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THE FUTURE OF UNIVERSAL SERVICE: TO WHOM, BY WHOM, FOR WHAT, AND HOW MUCH?

HEARING

BEFORE THE

SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET

OF THE

COMMITTEE ON ENERGY AND COMMERCE
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

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TUESDAY, JUNE 24, 2008

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TELECOMMUNICATIONS
AND THE INTERNET,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 9:35 a.m., in room 2123 of the Rayburn House Office Building, Hon. Edward J. Markey (chairman) presiding.

Members present: Representatives Markey, Doyle, Inslee, Hill, Boucher, Stupak, Green, Dingell (ex officio), Stearns, Upton, Cubin, Shimkus, Wilson, Pickering, Walden, Terry, and Barton (ex officio).

Staff present: Amy Levine, Tim Powderly, Mark Seifert, Colin Crowell, David Vogel, Philip Murphy, Neil Fried, Ian Dillner, and Garrett Golding.

OPENING STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. MARKEY. Good morning, and welcome to the Subcommittee on Telecommunications and the Internet.

Today we are going to have among the most important hearings which we can have, because today's hearing will focus on the principle of universal service. That principle along with diversity and localism has been a hallmark of telecommunications policy for decades.

The commission has a variety of tools to achieve universal service. It can be achieved and promoted through competition policy, franchising policy and wireless policy, through both options designed to spur competition on mandated build out of networks. And universal service can also be advanced through mechanisms developed under the law to support subsidies for various universal service funds.

These funds are currently in four major baskets: for rural high cost, for the E-Rate program for K through 12 schools and libraries, for the Lifeline and Link-Up programs for low income consumers, or for rural healthcare purposes. In analyzing the principle of universal service for the future, I believe it is important to take a step backward and to assess what objectives universal service should

now encompass and analyze how existing programs achieve these objectives or how they fail to meet them.

Rather than getting right into detailed debates about how to divvy up the existing subsidy pool, question who qualifies for so-called ETC status, or tackle the pros and cons of the identical support rule or reverse auctions, policymakers should first discuss why we do any of this at all and examine questions as to why, for whom, for what, by whom, and at what expense. Right now the four universal service programs spend approximately $7 billion a year, and more than half of it, roughly $4 billion, goes to rural high-cost, followed by the E-Rate Program, which is currently capped at $2.25 billion per year. Consumers pay approximately an 11 percent surcharge on their interstate and international calls to fund all of this. This is more than double the percentage consumers paid a decade ago. Yet, as we look at how to recalibrate the funding mechanisms to more equitably garner funding among industry participants, it is vital that we provoke a conversation about what we believe universal service should be in the 21st century. This will allow us to effectively manage both the imposition of fees as well as justify the eligibility and purpose of disbursements.

There are a host of questions to tackle in various areas. For example, what level of service should be supported for rural consumers? Should the supported services include just plain old telephone service or broadband, wireline, or wireless service, too? If competition fails to achieve affordability for a particular service in a rural community, should extremely wealthy rural consumers be subsidized, or should the program be targeted to assure affordability for non-wealthy consumers in some way? For low-income consumers in non-rural areas, should their supported service or services be comparable to the level of service provided to rural consumers? Today, for example, it is not. A rural consumer in a high-cost area can get multiple lines subsidized, including wireless service. But a low-income consumer in Boston can only obtain one subsidized line.

How should Congress or the FCC adjust the program for rural healthcare? This program has never worked well and its current statutory construct no longer makes any sense.

And what about the future of the schools and libraries program for which I coined the term E-Rate to emphasize the education rate or educational mission of the program? This is a vital program that George Lucas and I first discussed back in August of 1993. Our conversation directly led me to fight to include a provision for discounted rates for schools and libraries in the 1994 Telecommunications bill, which I successfully passed through the House but which died in the Senate that year. The E-Rate became law when Congress enacted it in the succeeding Congress as part of the Telecommunications Act, and we have defended it with political light sabers ever since.

Given the fact that requests for E-Rate funding outpaced the current cap, should the cap now be lifted? Should the nature of supported services be upgraded to include truly high-speed connectivity to schools? Should certain supported services to schools become free of charge to ensure that all schools keep pace

in preparing the next generation for the fiercely competitive global economy we now face?

Today we face the challenge of how to achieve universal broadband for our Nation. Any overarching policy blueprint for universal broadband will be by necessity inclusive of universal service as a component. We must look at this task, however, cognizant of the cost consumers will be willing to bear but also mindful of the cost of not acting to upgrade our national telecommunications infrastructure and bringing all Americans along. That must be a critical part of that debate. These are costs to education, healthcare, job creation, and innovation if the United States fails to develop a plan for our digital broadband future.

I look forward to hearing from our truly excellent witnesses today, and I thank them for their willingness to be with us today.

Mr. MARKEY. And I turn now to recognize the ranking member of the subcommittee, the gentleman from Florida, Mr. Stearns.

OPENING STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. STEARNS. Good morning, and thank you, Mr. Chairman for holding this hearing. It has been a long time since we have had a hearing on universal service, and I think all of us look forward to hearing from our witnesses, and we welcome all of them. I also want to commend the Ranking Member, Joe Barton, for his efforts to make this hearing and for making universal service a high priority for this side of the aisle.

Obviously, all of us believe that the universal service needs to be reformed. I think we can all agree upon that point. The system is fraught with overpayment to a lot of companies in the rural areas, as well as the Chairman pointed out to the customers who have an 11 percent surcharge, which is double a decade ago. So a major overhaul is necessary.

The question before us this morning is what is the appropriate way to do this and how do we best achieve these aims through this legislation, perhaps. The 1996 Telecom Act codified universal service, but the concept goes back decades earlier to a time when there was only one phone company. Now the landscape obviously has changed, and the fund is still administered by these outdated rules. The entire country has access to phone service. We have more competition, better technology then ever before.

Yet, the Universal Service Fund continues to grow and grow. As of last year, the annual cost of the Fund was $7 billion, more than $4 billion of which came from the high-cost fund. Universal service fees, as mentioned earlier, now represent 11 percent of the consumers' monthly bill. That is 11 percent.

Now is not the time to expand the Fund but rather to reform it. For example, we should impose a firm cap to prevent uncontrolled growth in the Fund. With a limitless pool of money, carriers have no incentive to operate more efficiently. This subsidy chills innovation by propping up older technologies and carriers and making it harder for new innovators to compete. So throwing additional money at this crumbling program perhaps is not the best way to do it.

Moreover, performance measures are needed to ensure that we are getting results. Let us have accountability from the $51 billion we have spent over the last 10 years. That is $51 billion has been spent over the last 10 years. What impact are these funds having when everyone already has access to a phone? This type of transparency and accountability goes a long way, I think, to prevent abuse.

To really add competitive pressure, we also need to move to market-based mechanisms such as reverse auctions that are technologically neutral and fund only the carrier that can provide the most efficient service in that particular area. Today we charge even middle- and lower-income Americans in urban areas to pay incumbent and wireline phone companies in places like Aspen, Colorado. What is worse, the incumbent receives the same amount of money even when it loses subscribers to competition. The amount of subsidy per line just goes up. Moreover, the company that wins the subscriber then gets the subsidy at the higher per line rate, even if it can provide service more efficiently. Rather than subsidizing multiple carriers in what is by definition an area that is uneconomic to serve, we should be focusing support just on the carrier that can provide quality service most efficiently, regardless of that technology.

As this subcommittee considers universal service reform, we must also examine the FCC's performance in managing the E-Rate program. How much has been lost to waste, fraud and abuse? The FCC's Inspector General found error rates of 12 percent in the E-Rate program, which calls into question ratepayer amounts of approximately $250 million a year. We need to take a hard look at this program and institute real reform.

So, Mr. Chairman, I think this is a very appropriate hearing. We welcome all the witnesses, and obviously we welcome George Lucas who has a long history of supporting an increased role of technology and education, and we are all very respectful of that. We also all of us in this room need to support this goal, and I hope this hearing brings us into a better understanding of universal access and how we can reform it to help the consumers and bring the cost down.

Thank you, Mr. Chairman.

Mr. MARKEY. I thank the gentleman. The Chair recognizes the gentleman from Pennsylvania, Mr. Doyle.

OPENING STATEMENT OF HON. MIKE DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. DOYLE. Thank you, Mr. Chairman. I do want to thank you for holding this hearing and for encouraging us not to get bogged down in details today but to keep things very general.

So generally speaking, Mr. Chairman, I think the Universal Service Fund needs to be blown up like the Death Star. We need to reevaluate this program's goals and establish new priorities. We need to completely reform the Fund by moving away from subsidizing telephone service and instead put our money toward the broadband future.

For the meantime, I will call this needed reform Universal Service 2.0. I will bet the residents of rural Pennsylvania don't know what the Universal Service Fund has done for their ability to get affordable telephone service during the program's 10 years. And that is too bad, because the Fund has also probably helped their school get high-speed access to the Internet. And it has helped their library link up to other sources of information around the world. And if they are struggling to get by, it might have helped them afford to keep connected to their community. Those parts of the Universal Service Fund haven't grown too much. What also hasn't grown is the percentage of American households who have a telephone.

Can we get the chart that I have prepared on the screen? Now, what has grown up nearly 300 percent from where it first started 10 years ago is the high-cost fund for local telephone service in rural America. That growth is the columns you see on the screen, but the top line of that chart shows telephone rates that are staying relatively flat.

As those red bars have grown exponentially, the impact on my constituency has grown, too. Pittsburghers are paying more, regardless of their ability to pay, to provide basic telephone service to rural America regardless of the economic need. A single mom in my district with a wireline and a wireless phone is paying roughly $55 a year into the Universal Service Fund when she might not even have broadband in her own home that is essential to further her career or her children's education.

