional Affairs, at (202) 482-1840.

Sincerely,

A handwritten signature in cursive script, reading "Lawrence E. Strickling".  
Lawrence E. Strickling

cc: The Honorable Anna G. Eshoo, Ranking Member  
Subcommittee on Communications and Technology

Enclosure

**Responses to Questions from the Honorable Joe Barton**

- 1. NTIA recently issued the funding announcement for the state planning grant program. I understand the grant performance period is three years and that there could be a second phase adding another two years. How do you reconcile a three to five year planning period with the fact that on Saturday during the National Governors Association conference Board Chairman Sam Ginn testified that the Board has already “architected the system” and “know[s] what it's going to look like”?**

The State and Local Implementation Grant Program (SLIGP) will run concurrently with the First Responder Network Authority’s (FirstNet’s) work to design and develop the nationwide public safety broadband network. The Middle Class Tax Relief and Job Creation Act of 2012 (Act) directs NTIA to establish SLIGP to assist state, regional, tribal, and local jurisdictions with identifying, planning, and implementing the most efficient and effective means to use and integrate the infrastructure, equipment, and other architecture associated with the nationwide public safety broadband network to satisfy the wireless broadband and data service needs of their jurisdictions. SLIGP also supports and facilitates the states’ consultations with FirstNet, which the Act created as an independent authority within NTIA to oversee the design, construction, and operation of a nationwide public safety broadband network that is based on a single, national network architecture.

The grant program has a three-year period of performance. Within this three-year period, the program is divided into two phases. The initial phase allows up to 50 percent of the federal funds to be used by states and territories to start planning, outreach, and governance activities, as well as the initial consultations with FirstNet. The second phase will be opened once FirstNet has determined what data elements it needs collected from the state, local, and tribal stakeholders. NTIA will release the remaining 50 percent of federal funds sometime during the first three years of SLIGP, at which time the states and territories will have access to all federal funds to complete all activities, including the outreach, planning, consultation, and data collection.

NTIA received SLIGP applications and expects to award grants this summer. The efforts funded under SLIGP will complement and facilitate FirstNet’s consultations with regional, state, tribal, local, and federal jurisdictions and public safety, which FirstNet Board Chairman Ginn has stated will be ongoing. To the extent FirstNet is “architecting the system,” it is merely in the preliminary phases of exploring various design, deployment, and financing options, consistent with the Act, and is not making final decisions on network design. Indeed, FirstNet needs to have a thorough understanding of these options in order to have meaningful consultations with state, tribal, and local governments and public safety, and to incorporate their requirements into the ultimate network design.

- 2. I am encouraged that FirstNet has been visiting the states, including Texas recently, and may potentially move forward with all the suspended BTOP projects if terms and conditions can be successfully negotiated over the next 90 days. I understand, however, that one such condition would be to transfer control of the BTOP assets to**

**FirstNet. Wouldn't the effect of this transfer of assets be to eliminate a state's statutory right to opt-out of the FirstNet deployment since it would otherwise be left with no beneficial access to these assets? Stated differently, wouldn't this create a de facto opt-in position for BTOP jurisdictions prior to their being presented a plan to make an opt in/opt out decision? What would be the purpose of requiring agreement to a transfer of control now as opposed to waiting until the plan for a particular state is complete?**

In February 2013, the FirstNet Board adopted a resolution outlining its path forward with the seven public safety BTOP grantees, whose funding was partially suspended by NTIA following enactment of the law creating FirstNet. Currently, Board member Sue Swenson is negotiating 700 MHz lease agreements with each of these seven projects. As this process has not yet concluded, FirstNet has not provided me with the terms of any agreement and I cannot speculate on the possible effect any hypothetical term may have on a state's decision to opt-out. Moreover, as five of the seven projects are with entities other than states, whatever conditions those grantees might negotiate would have no effect on a state's opt-out rights.