Perhaps that single mom's $55 a year investment into our infrastructure into Universal Service 2.0 would be worth it if it paid off in economic growth through the Nation and better opportunities for her children. Perhaps it would be worth it if it helped her wire her affordable housing project with broadband, or if broadband in her parent's home helped her dad manage his diabetes, or if a portion of her investment went toward broadband in a community far away where her son will take a promotion to manage a plant years from now.

Mr. Chairman, 1996 can be remembered for many things: the Telecommunications Act, the Macarena, one witness today was working on digitizing the Star Wars Trilogy. I won my first battle for reelection in 1996, so I remember 1996. Some things are timeless, like the Trilogy. Some things are better left to that time never to be heard of again, like the Macarena. And some things need to be completely revamped, like the Universal Service Fund.

Thanks for holding this hearing on universal service, Mr. Chairman. I yield back my time.

Mr. MARKEY. I thank the gentleman. The Chair recognizes the gentleman from Illinois, Mr. Shimkus.

OPENING STATEMENT OF HON. JOHN SHIMKUS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. Thank you, Mr. Chairman. Thank you for the hearing.

I represent parts of 30 counties in deep southern Illinois. Illinois has 102 counties, so you can imagine that most of the people who have had access in the rural parts of my district benefited from the

Universal Service Fund. They may be small mom and pop telephone companies like Home Tel Phone Company of Saint Jacob, Illinois, or Madison Telephone Company, or it could be rural co-ops like Adams Phone Co-Op. Ways in which people were able to bring out telephone service to rural communities when the business model was not there for major companies to do that. The Universal Service Fund stepped in to help do that.

The question that, hopefully, you will help us and those in the industry when we hear from them later will help us is how do we bring transparency to a funding issue and where do we put our money to best serve, I still believe, rural America. And I think most of us who service rural America know that there are still areas that have no cell connectivity.

And with enhanced 911 and location-finding, many of us really focused on 911 emergency issues, when you are traveling down rural Illinois Highway 127 and something happens, you are off in a ditch, you cannot be found. And that is why enhanced 911 is so critical, but you have to have the cell towers up. So that the 911, the Universal Service Fund has moved into helping place cell towers where it really is not the business model doesn't really justify it as much.

Secondly would be broadband deployment and everything that people talked about before, whether it is telemedicine, the distances that rural Americans have to drive to really get experts in the field of radiology or in the specialties through telemedicine, great benefits can be had. And also the ability of education and the quality of life in rural America is something that people really desire. And in light of specialties now, if you have access to broadband you can live anywhere in the world as long as you have that access.

So I appreciate the debate. I understand the importance of it. And we will work hard in the competing bills as we move through this Congress and in the next Congress to strike that balance to protect it but reform it.

And with that, Mr. Chairman, I yield back my time.

Mr. MARKEY. I thank the gentleman, and we now turn and recognize the gentleman from Virginia, Mr. Boucher.

OPENING STATEMENT OF HON. RICK BOUCHER, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. BOUCHER. Well thank you very much, Mr. Chairman.

As we focus on the Federal Universal Service program, I think three key points should be kept in mind. First, it is appropriate to think beyond the confines of the existing four-component program and consider how reform legislation can be written in order to meet the new realities of the telecommunications marketplace. Service providers are rapidly shifting from circuit-switched architectures to Internet protocol-based platforms which enable a large expansion of the services they are able to provide. The convergent services of voice, multi-channel video and data are frequently now offered by the same service provider. We should ask whether these dramatic technological changes are well-accommodated within the existing Universal Service program.

Second, broadband is the essential new infrastructure, as important to commerce in the 21st century as canals, railroads and highways were in earlier eras. In many of its components, the Universal Service program must be modified in order to encourage broadband deployment in rural and underserved areas. That goal also, in part, can be met by the committee approving legislation to remove the barriers to the provision of broadband services by local governments, who in many small communities can fill the gaps that have been left by the commercial broadband providers.

And third, our most urgent need is for a comprehensive statutory reform of the high-cost program. It is by far the largest of the four programs, and it is under financial pressures caused by long outdated, statutory provisions that are rapidly leading to its unsustainability. It is also relatively easy to fix.

In fact, I have introduced, along with Mr. Terry, a comprehensive reform measure which both fixes the obvious problems and enjoys broad support. It has been endorsed by the rural local exchange carriers who are the beneficiaries of the fund and also by the large regional carriers such as AT&T, Qwest and Embarq who are net contributors into the fund. We have provisions to promote broadband deployment, and by addressing both revenues into the Fund and expenditures by the Fund, the bill creates a financially sustainable program for the long term.

As we consider Federal universal service support, it is important to keep in mind that the high-cost Fund, by enabling every home in the nation to have affordable local telephone service, has made our country the most connected in the world, with more than 96 percent of Americans having local telephone service. All Americans benefit from all of us being connected, and a financially-stable high-cost Universal Service Fund is as essential in the future as it has been to that past high level of connectivity. Rural telephone companies need that support to buy and modernize the equipment that keeps all of America connected. And so as we look to the future of services that should also be offered in addition to what the Fund has supported in the past, we need to keep that key point in mind.

Thank you, Mr. Chairman. I yield back.

Mr. MARKEY. I thank the gentleman. The Chair recognizes the gentleman from Nebraska, Mr. Terry.

OPENING STATEMENT OF HON. LEE TERRY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

Mr. TERRY. Thank you. I appreciate, Mr. Chairman, you holding an important hearing on universal service and how it could be improved and is it still relevant today. And I certainly think it is. And I feel like Rick Boucher and I are the Luke Skywalkers riding in to save the Universal Service Fund from those who want to destroy it, the Darth Vaders. And when you look at this from 40,000 feet, why didn't we develop universal service back in the 1930s? And that is because we felt it was important that all of America be connected to the plain old telephone service, because then it was only the urban areas that had telephones. And that perhaps because of safety reasons and commerce and others we thought that grandparents out on the farm should have that type of service as well.

And maybe those that moved into the city could actually call their relatives. But a traditional commercial model didn't work. In order for a telephone company to roll out 60 miles of line to get to one customer, perhaps they needed some government help and such Universal Service Fund.

Today, as we look at that basic premise of providing basic services to high-cost areas, now just basic rural. That same farmhouse 60 miles away from the town of 1,500 people still exists today and is being served rather well because of universal service help. It doesn't provide 100 percent of the cost. In fact, it provides about one-third of the subsidy necessary to supply telephone service.

Does this Fund need to be modernized? Absolutely. The 1930s model does not work well in the 21st century. Where basic services have changed or perhaps the methodology of providing those services have changed in a digital world, USF for high-cost areas is trapped in that 1930s model. When someone receives the subsidy under USF, they only get to use it to maintain. They are forbidden to modernize with it. And that is what the Boucher-Terry Bill does, is allows them to use those dollars to modernize into the 21st century, so that they have the equal services that we do in suburban and urban America.

And that is what I think universal service should be about.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Michigan, Mr. Stupak.

OPENING STATEMENT OF HON. BART STUPAK, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. STUPAK. Thank you, Mr. Markey. I will be in and out today because I am the third bill on the floor today, and so I will be down on the floor. But I did want to be here because of very important legislation we are considering, or at least the Universal Service Fund. And for my district it is critically important that we have the Universal Service Fund. Every time I go home to my district, I am reminded how far we have come in real telecommunications, but I am also reminded how far we have to go.

When Congress enacted the Telecommunications Act in 1996, we committed ourselves to a goal of providing affordable access to the telecommunications network for all Americans through the creation of the Universal Service Fund. Since its establishment, over $43.5 billion has been distributed to improve telecommunications access, and almost every American today has access to phone service. According to the U.S. Census Bureau, the national telephone penetration rate is 97.6 percent. While the program has been very successful, parts of my district represent the 2.4 percent that do not have phone service at all. In total, I have 17 areas that lack service in my district due to geographic challenges.

While the Universal Service Fund has been successful in expanding access, the program does need some reforms. First, funding should be prioritized to areas that need it most. The recently-passed farm bill contains changes to the Rural Utilities Service broadband program to focus funding to the rural areas that need it most. I believe a similar emphasis should be placed on the universal services funding.

Second, the universal service concept should include affordable broadband access. Universal broadband access is vitally important for the rural economy to remain competitive in today's global market. While broadband access may be a matter of economics to the industry, to my constituents it is a matter of necessity.

And third, the funding mechanisms needed to be expanded and diversified to strengthen the future for the Fund. Expanding broadband service cannot be done on the cheap. One of the biggest challenges facing the Universal Service Fund is that those footing the bill are becoming fewer and fewer, while our needs continue to grow.

Mr. Chairman, thanks for holding today's hearing. I look forward to the testimony of our witnesses and discussing with them how we should modernize and reform the Universal Service Fund.

Mr. MARKEY. I thank the gentleman, and I wish the gentleman good luck on his bill out on the House floor to get the fraud out of the energy futures marketplace. The Chair now recognizes the gentleman from Oregon, Mr. Walden.

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

Mr. WALDEN. Thank you, Mr. Chairman. I am glad you are holding this hearing.

We have already heard a lot about the issues involving the Universal Service Fund. And I remember well the hearings that we had a few years back on some of the waste, fraud and abuse in the E-Rate program, and I hope that that situation is being cleared up, because it is long overdue. And there are a lot of good entities out there that need the funding, and we do not need those that are there that are hoarding equipment in warehouses in Puerto Rico and elsewhere and ripping off the system.