- 3. In the last FirstNet meeting held on Feb 12, 2013, the board approved resolution 18 directing the board to negotiate spectrum lease agreements with BTOP public safety grant recipients within 90 days. Texas was not included within that resolution and there are concerns with the Special Temporary Authority (STA) process being temporary causing jurisdictions concern about investing money into the network and planning within Texas. Is there planning within NTIA and FirstNet to ensure that Texas also is allowed to negotiate a long term spectrum lease agreement and if so when can it be expected.**

While the Board's February resolution applies only to its negotiations with BTOP awardees, a representative of the 700 MHz public safety project in Harris County, Texas, which was funded with grants awarded by the U.S. Department of Homeland Security, has been participating in the group's discussions as an observer. At its April 23, 2013 meeting, the FirstNet Board adopted a similar resolution authorizing Ms. Swenson to commence negotiations on a spectrum lease agreement with the State of Texas to cover operations under the Harris County project. Texas is currently engaged in discussions with FirstNet regarding a spectrum lease.

- 4. The current authority for the Texas Public Safety Broadband buildout is only for a total of 14 sites within Harris Co area. Just to deploy the Harris Co area would require approximately 90 sites. It is my understanding that jurisdictions within Texas have local funding to invest in infrastructure however they cannot proceed within the current approved authority. What is being done within NTIA and FirstNet to work with Texas to allow them to continue to buildout infrastructure beyond the current 14 sites?**

The Harris County, Texas project was funded through grants awarded by the Department of Homeland Security. Thus, unlike the circumstances with the BTOP public safety projects, NTIA does not have an administrative role in monitoring and overseeing the project.

**Responses to Questions from the Honorable Cory Gardner**

**1. Is delivering middle mile facilities to unserved and underserved locations one of the main objectives of the NTIA BTOP grant?**

The broadband grant program of the American Recovery and Reinvestment Act (Recovery Act) has several statutory purposes: providing broadband to unserved and underserved areas; enhancing broadband for community anchor institutions (CAIs) such as schools, libraries, and healthcare providers; improving broadband for public safety agencies; and stimulating broadband demand.

In the first round of BTOP funding, NTIA solicited applications for both last mile and middle mile projects. NTIA defined middle mile projects as any broadband infrastructure project that does not predominantly provide broadband service to end users or to end-user devices and that may include interoffice transport, backhaul, Internet connectivity, or special access. In the first round, NTIA also had as a goal to expand and enhance broadband services for community anchor institutions such as schools, libraries, colleges and universities, medical and healthcare providers, public safety entities, and other community support organizations.

NTIA found that the strongest applications were from those entities that proposed a comprehensive approach to meeting the community's broadband needs by both expanding on middle mile investments and providing new or substantially upgraded connections to community anchor institutions. As a result of these tremendous benefits, NTIA awarded a significant portion of funds in the first round of BTOP funding to such projects, and in the second round of BTOP funding, adopted the "comprehensive communities" approach that prioritized applications that would deliver middle mile broadband infrastructure and offer new or substantially upgraded connections to CAIs.

Middle mile investments also help "prime the pump" for additional investment by public and private entities. In particular, the open access and interconnection requirements imposed on federally-funded infrastructure encourage last mile and other broadband providers to tap into the middle mile networks to expand broadband services and speeds for American consumers and businesses. Across the country, providers have signed over 600 agreements with our grantees to use federally-funded networks to better serve their customers. In this way, NTIA leverages limited federal funding to significantly improve broadband capabilities for the greatest number of Americans.

The additional focus on connecting anchor institutions provides a number of important benefits to the nation. Schools, libraries, colleges and universities, medical and healthcare providers, public safety entities, and other community support organizations increasingly rely on high-speed Internet connectivity to serve their constituencies and their communities. Expanding broadband capabilities for community anchor institutions enables them to deliver significantly-improved education, healthcare, and economic development. Healthcare providers will be able to monitor patient health remotely, consult with other medical professionals, and share medical records in real-time. Emergency responders will be able to share real-time video and other situational awareness to help protect the public and respond quickly and efficiently to disasters



and other emergencies. Broadband connections in libraries enable students to conduct research and locate information and allow workers to identify and apply for jobs. Schools and colleges are able to stream audio and video content from other institutions, provide and receive instruction through online distance-learning programs, and facilitate training and skill development for adult learners.

**2. Was it a goal of NTIA to collaborate with existing providers where sufficient broadband already existed?**

NTIA's goal was to encourage our grantees to utilize existing infrastructure where it was available, and BTOP grantees took steps to obtain information about existing infrastructure and leverage these facilities as much as possible. In cases where some broadband facilities existed, NTIA encouraged applicants to solicit information from incumbent broadband providers on the availability of existing infrastructure and to lease "dark fiber," or otherwise leverage the existing facilities where possible. In these cases, federal funding was used to upgrade or improve the level of broadband infrastructure in the community, such as lighting unused existing fiber with appropriate electronics. By authorizing recipients in those circumstances to use grant funds to light existing dark fiber and bring it online, NTIA's grant recipients have made good use of existing facilities. In the case of Eagle-Net, approximately 1,900 network miles, or more than 65 percent of the total miles in the State of Colorado, have been leased or upgraded from existing broadband providers. Across the United States, BTOP grantees have upgraded more than 55,000 miles of existing broadband infrastructure, demonstrating the ability of BTOP to identify win-win opportunities for our grantees and existing broadband providers.

**3. What were the criteria used to determine whether sufficient broadband existed within unserved and underserved areas, and did NTIA have a step-by-step process in place to determine where sufficient fiber optic facilities existed? If so, what was that process?**

NTIA defined unserved to mean an area where at least 90 percent of the households lack access to facilities-based, terrestrial broadband service of at least 768 kilobits per second (kbps). It defined underserved to mean an area where either no more than 50 percent of the households have access to broadband service greater than 768 kbps, no broadband service provider advertises broadband speeds of at least 3 Mbps, or the rate of broadband subscribership is 40 percent of households or less. The second round of funding did not require projects to serve only unserved or underserved areas, but the extent to which the project proposed to serve those areas, along with meeting the other goals of the Recovery Act, was a significant factor in consideration of the application.

The mere presence of an existing provider did not necessarily indicate that the area was adequately served. For example, community anchor institutions such as schools and libraries need broadband speeds many times faster than the basic mass market broadband offered to residential customers. The State Educational Technology Directors Association (SETDA) has reported that schools need bandwidth of at least 100 megabits per second (Mbps) for every 1,000 students and staff. SETDA expects that requirement to increase to one gigabit per second by 2017-18. Compare those speeds to a basic mass market broadband offering of 3 Mbps. In

Colorado, only 4 percent of schools subscribe to broadband speeds greater than 50 Mbps, compared with North Carolina where a statewide educational network allows 75 percent of schools to have broadband service at speeds of 50 Mbps or greater. Clearly, Colorado is an example of a state with significant need for additional broadband investment to deliver the high Internet speeds that students need to be competitive in the 21<sup>st</sup> century.

In reviewing applications, NTIA relied on such information submitted by applicants as data collected by states or other government entities, or evidence that CAIs lacked sufficient broadband service. NTIA received thousands of letters and testimonials from schools, libraries, healthcare facilities, and public safety entities indicating that they could not obtain the broadband services they needed to fulfill their missions in today's technological age. In many cases, this evidence was bolstered by the support of leadership representing the state. To give just one example, the Eagle-Net project in Colorado was endorsed by the Governor, the state legislature, the Colorado Department of Education, and numerous incumbent providers. Republican and Democratic members of the Colorado Congressional delegation wrote:

"As representatives of Colorado's congressional delegation, we are well aware of the inconsistent and in some cases, completely non-existent high speed broadband services for some of our most vulnerable communities. EAGLE-Net's proposal will address this need among the communities where market forces have failed to attract affordable broadband infrastructure and investment. EAGLE-Net will serve as the non-profit network to Community Anchor Institutions throughout the state, including 178 K-12 school districts serving over 2,000 schools & 800,000 students, 16 community colleges, 26 libraries, 12 BOCES, two institutions of higher education, public safety and health care providers, as well as city and county governments."

To further avoid duplicating existing infrastructure, NTIA published detailed information about the proposed service areas of BTOP applications and requested comment from incumbent broadband providers on their level of service in these areas. NTIA reviewed the information submitted by these providers and took it into consideration during the review process.

**4. If sufficient broadband existed, did NTIA guidelines have steps in place to ensure that BTOP grant awardees had a process to evaluate the best possible use of existing facilities and BTOP grant dollars?**

Please see my answer to question 2 above. NTIA encouraged awardees to utilize existing infrastructure, such as by lighting dark fiber, to ensure the efficient use of taxpayer dollars. Of course, this outcome was only possible where existing providers were willing to make dark fiber available on reasonable terms and conditions.