My district—you have heard a lot about different districts—mine is 70,000 square miles, and it is Mr. Ramsey who spent his best years in the great State of Oregon. Seventy thousand square miles, one of the first things I did get involved in after being elected to Congress in 1998 was help the little town of Granite get its first phone service, period, first phone service. I think there are still areas in my district where you do not have phone lines all the way to the houses. And next week I will be out in the metropolis of Fossil, Oregon, in Wheeler County, and we will be dedicating the first cellular service for that community.

And so in many of these western large areas where it makes little economic sense for companies to come in, the Universal Service Fund has played a key role, and new technologies are allowing access where it never existed before. So it is time to look at this program, review it, and refine it, and reform it, and make sure that those who are paying for it are getting treated properly and that the money is being spent properly.

So, Mr. Chairman, thanks for the hearing. I will look forward to working with you on this issue, and I want to thank our witnesses.

Mr. MARKEY. I thank the gentleman. The Chair recognizes the gentleman from Texas, Mr. Green.

OPENING STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GREEN. Thank you, Mr. Chairman. I want to thank you for holding the hearing on the future of universal service, and I particularly appreciate our panel and thank you for listening to us while we give our opening statements. Like everyone, I want to welcome Mr. Lucas here, but also I want to welcome Charles Sullivan who—Charles and Pauline Sullivan—I worked with for many years in the Texas legislature on prison rights and try and make it much easier, since we incarcerate so many people in Texas compared to other countries in the world. But thank you for being here.

And I hope this may be the last, Mr. Chairman, of analogies to your Star Wars, but I would hope those of us who really want to reform E-Rate and who would like to have better broadband penetration in our urban district would be really the wise man Obi-Wan Kenobi, and Darth Vader would be the ones who are trying to keep the status quo in the empire. But the state of communications in our country is significant since Congress made the last changes, major changes in universal service in 1996, and it is significantly different today. With 95 percent of the U.S. population having a telephone but funding support still increasing at an unsustainable level, it is time we look at what return is being made on this investment and what the future of universal service would look like.

The future of telecommunications, I believe the future of universal service should be broadband. This is especially true with schools and libraries program, or E-Rate. Despite the proven benefits of having schools connected, the E-Rate program is capped, while the high-cost program has continued to balloon. Twice as many funds are requested through E-Rate then are available, but we have capped this program while allowing the high-cost fund to continue to balloon with inefficient spending under the identical support rule and rate-of-return regulation. This does not have to be the case, and it is important that voice and broadband service be universal, but the current system is unsustainable because of the structure the USF creates such strong disincentives to consolidate and reduce cost in the high-cost fund. Meanwhile, hundreds of children are waiting to use computers connected to broadband connection in many of our Nation's schools.

In our district, we do not have a high Internet penetration at home, because while people may not qualify for low-income phone support, they work hard to make ends meet, and they may not be able to afford a computer or a monthly broadband payment. Schools and libraries are often the only places children have to access the Internet, and the universal service fees that come out of our constituents' phone bills are needed at the school across the street or around the block as much as anywhere else.

Mr. Chairman, the future of universal service should focus on making efficient use of the funds that provide broadband, especially in our schools and libraries.

And I want to again thank the witnesses here, and I thank you for holding this hearing.

Mr. MARKEY. The Chair now recognizes the gentlelady from New Mexico, Ms. Wilson.

OPENING STATEMENT OF HON. HEATHER WILSON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW MEXICO

Ms. WILSON. Thank you, Mr. Chairman.

I listen to folks comment about the access to telephone service in their states, and the idea that everyone in the country has access to phone service, I think, is a myth. In my State of New Mexico the Navajo Nation is the size of the State of West Virginia, and there are far too many people who live in Indian country who do not even have any access to plain old telephone service, let alone some of the high-end services that we would all like to see our constituents have.

Because of the Universal Service Fund, consumers in rural New Mexico actually had DSL and broadband before a lot of people in Albuquerque. In Des Moines, New Mexico, beautiful downtown Des Moines, New Mexico, a thriving metropolis, you have to go three and a half hours north of Albuquerque to Raton and then about an hour east. This is the part of the country where you can scan your entire radio dial and keep scanning for several hours as you drive and not come up with a radio station. They had access to DSL in Des Moines, New Mexico, because of the telephone co-op in the Universal Service Fund earlier than Albuquerque, New Mexico, did.

This is a fund that has helped rural areas substantially, and I do not think that we should lose sight of the access that this Fund has brought. I also want to make sure as we move forward in making changes to universal service and improving it that we do not and we should not lose sight of the ultimate goal, which is to make sure that Americans wherever they live have access to technologies that can change their lives.

Just a few weeks ago, my son was sitting on the computer, and I said what are you looking at? And he said oh, this is the valve that Dad needs to fix the ozonater. My husband and I never would have thought to go on the Internet to figure out what the valve was that Dad needed to fix the ozonater. That kind of approach to learning and information is something that our children have while our generation is still thinking about finding the manual that is somewhere in the kitchen drawer or looking at it and going down to the hardware store and saying to the guy, do you know what this is and where I can get a replacement?

Thank you for being here. I look forward to your testimony.

Mr. MARKEY. The gentlelady's time has expired. The Chair recognizes the gentleman from Michigan, Mr. Dingell.

OPENING STATEMENT OF HON. JOHN D. DINGELL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. DINGELL. Mr. Chairman, I thank you for your courtesy, and I commend you for this hearing.

It begins a valuable discussion about universal service and telecommunications. I very much look forward to this dialogue because I strongly believe universal service is a fundamental American value. Universal service opens the door of opportunity to all, without regard to one's address or economic status. It provides edu-

cational opportunities and makes advances in healthcare widely available. It allows those with disabilities a greater chance to be fully vested members of our society. It allows everyone to take part in the national dialogue that strengthens our democracy, whether one lives on a reservation, in the inner city, in the Great Plains, or in Appalachia.

I want to thank our panel members for helping us to understand the real benefits of a robust and effective universal service policy.

I believe it is both wise and proper that we should start this examination of universal service, by focusing on core principles. And I commend you for your leadership in this matter.

I would offer the following for our consideration. First, universal service is about consumers, not carriers. As we delve deeper into the intricacies of universal service we must ask what is best for consumers. That should also be the central question.

Broadband is the communications platform of the future. Any successful universal service program for the future must account for this reality. Universal service is about access and affordability. A proper universal service program should ensure access and affordability in places and situations where the market forces cannot or do not do so. And that is the reason both for universal service and for the Universal Service Fund.

Properly targeting universal service support must ensure consistency, efficiency and fairness. And we must protect the Fund against raids and unwise use. Because everyone benefits from universal service, everyone should participate. Spreading the cost of the universal service program as widely as possible reduces the impact on each individual and assures a fair situation for all, which will achieve greater and broader support.

The program should be forward-looking, and it should be flexible enough to accommodate new technologies and service providers in a sensible way, so that we can create incentives for innovations and better service at lower prices. A critical examination of universal service must examine regulatory disparities between different types of providers. If all types of providers are going to participate, that participation should be in as equal terms as possible.

Similarly, we should also examine whether the benefits of universal service are being fairly distributed. Fundamental changes in universal service are going to mean transition. It is important that we not allow transition issues, however, to bury the fundamental changes we seek.

Finally, the Congress, not the FCC, is better suited to make the tough political choices on how best to reform the system. But we must be properly informed in the Congress, and we must understand the basic policy of providing universal service to all of our people, a principle which goes back to the 1927 Act and to the 1934 Act, something which was put in place to assure that every American should have full access to the telecommunications network that is so important to our national success. By focusing on consumers and principles rather than winners and losers, we stand a greater chance of creating a viable, successful universal service mechanism for the future.

I welcome this discussion, and I look forward to working with you, Mr. Chairman, and with my colleagues to accomplish this great purpose. Thank you.

Mr. MARKEY. We thank the Chairman, and now we turn and recognize the gentleman from Michigan, Mr. Upton.

OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman.

There is an old saying that if it ain't broke, don't fix it. Well, the opposite is true here. There is something seriously broken about the Universal Service Fund, and it does need to be fixed. We have spent some $51 billion over the last 10 years on this program. This last year we spent about, or we collected about, $7 billion, b as in big. So it is not a small program. We need oversight, and we need to identify how we can fix it, and we need to fix it in a bipartisan way. And I happen to believe that both the Barton-Stearns Bill or is it the Stearns-Barton Bill? Barton is not here so it is the Stearns-Barton Bill and probably the Boucher-Terry Bill or the Terry-Boucher Bill, in fact, provides some good starts, so that we can begin to communicate together on a bipartisan basis.

I have a particular focus on the E-Rate program, a program that I support. And I would note that after the tragedies at Virginia Tech and Northern Illinois University in the last year and a half or so, we looked at all the different issues at K through 12 schools. As well, it would be nice for parents of any junior high student or middle school or a high school student to be able to hear from the school if there is trouble, whether it be a bus delay, whether it be a snow or weather delay, whether it be a water shortage or heaven forbid something involving violence. So you could communicate with a parent or a guardian about their child's safety and welfare either during the school day or perhaps even before it starts. And I would note that Mr. Rush has authored with me a bill that would allow the E-Rate to in fact tap funds or allow the schools to tap funds to develop a program like many of our universities already have done as a worthy experience.

So I look forward to this hearing and the testimony that we have. And, Mr. Chairman, I yield back my time.

Mr. MARKEY. The gentleman's time has expired. The Chair recognizes the gentleman from Indiana, Mr. Hill.