**5. Can you justify a circumstance where an unserved or underserved community did not get fiber with Eaglenet's BTOP middle mile grant, yet other locations that appeared to be well served received funding? Please explain in the context of the priorities of the BTOP grant program how this could occur.**

In 2010, NTIA awarded a grant to Eagle-Net to construct a high-speed broadband network to connect schools and other community anchor institutions throughout the state. Eagle-Net developed the project application based on its assessment of the needs and priorities of schools in Colorado. As described in my answer to question 3, data indicate that Colorado schools have tremendous need when it comes to broadband investment.

The goal of the Eagle-Net project is to connect schools across Colorado to a statewide education network. We have seen from our experience in other states that students, teachers and the state more generally will benefit tremendously from a statewide education network. A statewide education network can significantly lower costs for schools and teachers by combining their purchasing power to lower costs for bandwidth. Teachers, students, and parents can harness the power of a statewide network to share resources, best practices, and software applications. Students can engage in distance learning more efficiently over a statewide network and take advantage of teacher instruction in areas across the state. By lowering bandwidth costs and increasing broadband speeds for schools, students and teachers can conduct coursework online and leverage the global resources that the Internet provides. Most schools in the United States now require that student and teacher assessments be administered online, making high-speed broadband even more of a necessity. The proliferation of tablets and low-cost notebook computers is providing students with unparalleled new opportunities to learn that were unimaginable just a few years ago, but also straining antiquated broadband networks in some communities. Schools that lack sufficient broadband service will continue to be at a disadvantage in their ability to give students the tools and services they need to compete in the twenty-first Century.

Development of a statewide network will involve connecting schools located in unserved, underserved, and served areas of a state. It also makes economic sense, because Eagle-Net would be unsustainable otherwise. Revenues from school districts in more densely populated areas of Colorado allow Eagle-Net to provide service in underserved school districts in a supportable and self-sustaining manner well into the future.

As noted in the answer to question 2, NTIA encourages all our grantees to utilize existing infrastructure where they can, which has been the case with Eagle-Net in Colorado. In addition, Eagle-Net has delivered significant network assets in western Colorado, deploying over 500 miles of broadband infrastructure in the West. These assets include leasing existing infrastructure that interconnects cities such as Craig, Grand Junction, Montrose, and Durango. Additionally, core network routers have been deployed in major interconnect locations, including Durango and Grand Junction. Eagle-Net has encountered delays in delivering other parts of the Western build due to contractor and procurement issues. Additionally, the terrain in the western parts of the state has made deploying broadband infrastructure more challenging.

In April 2013, NTIA lifted the suspension on the Eagle-Net project after the recipient addressed its environmental requirements and developed a viable path forward for the project's long term sustainability. Eagle-Net now has a plan to focus on constructing in western Colorado during the limited 2013 construction season, working closely with community stakeholders and existing broadband service providers. Eagle-Net is committed to continuing discussions with the Colorado Telecommunications Association and its members to identify partnership opportunities

that will benefit Colorado schools. Eagle-Net will implement a plan that focuses immediately on 29 school districts west of I-25, including Silverton. Eagle-Net plans to complete the majority of this construction by August 2013 and request an extension of its BTOP project to 2014. At the end of this phase, over 50 percent of the 190 combined school districts (178) and Board of Cooperative Educational Services (12) in Colorado will be on-net to the Eagle-Net network.

**6. Are BTOP awardees such as Eaglenet required to provide annual audited financials? If so, where are they sent?**

Yes, the Department of Commerce Standard Terms and Conditions require all BTOP grant recipients to have their award audited, if they meet certain financial thresholds. State, local, and tribal governments; universities; and non-profit organizations such as Eagle-Net must have an A-133 audit for every fiscal year in which the recipient expends \$500,000 or more in federal funding. Recipients submit their A-133 audit reports to the Federal Audit Clearinghouse via <http://harvester.census.gov/sac/> 9 months after their fiscal year ends. For more information on BTOP audit requirements, see <http://www2.ntia.doc.gov/compliance#audit> and [http://www.whitehouse.gov/sites/default/files/omb/assets/a133/a133\\_revised\\_2007.pdf](http://www.whitehouse.gov/sites/default/files/omb/assets/a133/a133_revised_2007.pdf).



April 8, 2013

The Honorable Greg Walden, Chairman  
Subcommittee on Communications and Technology  
Committee on Energy and Commerce  
2125 Rayburn House Office Building  
Washington DC 20515

Dear Representative Walden:

Thank you for the opportunity to appear before the Subcommittee on Communications and Technology on Wednesday February 27, 2013 to testify about the Colorado Telecommunications Association's concerns with the NTIA grant awarded to EagleNet.