OPENING STATEMENT OF HON. BARON P. HILL, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF INDIANA

Mr. HILL. Thank you, Mr. Chairman, first of all for holding this hearing and also to the panel witnesses for the opportunity to discuss the future of the Universal Service Fund.

The Universal Service Fund has supported the development and provided telephone service to approximately 96 percent of Americans. However, a continued integration of more advanced communications technology in our daily lives leads me to ask: should we refocus the Universal Service Fund deployment to focus on advanced services?

I represent a rural community. I have constituents that are still connecting to DSL or have no Internet connections at all. Their

daily communications are through wireline services. They lack the technologies available to develop the skills to compete in today's digital world.

I see the digital divide daily in small Hoosier communities. The Universal Service Fund should undergo reforms that will make the deployment of broadband more viable for all communities that are targeted under the current program. High-speed communications technologies are the future of our nation. Transforming the Universal Service Fund into a program that will bring the latest technologies to communities least likely to see competition is one step we can take to ensure the educational needs of children and attract businesses to rural markets.

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

Mr. MARKEY. Great, and we thank the gentleman for that, and all time for opening statement by members has been completed, so now we are going to turn to our expert panel, and we are going to begin with Randolph May. He is the President of The Free State Foundation, an independent, non-profit, Maryland-based, free-market-oriented think tank. The Foundation promotes through research and educational activities understanding a free market, limited government and rule of law principles in Maryland and throughout the United States. We welcome you, Mr. May, and whenever you are ready, please begin.

STATEMENT OF RANDOLPH J. MAY, PRESIDENT, THE FREE STATE FOUNDATION

Mr. MAY. Thank you very much, Mr. Chairman and Members of the Committee. When I got the call to come down here on Thursday, I thought it was because you wanted some star power in this hearing, but all of the photos seem to be directed in the other direction. But I am happy to be with you.

Since passage of the 1996 Telecom Act, the landscape has changed dramatically as a result of vastly increased competition. This increase in competition is due in large part to technological developments and in part due to the reduction of some legacy regulations. The upshot, as has already been acknowledged this morning, is that the existing universal service reform, the universal service regime, needs serious reform if telecommunications services are going to be provided in the most cost effective and economical manner for the benefit of all consumers. New entrants and new technologies have rendered the existing system wasteful, inefficient and competition-distorting.

I was going to cite a whole bunch of figures and facts at this point, but I think all I want to do now is mention once again that currently all consumers pay 11.4 percent surtax on their interstate calls. This is in effect a tax which suppresses telecommunications demand and reduces overall consumer welfare. And as has been already noted, currently the telephone penetration rate is about 94 percent, and it has remained steady at that same rate for the past 10 years. The data shown from the Census Bureau is that the income level is the key independent variable driving penetration.

The basic questions to be asked about the future of universal service are the ones the Chairman identified. Before providing my thoughts on these questions, I want to state two policy principles

that should guide reform. First, market forces rather than subsidies should be relied on to the greatest extent possible to achieve the identified objective. This is more important than ever because increasing competition and new technology should drive down the cost in making communication services widely available. Second, if there are to be subsidies they should be targeted narrowly and financed broadly. The current system is at odds with these principles.

Without elaborating the specifics here I will simply point out that the first principle is disregarded when subsidies are provided to carriers serving geographic areas in which market forces already have resulted in existing service and when subsidies are provided to persons who require none to obtain service. The second principle is disregarded because the current system targets subsidies broadly to areas and persons who don't need them, and finances narrowly raising contributions from limited kinds of communication service.

So what should be done? Recognizing that the goal of universal service as originally conceived to make voice service ubiquitously available has been generally achieved, declare victory, cap the high-cost fund. If the penetration level is to be increased at all it almost certainly will be by virtue of more vigorous effort to target low-income persons to sign up for service.

Now, I understand that the question of whether a reform or a regime should be extended explicitly to include subsidies for broadband services is front and center. In considering this question, have in mind the principles that I enunciated and the lessons that we have learned from the existing regime. We can have a lot of debate about how rapid the progress has already been in this country, and perhaps we will have some of that but it is my contention that due to market forces principally, and not due to government services, there has been rapid dispersion of broadband service thus far. But if policymakers determine that some subsidies are nevertheless desirable they should be narrowly focused on selected high cost geographic areas where service is unavailable or on low-income persons.

In keeping with the principle of financing broadly, funding for any such subsidies should come from general Treasury appropriations. The targeted subsidies should be awarded through some form of competitive bidding process to determine which operator consistent with meeting defined service parameters is the least cost provider. Any broadband subsidies deemed necessary should not be dispersed or financed through an unreformed universal service regime that resembles the existing one. This would perpetuate a system that is inefficient, wasteful, and competition suppressing.

A last note of caution in considering whether broadband needs any universal subsidies is that we must have in mind the distinction between availability of service and use. There are many different demand-side reasons that people may not subscribe to broadband service. The nature of unmet demand has many dimensions and price often plays a minimal role. The point here is that there are different demand-side reasons why people do not take broadband service where it is available and they will not be addressed by supply-side subsidies directed towards availability.

Thank you for giving me the opportunity to testify today and I will be pleased to answer any questions, Mr. Chairman.

[The prepared statement of Mr. May follows:]

STATEMENT OF RANDOLPH J. MAY

Mr. Chairman and Members of the Committee, thank you very much for inviting me to testify. I am President of The Free State Foundation, a non-profit, non-partisan research and educational foundation located in Potomac, Maryland. FSF is a free market-oriented think tank that, among other things, does research in the communications law and policy and Internet areas.

It is appropriate to hold a hearing to reexamine the existing universal service regime. In the twelve years since passage of the Telecommunications Act of 1996, the communications landscape has changed dramatically as a result of vastly increased facilities-based competition. This increase in competition—for example, with mobile phones becoming nearly ubiquitous and cable companies already providing digital voice service to over 16 million customers—is due in large part to technological developments enabled by the transition from analog to digital technologies. It is also due in part to the removal or reduction of some legacy regulations.

The upshot is that the existing universal regime needs serious reform if telecommunications services are going to be provided in the most cost-effective and economical manner so that overall consumer welfare is enhanced. The fact of the matter is that new competitive entrants and new technologies have rendered the existing system wasteful, inefficient, and competition-distorting.

Just a few basic figures up front to provide perspective for my contention that the current system needs a substantial overhaul. In order to finance the various universal service subsidies, consumers now pay a surcharge, in effect a "tax," of 11.4% on all their interstate and international calls. In contrast, in 2000 the surcharge was 5.5%. The doubling of the USF tax burden in such a short period is an easy-to-understand measure of how fast the subsidies funded by the surcharge have grown under the existing system. Much of the increase, of course, is attributable to the rapid growth in the high-cost fund, and my testimony today focuses mainly on that fund. The subsidies to support providers in high-cost areas grew from $2.2 billion in 2000 to $4.5 billion today. A final significant figure: Since the passage of the 1996 Act, Census Bureau data show that the percentage of households with a telephone has hovered close to 94%, give or take a percentage increase or decrease due to what appears to be routine fluctuation. Examination of the Census data shows that income level is the key independent variable driving penetration. Lower income households tend to fall below the national average penetration rate.

As I transition from highlighting these few but nevertheless key data points to a future-oriented discussion of the principles that should guide reform of the current regime, I want to make clear I support the notion that government has an appropriate role to play in helping ensure that communications services are available to all Americans. Of course, such role may vary over time, so that what may have been appropriate 50, 25, or even 10 years ago, may not be appropriate now. The basic questions to be asked and answered in thinking about the future of universal service are the ones identified in the hearing's subtitle, which might be rephrased as follows: What is the mission? If the mission requires subsidies to achieve its objective, who should receive them? And how should any subsidies be financed?

Before providing thoughts on these questions, I want to set forth two interrelated fundamental public policy principles that should guide reform of the system. First, market forces, rather than subsidies, should be relied on to the greatest extent possible to achieve the identified objective. This is more important today than ever because, under a properly constructed regime, increasing competition and new technologies should drive down the cost of making communications services widely available. Second, as John Mayo, a member of the Free State Foundation's Board of Academic Advisors and Professor of Economics and former Dean of Georgetown University's Business School likes to say: If there are to be subsidies, they should be targeted narrowly and financed broadly. Anyone familiar with the current universal service system knows it is at odds with these fundamental principles.

Without elaborating all the specific "at odds" here, I will simply point out the first principle is disregarded when subsidies are provided to carriers serving geographic areas in which market forces already have resulted in existing service and when subsidies are provided to persons who require no subsidy, but who would in any event acquire service at market prices. The second, related principle is disregarded because rather than targeting subsidies narrowly and contributions broadly, the cur-

rent system targets subsidies broadly (to areas and persons who don't need them) and funding narrowly (contributions from only one kind of communications service).

Ignoring these sound principles is the reason that the current USF surcharge is 11.4% per interstate call. Like any tax, the surcharge distorts economic behavior. Here the effect is to suppress demand for the relatively price-elastic calls subject to the surcharge. Economists have estimated the consumer welfare losses from the suppression of this demand for telephone services in the billions of dollars. The adverse impact on consumers negatively impacts the entire economy.

So what should be done? Congress should recognize that the goal of "universal service" as originally conceived—to make voice service ubiquitously available—has generally been achieved. While the extent to which the existing universal service regime is responsible for such achievement is debatable, no matter. Once in a while victory should be declared, the cannons silenced, and the bugles triumphantly sounded. The high-cost fund should be permanently capped at its current level. As I pointed out earlier, approximately 94% of American households have voice telephone service, and this figure has remained steady for more than a decade. This may well be the "natural" high mark for telephone penetration at any one time. But if the penetration level is to be increased at all, almost certainly it will be by virtue of even more vigorous efforts to target low-income persons to sign up for the existing Lifeline and Link-up programs, not because unfocused subsidies continue to be disbursed.