Attached is a copy of my response to Representative Henry Waxman's questions regarding my testimony. A copy of the response was also provided electronically to the Legislative Clerk.

If there are any other questions or concerns, please let me know.

Sincerely,

Pete Kirchhof  
Executive Vice President  
Colorado Telecommunications Association  
225 East 16<sup>th</sup> Avenue  
Denver CO 80203

cc: Anna Eshoo, Ranking Member, The Honorable Cory Gardner, The Honorable Diana DeGette

Attachment

The Honorable Henry Waxman

1. Your testimony notes that Eagle-Net is a "government owned and operated duplicate network." Yet you also discuss your members' heavy reliance on RUS loans – a publically financed investment that the federal government makes in broadband. It is also my understanding that CTA members receive roughly one third of their revenues from the Universal Service Fund, a public program funded by rate payers across the nation.

- a. Do your members use RUS loans and FCC Universal Service funds to serve exclusively unserved areas?

Response: CTA members do not use RUS/USF funds to serve exclusively unserved areas.

- b. Is cable or satellite broadband service available in any of the areas where your members offer service that is subsidized by ratepayers?

Response: Cable and satellite broadband service may be available to some CTA member customers but not to the majority of them. With regard to cable broadband, if it is available at all, it would only be to the core city/town and would not likely be available to the entire member service area.

2. I understand that Eagle-net has reached agreements with numerous providers across the state of Colorado for access to their networks – including big companies like Centurylink and smaller companies like Northern Colorado Comm. It is my understanding that one of CTA's members, PCTelecom, has such an agreement with Eagle-Net. Given the existence of these agreements, what is your basis for testifying that Eagle-Net has not negotiated in good faith with local providers to use their facilities.

Response: I do not have any personal knowledge of contracts between EagleNet and CenturyLink or Northern Colorado Comm. CTA has 25 RLEC members and two CLEC members. I am aware of two EagleNet/CTA member contracts: Wiggins Telephone and PCTelecom. Wiggins is a BIP award winner and therefore, EagleNet is prohibited from overbuilding in their service area.

Even though PCTelecom is a party to a contract, EagleNet still proceeded to overbuild most PCTelecom's service area putting millions of dollars in taxpayer funds at risk. It is unclear why EagleNet would sign a contract and then proceed to overbuild PCTelecom's service area without even informing them. This and the fact that the other 25 member companies do not have agreements with EagleNet and several of them are or were planned to be overbuilt by EagleNet is the basis for my testimony that EagleNet has not negotiated in good faith with CTA members.



Michael K. Smith  
State President – Vermont  
800 Hinesburg Road  
South Burlington, VT 05403  
msmith5@fairpoint.com

April 5, 2013

Charlotte Savercool, Executive Assistant  
U.S. House Committee on Energy and Commerce  
2125 Rayburn House Building  
Washington, DC 20515-6115

Dear Ms. Savercool:

I am submitting answers to the questions that you send after my testimony at the Subcommittee on Communications and Technology on Wednesday, February 27, 2013, to testify at the hearing entitled "Is the Broadband Stimulus Working." Please find my answers attached.

If you have any further questions please do not hesitate to give me a call.

Sincerely,

Michael K. Smith  
State President-Vermont

The Honorable Cory Gardner

1. Mr. Smith, during the second panel, Congressman DeGette asked about a \$7 million payment that FairPoint received as a vendor from an award winner. I believe she was asking about the federal NTIA grant program and your answer referenced a state program. Did FairPoint receive any money from a AARA BTOP grant award recipient?

## ANSWER

Thank you for the question. For clarification, we received \$8.6 million in reimbursement from either ARRA grant recipients or their contractors working for BTOP award winners. These monies partially reimbursed us for our costs for make-ready work necessary for the applicants to attach their cable to FairPoint's poles. In most cases this was right on top of our existing fiber. This work includes modifying existing pole attachments, which include FairPoint's, CLEC's, Cable TV's and in some cases the electric utilities facilities. It is important to note that this "reimbursement of costs" is recovery of money spent by FairPoint to make changes to the pole and does not directly benefit either FairPoint or any last mile broadband customers.