To the extent there are identifiable remaining high-cost areas without any affordable service, I would rely on competitive mechanisms, such as reverse auctions, to select a provider of last resort. This is the most efficient and most technologically and competitively-neutral way to make service available in those areas. In my view, Representative Barton's Staff Discussion Draft does a good job of envisioning how such a reverse auction system would work to drive costs down over time or to at least halt the steady growth in costs experienced under the current regime. Consistent with the principle enunciated earlier, I would finance the remaining subsidies through a telephone numbers-based contribution system. This broad-based financing system, which is also adopted in the Barton Staff Draft, by taxing relatively price-inelastic access (with exceptions for low-income subscribers) rather than much more price-elastic usage, is a more economically efficient funding method. It would have less adverse impact on consumer welfare and the overall economy.

Now I understand the question whether a reformed regime should be extended explicitly to include subsidies for broadband services is front-and-center. In light of the importance of the widespread broadband availability to the Nation's economic and social well-being, this is entirely appropriate. In considering the question, it is very important to have in mind the principles I have enunciated and the lessons we have learned—or should have learned—from the existing regime. To the maximum extent possible, market forces should be relied upon to make broadband service widely available. If any subsidies are deemed necessary, they should be focused narrowly and funded broadly.

I know there is controversy, depending upon one's perspective, concerning how well we are doing in this country regarding broadband deployment and how well we are doing vis-a-vis other nations. There have been separate hearings on this subject, and it may well be useful to have more. From my perspective, I want here simply to point out that, by most measures, the nation has witnessed remarkable progress in a short time. The FCC's most recent broadband data, now almost a year old, show that more than 99% of the Nation's zip codes have at least one in-service high-speed provider, and more than 99% of the nation's population lives in those zip codes. There are over 100 million high-speed lines in service, and over 65 million of these serve primarily residential end users. This represents a rapid dispersion of broadband availability. This success is attributable primarily to the private sector responding to market forces, with more than $100 billion—and still counting—of investment. The success is not attributable in any significant way to government subsidies. And it is important to understand that market forces have spurred this rapid deployment in large part because broadband providers have not been subject to traditional common carrier regulation that prevailed in an earlier monopolistic era. In furtherance of promoting any "universal service" policy regarding broadband, policymakers should retain this minimally regulated environment that has encouraged so much private sector broadband investment in a relatively short time.

If policymakers determine that, despite the progress already achieved through market forces, some subsidies nevertheless are desirable to achieve more ubiquitous deployment at a faster rate, such subsidies should be narrowly focused on selected high-cost geographic areas where service is unavailable or on low-income persons who otherwise cannot afford service. In keeping with the principle of financing broadly, funding for any such subsidies should come from general Treasury appro-

priations. Carefully targeted subsidies should be awarded through some form of competitive bidding process to determine which provider, consistent with meeting defined service parameters, is the least cost provider. Any broadband subsidies deemed necessary should not be disbursed or financed through an unreformed universal service regime that resembles the existing one. To do so would perpetuate a system that is economically inefficient, wasteful, and competition-suppressing. It would saddle the broadband world—and the American public—with an outdated relic of the narrowband world.

A last note of caution in considering whether broadband needs any "universal service" subsidies. Policymakers should have in mind the distinction between availability and use. As shown above, broadband service is now available to most of the Nation's consumers. But there are many different "demand-side" reasons that people may not subscribe. John Horrigan at the Pew Internet & American Life Project has done much good work in this area. His research shows that the nature of unmet demand has many dimensions and that price often plays a minimal role in acquisition decisions. Factors include lack of computers at home and concerns relating to usability of computers and the Internet; security of online information; and relevance of online content. The point here is that there are different demand-side reasons why people do not take broadband service where it is available. These reasons will not be addressed by subsidies directed towards increasing broadband deployment. This is another way of saying that, before adopting any new subsidies, policymakers must carefully consider the costs and benefits of such expenditures.

Thank you for giving me the opportunity to testify today. I will be pleased to answer any questions.

Mr. MARKEY. Thank you, Mr. May, very much. Our second witness, Rey Ramsey, is the Chief Executive Officer of One Economy Corporation. Under his leadership, One Economy, which he cofounded in 2000, has emerged as one of the Nation's leading nonprofit organizations in the field of technology. One Economy Corporation is a global nonprofit organization that uses innovative approaches to deliver the power of technology and information to low-income people, giving them valuable tools for building better lives. We welcome you, sir. When you are ready, please begin.

STATEMENT OF REY RAMSEY, CHIEF EXECUTIVE OFFICER, ONE ECONOMY

Mr. RAMSEY. Chairman Markey, Ranking Member Stearns and special recognition to Congressman Walden, who I had the pleasure of working with as a fellow Oregonian, it is a great opportunity to be here.

I am Rey Ramsey, Chief Executive Officer of One Economy Corporation, and we got started about 8 years ago, and I want to talk a little bit about why we got started, because I think it is very relevant to the subject at hand. I have been working in affordable housing as the chairman of Habitat for Humanity and working in housing in Oregon and doing anti-poverty work, and in the 1990s people started talking about something called the digital divide. And we still have a digital divide, but my focus and my choice was to focus on what I call the digital opportunity. And a lot of what I look at is that we have an enormous opportunity to use digital technology to solve some very vexing problems in the country. And what I want to say to this committee is that time is of the essence in terms of whatever we choose to do in terms of reform.

It is not my role today to tell you how exactly to reform. I think that your wisdom and many others will have their different viewpoints on reform. We certainly support reform, and in addition to the submitted remarks that I have, I would like to just lay out a

couple of key points that I think are important. Obviously, in looking at universal service we need to think about supply and demand, and when we are thinking about those issues I have two basic points to make.

The first is that we need to think about three basic issues. One is the issue of connectivity, and when we think about connectivity, we have to think about it more broadly. Not only should we be talking about is the technology available and I call this the three As: the technology should be available, it should be affordable, but we also have to focus on is it being adopted and why is it not being adopted, so available, affordable and adopted.

The second issue on the demand-side is that we have an opportunity to use technology in remarkable ways, and it is one I call public purpose content, that there are reasons why individuals are not online or using broadband, and that is because we haven't developed some of the applications in health and in education and in other areas. And in my written remarks I refer to some of the things that are being done. We, this past year, in a partnership with E-Trade and H&R Block, have been able to focus on helping low-income individuals with applications online to be able to get money back in the Earned Income Tax Credit. In this year, $10 million were returned to individuals by using our service for free, working in partnership with the private sector.

And then the last issue that gets very little attention is human capital, and that is digital literacy. There are a lot of people who would like to use technology but have no idea how to use it and do not understand the applications. And so to that end we have launched a program in the country called Digital Connectors, where we bring young people to work intergenerationally to help people use the technology, working in elderly centers and other places.

Those are the three basic points—the connectivity, the public purpose media, and the human capital—that I think we have got to expand our notion of thinking about universal service to meet the needs and the opportunity of the digital age.

You know, there are lots of things that are being done on the ground. We are working in rural areas, Native American communities, as well as in urban areas where there are low-income individuals. And I started my remarks by saying time is of the essence. When you think about this time of year in the spring, people graduate, and I think about every time there is a graduating class where there are individuals in that class, students and children who do not have access to technology not only in their school but in their home, which is where it is most important now to bring the technology into the home, it is a shame. And every time there is a graduation where we can look up and see one group of children who have access and those who do not, it reminds me that there still is a divide and that time is of the essence.

We can do this. I am encouraged by again the partnerships on the ground. We have been able to work with local governments whether they are from Oregon to Texas to North Carolina or to Massachusetts. But we are also able to work with the private sector by always remembering that we are dealing with consumers

who have the same aspirations as anybody else. They just happen to earn a little less money.

So I submit my remarks and my testimony today, and I appreciate this opportunity on behalf of all the hardworking people at One Economy Corporation.

[The prepared statement of Mr. Ramsey follows:]

Testimony
of
Rey Ramsey
Chief Executive Officer of One Economy Corporation
Before the House Committee on Energy and Commerce

June 24, 2008

Chairman Markey, Ranking Member Stearns, I thank you for the opportunity to be here today. My name is Rey Ramsey, and I am the chief executive officer of One Economy Corporation.

One Economy is a global nonprofit that leverages the power of technology and information to connect low-income people to the economic mainstream. We bring broadband into the homes of low-income people, produce public-purpose media, and train and employ youth to enhance communities' technology capacity. Our work has taken hold in four continents, from big cities to small rural towns. Since our founding in 2000, our work has reached 15 million people.

Today, as we discuss the importance of universal service and universal access to low-income communities, I would like to highlight the challenges we face in encouraging families to adopt that access in their homes.

When we look at the data on broadband, we see both good news and bad news.

Most Americans have *access* to broadband service—by which I mean it is available where they live if they want a connection to their home computer. In fact, according to the Federal Communications Commission's zip-code level data, in more than 90 percent of the United States, consumers can choose from three or more broadband providers. Nearly 60 percent of Americans have *adopted* broadband by paying for a high-speed connection.

But those positive trends in broadband availability should not overshadow the significant inequality between rich and poor communities. According to the most recent Census Bureau data, while 76 percent of households earning more than $50,000 per year are connected, only 35 percent of homes with annual income less than $50,000 have adopted broadband in their homes.

Universal access is particularly important to these low-income communities. We have seen the power of broadband to give low-income people tools for improving their education, their health, and their economic lives.

For example, 70 percent of working families who receive the Earned Income Tax Credit (EITC) pay for professional help preparing and filing their taxes and as many as 25 percent of families who qualified for the EITC did not receive it. This year, we partnered with H&R Block and E*TRADE to make free tax preparation and filing available online. Families using our site, the Beehive (www.thebeehive.org), received nearly $10 million in state and federal refunds. In addition to the $1000 average refund, broadband made possible the education and support these families needed to file for themselves, saving hundreds of dollars in fees.

Broadband is also giving low-income people tools to improve their health. Chronic diseases affect millions of Americans and disproportionately impact low-income communities. Broadband can bring into homes the resources people need to handle the day-to-day management of a disease like diabetes. These tools can be accessed by people who may not be able to seek in-person assistance because of their location or the cost of these services.

Perhaps the most dramatic changes we have seen are in the area of education. Greene County, North Carolina—a rural, economically distressed area—struggled with high rates of poverty and low attainment

of higher education. Beginning in November 2003, a diverse team of stakeholders, including the Greene County local government, the school system, grassroots leaders, and social service providers, used technology and its tools to positively impact the pressing economic needs in the area. The technology infusion began at the school-level by bringing Apple iBooks to each 6th through 12th grader.

The schools and the community quickly realized that without broad-based, affordable access to the Internet, the benefits of technology would be limited. In November 2003, Greene County leaders began working with One Economy to help create Internet tools and content for the community. Since then, Greene County has developed free Internet hotspots at schools and fire stations and a municipal broadband solution for the entire County.

Today, Greene County has improved educational outcomes—including higher SAT scores, more students attending college, and dramatically reduced teen pregnancy. These outcomes are detailed in Appendix 1.

These opportunities to improve health, education, and economic livelihood in low-income communities demonstrate that while universal access is an important goal, it is only a starting point. Our experience has shown that additional steps—efforts that are less about a specific technology and more about education and creating a culture of use—are needed to ensure that the benefits of the Digital Age are reaching the communities that need them most.

Independent research and our own experience suggest that the principle barriers to people adopting broadband in their homes have less to do with access and affordability and more to do with helping people to understand the value of broadband, helping to alleviate concerns about online safety, and a series of other educational and cultural issues. A 2007 survey by the Pew Internet and American Life project asked non-Internet users why they are not online. You might expect the number one reason to be cost. In fact, one-third of people not using the Internet said they are just not interested.

This is not to discount the importance of cost and the work that still needs to be done in that area, but these findings show that even when broadband is available and affordable, other concerns remain to be addressed.

At One Economy, we have recently begun work with the Warm Springs Indian Reservation in Oregon, home to nearly 4,000 members of the Warm Spring, Wasco, and Paiute tribes—thanks in part to the efforts of a former member of this committee, Congresswoman Elizabeth Furse. Broadband access is already available on the reservation; the Warm Springs Tribe built a Motorola canopy-based wireless solution to provide broadband to the local government and individuals. But uptake among residents has been slow, in part because the average monthly cost is $50—out of reach for many members of the tribes.

In the coming months, we will work with leaders in the reservation to make broadband a relevant and affordable tool. In addition to lowering the cost of home access and creating public access points, we will use broadband and the applications it makes possible to expand tribal member participation in government, support small business development, preserve native culture, and improve members' digital skills. Young people will be trained in technical and leadership skills so they can become cultural bridges between their community and technology.

Government can play a role in stimulating demand, as the tribal government in Warm Springs is doing. Creating public-purpose online media—media that puts vital information and tools directly in the hands of citizens—can demonstrate the value proposition of bringing broadband into their lives and homes. For low-income people, who are often caught in a web of government programs and services, simple and direct online access to those programs can mean the difference between missing a day of work to stand in line at a municipal building and getting help in the comfort of one's home.

At One Economy, we believe that the time has come for a broad-based effort to provide these kinds of information and tools online. To that end, we have created the Public Internet Channel (*PIC.tv*): public-purpose programming designed to inform, engage, and help people take action. The Public Internet Channel grew out of our experience delivering culturally relevant, multilingual information to low-income and low-literacy audiences. The millions of people who have taken advantage of our online resources to file their taxes, find better schools for their children, start new businesses, and take other steps to improve their lives demonstrate the need for such an effort. See Appendix 2 for detailed outcomes.

Again, I appreciate the committee's interest in how universal access to broadband stands to benefit low-income communities. I believe that a policy that brings the traditional conception of universal service into the digital age, while addressing the broad spectrum of reasons why people are not online, stands to improve the lives of millions of Americans.

Appendix 1

A Replicable Model: Greene County, North Carolina

Greene County, North Carolina is a rural, economically distressed county in the eastern portion of the state. According to the 2000 U.S. Census, 20.2% of the county's population lived below the poverty line, a number that is notably higher than national statistics and only 8.2% of the population had a bachelor's degree or higher, another staggering statistic when compared to the national rate of 24%. However, through Greene County's collaboration with One Economy Corporation, a multi-national nonprofit organization, significant positive changes have occurred throughout the community.

Beginning in November 2003, a diverse team of stakeholders, including the Greene County local government, the school system, grassroots leaders, and social service providers, used technology and its tools to positively impact the pressing economic needs in the area. The technology infusion began at the school-level by bringing Apple iBooks to each 6th through 12th grader in the County. However, the schools and the community quickly realized that without broad-based, affordable access to the Internet, the benefits of technology would be severely limited in the community. In November 2003, Greene County Leadership began working with One Economy to help develop Internet tools and content for the community. Over the next 24 months, Greene County developed free Internet hotspots at schools and fire stations. The County then contracted with Internet Service Provider, Wavelength, to create a municipal broadband solution for the entire County.

Today, all of Greene County now has affordable high-speed access. Moreover, Greene County launched a county-specific Beehive website which includes non-tobacco agriculture options, online marketplace, small business development, and career-building opportunities (www.beehivegreene.org). Through this site, Greene County residents are actively participating in the local election process, discussing health issues with medical experts from East Carolina University, and learning about educational opportunities in

their community. The site is pioneering web-based solutions for rural America through locally-generated content such as the "Greene County Marketplace" and "Pest Alert."

This website is made available through a county-wide deployment of affordable broadband service and a mobile training lab which is used by faith-based institutions and community organizations to train their clients on how best to use this new technology. Furthermore, Greene County has 31 technologically trained young people that are working throughout the county to teach others how to use the site and become a part of the 21st century technology economy. A screenshot of the Greene County Beehive is below:

The success of technology infusion has greatly impacted all sectors of the Greene County community:

Improved Broadband Availability

- **400 households are now connected to the Internet** and nearly 200 households are waiting for connection on the county's wireless. Greene County schools and government are the anchor tenants.
- 89% of Greene County has access to broadband
- Nearly 25% of the households have purchased broadband for their home
- *Embarq,* with approx. 500 customers, has increased its coverage area, providing more competition and choice for residents.
- More than two dozen church and community buildings have **become hot spots for free internet access.**
- More than **600 residents have received free computer training**. 30% of the people trained were senior adults.
- Residents share service with neighbors--early beginnings of community wireless.

Building a Digital Community in Greene County

- The Greene County's Beehive (www.beehivegreene.org) received **4000 hits in it first month** and **200 unique visitors use the site weekly**. With only 1000 households connected to the internet, this represents 25% usage of the site each month.
- **111 Digital Connectors are involved** in the program providing computer training to Greene County residents. They have logged **1000 hours of teaching and business and technical support** to date.

Impact in Schools

- **1600 students have their own laptops** (in grades 6-12). 93% of these computers travel home with the student every evening.

- High school SAT composite scores increased 41 points in 2 years from 930 to 971.
- 84% of the 2007 senior class applied to college, compared to less than 26% the year prior to the iTech program's launch in 2003.
- High school proficiency scores increased from 53% to 78.4 % in the first year and they have met adequate yearly progress each year.
- Decrease in student drop out rate.
- Increase in Honors Courses taken due to classes being offered online with other educational partners.
- Teenage pregnancy dropped from 2nd in the state to 18th (out of 100 counties).
- Higher parent / community confidence.

Economic Impact

- **20 new businesses were attracted and opened** in Greene County in 2 years, reversing several years of negative business growth.
- Before *Beyond Tobacco,* less than 5 of the 200 small businesses had websites. In the second year, **nearly 25% of the county's small businesses have websites** and most are reporting increase revenues due to their online presence.
- In 2007, **2 companies reported 50% growth in sales** due to online purchases and marketing.

The success in Greene County is due, in part, to the partnerships One Economy creates with local residents and diverse groups of stakeholders and the work that we do by providing access to technology and the Beehive. In the course of our work in Greene County, One Economy facilitated the county's transformation from what had been a historically tobacco-dependent agrarian lifestyle to one rich with the enhancements of technology. In partnership with the Greene County local government, the school

system, grassroots leaders and social service providers, One Economy set out to plan, develop, and launch a digital community in Greene County, North Carolina. Through our work in the county, One Economy and its partners accomplished the following objectives:

- Improved communications infrastructure. In order to address problems of access and lack of hardware that would be necessary for the creation of a digital community, One Economy worked with the community to contract a wireless company to build an Internet network that covers the county. This county-wide deployment of affordable broadband service made it possible for 90% of the residents in Greene County to get affordable high-speed access.

- Encouraged the growth of small business and agricultural enterprises. See the below description on the Greene County Ag Center and the Entrepreneur's Center, located on the Beehive (www.beehivegreene.org).

- Used technology as an accelerator for educational advancement. To integrate technology into Greene County schools, Apple computers worked with the school system to develop a program where laptops were provided to every 6-12 grade student, teacher and administrator. One Economy created relevant education content on the Beehive allowing students and parents to access educational resources and homework help.