The Honorable Henry Waxman

1. I understand that during the time period of the Recovery Act implementation, FairPoint was the subject of a significant number of customer service complaints to the Vermont Public Service Board—roughly 9,000 complaints in 2009 and almost 4,000 in 2010. Do you believe FairPoint's customer service record have impacted the company's suitability to receive Recovery Act funding? If not, why not?

## ANSWER

Thank you for the question. If the above Vermont complaint data was a contributing factor to impacting FairPoint's suitability to receive Recovery Act funding then this is truly unfortunate since this data appears to be interpreted incorrectly and appears to be inaccurate. There is no data that we could find that corresponds to the Vermont Public Service Board receiving 9,000 complaints in 2009 or nearly 4,000 complaints in 2010. Our records indicate that for 2009 there were 2,606 complaints made to the state in Vermont (less than one-percent of our total access lines in Vermont) and in 2010 there were 1,339 complaints (less than one-half of a percent of our total access lines in Vermont). It is uncertain what the source of the data is for the assertions that we received 9,000 complaints in Vermont in 2009, but if the Federal Communications Commission's ("FCC's") report "State Complaints Per 1,000,000 Lines" from the Automated Record Management Information System (ARMIS) was the source for these complaint numbers, there is a conversion that must be done before reporting complaint data



because it is based on "Per 1,000,000 Access Lines." Using only Vermont data from the 2009 FCC Report 43-05 "The ARMIS Service Quality Report", the FairPoint Vermont complaint number was 993. The difference between this figure and what we have in our Vermont data base is probably because by all accounts Vermont has a more liberal interpretation of what constitutes a complaint than most other states or the federal government.

In large part these complaints were based on a massive IT conversion and were largely resolved between the fourth quarter of 2009 and the first quarter of 2010 and it had no bearing on our operational capabilities to expand broadband. In fact, we kept an aggressive broadband expansion program in full deployment in Vermont during that time. Digging deeper about complaint levels in Vermont during this timeframe finds a dramatic decrease in complaints (almost 50%) from the third to the fourth quarter of 2009. In 2010, there was another significant decrease in complaints (55%). Certainly these numbers needed improvement, and at the time of the grant application and process, they were improving significantly. Today, FairPoint is achieving high service quality standards that are predicated on the turnaround that was happening toward the last quarter of 2009 and beginning of 2010.

2. Your testimony stated FairPoint's concern about "overbuilding." Yet it is my understanding that FairPoint's own application for Recovery Act broadband funding would have included some areas that were already served by cable, DSL, and satellite providers. Would FairPoint's proposed project have raised the type of "overbuild" concerns that you stated in your testimony? If not, why not?

ANSWER

I have reviewed FairPoint's 2009 applications in Vermont, New Hampshire, and Maine. It is safe to conclude that the intent of those applications was to build where state officials thought that broadband was needed in their respective states. Although I can't confirm that in every case there was no one being overbuilt-- since satellite transmission by its very definition could be considered to be an overbuild in loosely defined terms--it was the primary intent of the applications to bring broadband to the unserved. FairPoint's 2010 Maine application had the same intended purpose. This intention is quite different than funding programs whose primary intent is to overbuild existing carriers.

3. According to the Committee's annual request for oversight data on the high cost program, FairPoint is a major recipient of Universal Service funding through the FCC. In your testimony you noted that FairPoint invested \$196 million for the deployment of broadband services. Did you include any USF subsidies in this \$196 million calculation? If so, how much of USF subsidy did you include?

## ANSWER

FairPoint has spent approximately \$196M on broadband expansion in the northern New England markets purchased from Verizon. During that same period the Company received approximately 2% of its revenues from USF. The high cost model support was spent in accordance with the various FCC rules and as such could have contributed, although fractionally, towards the total investment.

4. Is FairPoint using any USF funding to build in areas that may already have some broadband service such as from a local cable company or satellite provider?

## ANSWER

USF funding comes in a variety of programs, but generally it is based on reimbursement for required operational spending and recovery of existing investments. The single USF program that FairPoint participates in and that is tied to specific broadband buildout is the CAF Phase I Incremental support funding which can only be used for broadband in unserved areas. In fact one of the issues with CAF Phase 1 funding is that if just one household is served by another provider within the entire census block then that census block can't be used for CAF Phase 1 funding.