- Built a replicable model for other rural communities. Greene County, North Carolina and the immense success that One Economy's pioneering work there achieved is proof of the positive impact that the "Digital Community" model can have on a region.

Today, Greene County residents have more opportunities to live, work and prosper than they had 5 years ago. Thanks to a committed and visionary leadership team in Greene County, the commitment of key

partners and the technical assistance of One Economy, the future of this rural community is brighter. We believe that the Greene County model that can be implemented successfully in other communities.

Appendix 2

The Beehive (*www.theBeehive.org*), our multilingual self-help web portal, has been visited more than 13.5 million times, including 2.4 million visits by Spanish-language users.

Education:

- Over 545,000 high-schoolers have gotten help with their homework
- Students received over 9,000 hours of free online tutoring, resulting in more than a full grade level improvement in Math.
- Over 112,000 people learned about how to achieve their GEDs

Health & Family:

- 444,000 people found information about Diabetes
- 472,000 people have gotten help finding and evaluating child care
- 177,000 people learned about Alcoholism, including more than 30,000 in Spanish
- 477,000 people have learned about Medicaid
- More than 512,000 people have learned how to safeguard their computers

Employment:

- 20,000 people have created and saved business plans on the Beehive Entrepreneur's center
- 33,000 Spanish-speakers got information on finding a job
- 778,000 people have learned about filing for unemployment benefits

Economic Livelihood:

- 550,000 people have learned about creating a family budget
- During the 2007 tax season, $5 million in tax refunds were returned through the Earned Income Tax Credit program to users who filed their taxes on the Beehive.
- Over 233,000 people learned how to write a check

Numbers as of 3/12/2008

SUMMARY

- Positive trends in broadband availability should not overshadow the significant inequality between rich and poor communities. According to the most recent Census Bureau data, while 76 percent of households earning more than $50,000 per year are connected, only 35 percent of homes with annual income less than $50,000 have adopted broadband in their homes.

- A 2007 survey by the Pew Internet and American Life project asked non-Internet users why they are not online. You might expect the number one reason to be cost. In fact, one-third of people not using the Internet said they are just not interested.

- Our experience has shown that additional steps—efforts that are less about a specific technology and more about education and creating a culture of use—are needed to ensure that the benefits of the Digital Age are reaching the communities that need them most.

- Government can play a role in stimulating demand, as the tribal government in Warm Springs is doing. Creating public-purpose online media—media that puts vital information and tools directly in the hands of citizens—can demonstrate the value proposition of bringing broadband into their lives and homes.

- At One Economy, we believe that the time has come for a broad-based effort to provide these kinds of information and tools online. To that end, we have created the Public Internet Channel (*PIC.tv*): public-purpose programming designed to inform, engage, and help people take action.

Mr. MARKEY. Thank you, Mr. Ramsey, very much. We all know our next witness through his epic stories captured in the movie series Star Wars and Indiana Jones. But George Lucas is not only a storyteller, movie industry visionary, and innovator, he is also the Chairman of The George Lucas Educational Foundation. The Educational Foundation's goals are to create a space where children become lifelong learners and develop the technical, cultural, and interpersonal skills to succeed in the 21st century. It is our honor to have you here, sir. Whenever you feel comfortable, please begin.

STATEMENT OF GEORGE LUCAS, CHAIRMAN, THE GEORGE LUCAS EDUCATIONAL FOUNDATION

Mr. LUCAS. Thank you. My name is George Lucas, and as founder and chairman of The George Lucas Educational Foundation, I am pleased to appear before you again.

And I appeared here in March of 1994 and outlined my vision for education in our schools. It was called "Edutopia" to signify a more ideal learning environment. Fifteen years ago that vision could have been considered futuristic and unattainable, a pipe dream that could never come to pass. But now, especially with the growth of the Internet, this vision of Edutopia has become a movement.

Across the globe, ministries of education in many nations, including Singapore, China, Australia and the United Kingdom, are all moving ahead with plans to recreate their schools for the 21st century skills. They are investing substantially in Internet access, hardware and software for schools, and training for teachers to enable their students to achieve at the highest levels and fuel the economic growth of their countries. According to a recent report from the Organization of Economic Cooperation and Development in Paris, the U.S. ranks fifteenth in broadband Internet access and is outpaced by Denmark, the Netherlands, Finland, Korea, France, and Canada.

There have been two revolutionary changes in telecommunications in recent years: broadband and wireless technologies. The processing speed and memory of computers has continued to double roughly every 2 years, following Moore's famous law. In just the past 4 years, we have seen an explosive growth of multimedia on the Web.

The narrow goal of universal service must be redefined to include much faster broadband access to current multimedia content and address the next generation of broadband technologies to come. I encourage the subcommittee to anticipate broadband speeds that enable current applications and plan for the much higher speed networks that are currently available only in universities and research centers.

The other transformation in Internet access has been wireless networks and mobile computing. Now it is possible for students to access the world's knowledge without being tethered to a wire at school and libraries. Teachers tell the staff at my foundation of students who sit in their cars in high school parking lots in order to access the wireless Internet hub inside. While the school doors are closed, their minds are still open.

In order to support this vision of 21st century schools, it is very important that we not rest on the accomplishments of the E-Rate funding and the Telecommunications Act of 1996. We should not simply declare that the program has been a success. Instead, we must recognize the even greater possibilities made possible by broadband and wireless and expand the program to keep pace with technology.

I urge the subcommittee to go beyond the current E-Rate discounts for public schools and libraries. Our goal should be to extend the definition of universal service to include modern broadband connectivity. We also need to define speed and bandwidth in terms of what a student sees on their computer, not just one connection to a school or library that must be divided among many users.

The current cap on E-Rate needs to be increased. I note as reported in the Education and Library Networks Coalition, the administrator for the E-Rate program, E-Rate discount requests for 2008 total $4.3 billion but were at $2.25 billion. So we still have work to do to achieve the goal of universal access. I agree with the 2005 statement of the Education and Library Networks Coalition that "all students, educators, and library patrons should have high-speed Internet connectivity to fully participate and learn in an information-dominated economy and world."

I applaud the program of E-Rate discounts to schools and libraries, ranging from 20 percent to 90 percent based on the economic status of communities. But I believe that the eventual goal should be to make these connections free, free for all schools and libraries. This goal is ambitious and as important as the coalition of free public schools and libraries themselves, free and open to all.

Telecommunications provides the new learning platform of this century and is replacing the textbook as the medium through which modern education is provided. The world's knowledge is now available online, far beyond what books and materials can provide in schools and libraries themselves.

Just as access to quality education is a civil right, access to modern telecommunications tools for education should be viewed as a digital civil right. We should seek to guarantee that right to every student, regardless of their ability to pay.

Thank you.

[The prepared statement of Mr. Lucas follows:]

Testimony of George Lucas,
Chairman, The George Lucas Educational Foundation
San Rafael, California

Submitted to the Subcommittee on Telecommunications and the Internet
Committee on Energy and Commerce
U.S. House of Representatives
June 24, 2008

My name is George Lucas. As founder and chairman of The George Lucas Educational Foundation, I'm pleased to appear again before this Subcommittee and to submit this testimony.

A Vision for Education: Edutopia

Nearly fifteen years ago, I testified before this Subcommittee and outlined my vision for education in our schools. I called it "Edutopia" to signify a more ideal learning environment. It included six themes:

1. A student-centered approach where students' individual curiosity and motivation is supported and personalized educational opportunities meet the needs of each student.
2. The family as an integral part of learning and the importance of schools reaching out to include parents as a positive force for children's learning.
3. The teacher changing from authoritarian subject-matter expert to facilitator of the learning process. Though teachers still need to be knowledgeable in their subject areas, their real gift is to help students find and interpret information and to learn the skills of communication and cooperation.
4. Communities—including local governments, nonprofit organizations, and businesses—as co-facilitators of learning for their young citizens. More learning is taking place outside of the classroom. Community members need to get more involved and share their expertise with students and teachers.

5. Schools as the gathering place for learning, with more flexible schedules and group work areas, rather than only large classrooms. Community members could also use the school facilities for their lifelong-learning activities.
6. The essential role of technology for students to locate and assess information, communicate with others, and create works expressing their knowledge.

These information-literacy skills are not narrow skills; rather, they encompass deeper learning across the traditional curriculum. Being able to locate, assess, and use information involves the ability to think critically about a variety of information and data and to think deeply about core concepts in different subject areas.

And developing products of one's knowledge should involve teams of students, rather than one student toiling alone. The ability to listen to and work well with others, to collaborate in teams to create a product greater than one person can achieve alone—this type of teamwork defines the modern workplace and should be the way schools organize the work of students.

Achieving Edutopia

How Far We've Come

Fifteen years ago, that vision could have been considered futuristic and unattainable, a pipe dream that would never come to pass. But now, especially with the growth of the Internet, this vision of Edutopia has become a movement. The features I described are now commonly incorporated in discussions of modern learning environments and twenty-first-century skills in educational conferences across the country and internationally.

Across the globe, ministries of education in many nations, including Australia, China, Singapore, and the United Kingdom, are moving ahead with plans to re-create their schools for fostering twenty-first-century skills. They are investing substantially in Internet access, hardware, and software for schools and training

for teachers to enable their students to achieve at higher levels and fuel the economic growth of their countries.

According to a recent report from the Organization for Economic Cooperation and Development (OECD), in Paris, the United States ranks fifteenth in broadband Internet access and is outpaced by Canada, Denmark, Finland, France, Korea, and the Netherlands, among others.

Since its launch in 1998, the E-Rate program, administered by the Universal Service Administrative Company (USAC), has provided more than $20 billion in discounts for schools and libraries. According to a 2005 report from the National Coalition for Technology in Education and Training (NCTET), Internet access in public school classrooms jumped in one decade from 4 percent (1996) to 94 percent (2005). Connectivity is high in rural classrooms (95 percent), minority school districts (92 percent), and high-poverty districts (92 percent). Furthermore, almost 100 percent of public libraries provide Internet access.

These data, however, do not capture whether the connectivity is at broadband levels. We have come a long way, but we have a long road ahead to keep pace with how technology has advanced and can support learning. In its study of the Digital Economy in 2003, the U.S. Department of Commerce reported that out of fifty-five industries, education is dead last in its use of technology.

What Still Needs to Be Done

My vision for schools hasn't shifted, but technology has—dramatically. Two revolutionary changes in telecommunications technology have occurred in recent years: broadband and wireless technologies. The processing speed and memory of computers, following Moore's famous law, has continued to double roughly every two years.

In just the past four years, we have seen the explosive growth of multimedia on the Web. Multimedia content, including films, television, and music, is now

routinely published, viewed, and shared on Web sites. This content includes excellent educational resources for our schools from our nation's museums, libraries (such as the Library of Congress's American Memory project), and government agencies (such as the NASA Web site, which brings space exploration into the classroom).

It is now possible for students to look at simulations of planetary movement NASA provides. We have produced a film in which students videoconference with surgeons who are performing heart-bypass surgery. Online simulations have been produced to help students experience ancient civilizations. All these online media require high-bandwidth connections beyond what was anticipated in the 1990s.

Now, our goal of universal service must be redefined to include much faster, broadband access to current multimedia content and address the next generation of broadband technologies to come. I encourage the Subcommittee to anticipate broadband speeds that enable current applications and plan for the much higher-speed networks now available only in universities and research centers.

The other major transformation in Internet access has been wireless networks and mobile computing. Now, students can access the world's knowledge without being tethered to a wire at schools and libraries. Teachers tell the staff at my foundation of students who sit in cars in high school parking lots in order to access the wireless Internet hub inside. While the school doors are closed, their minds are still open.

Schools still operate on the agrarian calendar: open nine months a year, six hours a day, five days a week. Those three months used to be important for children to help harvest the crops, but the summer could now be valuable time for planting and harvesting new seeds for learning. In this broadband, wireless world, information is always on, ready for students to exercise their curiosity and

broaden their minds. Now, it is possible to conceive of a world where students can learn 24/7/365, anytime, anywhere.

Extend Universal Service to Broadband at the Desktop

In order to support this vision of twenty-first-century schools, it is very important that we not rest on the accomplishments of the E-Rate funding and the Telecommunications Act of 1996. We should not simply declare that the program has been a success and end it. Instead, we must recognize the even greater possibilities made possible by broadband and wireless and expand the program to keep pace with technology.

I urge the subcommittee to go beyond the current E-Rate discounts for public schools and libraries. Our goal should be to extend the definition of universal access to include modern broadband connectivity. We also need to define speed and bandwidth in terms of what students see on their computer, not just one connection to a school or library that must be divided among many users.

The current cap on E-Rate needs to be increased. I note that, as reported by the Education and Library Networks Coalition (EdLiNC), the administrator for the E-Rate program, E-Rate discount requests for 2008 totaled $4.3 billion but were capped at $2.25 billion. So we still have work to do to achieve the goal of universal access. I agree with EdLiNC's 2005 statement that "all students, educators, and library patrons should have high-speed Internet connectivity to fully participate and learn in an information-dominated economy and world."

Provide Free Internet Access for Schools

I applaud the program of E-Rate discounts to schools and libraries, ranging from 20 percent to 90 percent based on the economic status of communities. But I believe that the eventual goal should be to make these connections free for all schools and libraries. This goal is as ambitious and as important as the creation of free public schools and libraries themselves, free and open to all.

Telecommunications provides the new learning platform of this century and is replacing the textbook as the medium through which a modern education is provided. The world's knowledge is now available online, far beyond what books and materials can provide in schools and libraries themselves.

In affluent Marin County, one middle school has a laptop program where each student has his or her own computer and is able to access the Internet via a wireless hub in the school. But just over the Golden Gate Bridge, only 10 miles away, some San Francisco high school students do not have access to even basic computers and Internet access to go online and do research for class assignments. Teachers in San Francisco tell us that they feel they cannot in good conscience assign students to use computers and the Internet when five students in a classroom of twenty-five do not have access in school or at home.

Just as access to a high-quality education is a civil right, access to modern telecommunications tools for education should be viewed as a digital civil right. We should seek to guarantee that right to every student, regardless of ability to pay.

Connect Telecommunications Infrastructure to Teacher Professional Development

Although I recognize that teacher development does not come under the purview of this Subcommittee, I do want to note the importance of educating teachers about how Internet resources can be used for learning. A report issued recently by the National Education Association, titled "Access, Adequacy, and Equity in Education Technology," points to this critical relationship. Many educators feel that technical assistance and training support is inadequate, especially on how to incorporate technology in instruction.

I understand that teacher training is a focus of the Achievement Through Technology and Innovation (ATTAIN) legislation being discussed as part of the reauthorization of the No Child Left Behind Act. ATTAIN is supported by the

Consortium for School Networking (CoSN), the International Society for Technology in Education (ISTE), and the State Educational Technology Directors Association (SETDA). ATTAIN's funding of professional development for educators on how to use technology is a vital complement to E-Rate connectivity.

I hope this Subcommittee will continue to coordinate its funding and policies with your colleagues on the House Education and Labor Committee. Your policies could encourage school districts and states to adopt an integrated telecommunications platform for schools, teachers, and students. Teachers and principals could use such a network as a platform for their own communications, sharing, and training.

We already see signs of such school networks in the United States, where new teachers are sharing their experiences with each other and their mentor teachers. This year, in our *Edutopia* magazine and on our *Edutopia.org* Web site, we described a project from Scotland called Glow, the first national schools intranet, which provides every Scottish school with a common e-platform for student and teacher email, for parents to have regular communication with their schools, for publishing school Web sites, and for features such as online courses and videoconferencing between schools.

This kind of common platform makes perfect sense. As companies and government agencies do, school districts and states should invest in ensuring that each of their locations has the same suite of online tools for their work and communications. But school districts and states have been slow to invest at the level the Scottish government has done for its schools. For a nation of five million people, the system cost $75 million and took four years to develop.

Students as Producers, Not Just Consumers, of Internet Content

Today's students desperately want to use technology and the Internet for their learning. It is ironic that nearly all students participate in this digital generation outside of school—talking on cell phones, playing video games, or socializing via

Facebook—but many are disconnected from the educational benefits of telecommunications during the school day.

Students tell us that technology provides the kind of choice and engagement that would keep them in school and motivate them to go on to higher levels of learning. This is the new frontier in telecommunications, where students can share the multimedia products of their knowledge.

In one of our *Edutopia* magazine articles, one high school student from Florida said, "You think of technology as a tool. We think of it as a foundation—it's the basis of everything we do." Another student, from Albany, New York, said, "If it's the way we want to learn, and the way we can learn, you should let us do it!" A third student, from West Virginia, added, "If I were using simulation in school, that would be the sweetest thing ever!" The students "get it" and are moving ahead. It's up to our schools to catch up with them.

In 1994, I talked to this Subcommittee about students as authors of their own learning and said, "I don't want to make educational movies. I want kids to make their own movies, programs, and presentations. I want them to have the experiences I have when I create; those are the experiences that help me continue to learn and feed my creative spirit." We have reached an era in telecommunications when students can now do this via the Internet, but they will need the increased bandwidth to do so.

Harnessing Telecommunications at This Moment in Our Nation's History

We pride ourselves on being a nation of laws. Why shouldn't we also be a nation of learning? Americans were pioneers in creating the truly wondrous technology we are talking about today. Innovation is in our DNA. Now, we need to make sure it is also in our classrooms and that every American child grows up knowing how to use the Internet and how to benefit from its rich and powerful resources.

There was a time in our history when only the privileged few enjoyed literacy. The Industrial Revolution made paper and books more readily available, and reading was soon a requirement to getting ahead. The technology revolution we are living in today is another historic opportunity for advances in learning that arrive every few decades. We simply cannot afford to miss it.

Back in 1994, the United States was enjoying an era of prosperity. Now, fourteen years later, we see a much different world and much harsher realities confronting our nation. The climate crisis, soaring fuel and food costs, and terrorism are high among the threats to our future economic and political security. This Subcommittee can put in place crucial legislation to answer whether we confront these challenges successfully as a nation, because all these challenges require much more highly educated citizens and a much better-prepared workforce. Telecommunications and the Internet hold valuable keys to unlocking our brighter future.

I thank the Subcommittee for inviting me here today to share my thoughts about the critical role of telecommunications in the future of education.

Mr. MARKEY. Thank you, Mr. Lucas, very much. Our next witness is Jane Smith Patterson, who is the Executive Director of the E-NC Authority. The E-NC Authority was created by the North Carolina legislature for the purpose of improving broadband Internet access across the State by encouraging North Carolinians to use the Internet in providing opportunities to gain new skills. E-NC is building connected communities in a more economically competitive State. We welcome you.

STATEMENT OF JANE SMITH PATTERSON, EXECUTIVE DIRECTOR, THE E-NC AUTHORITY

Ms. PATTERSON. Thank you, Mr. Chairman. Chairman Markey and Ranking Member Mr. Stearns and other members of the House, I am pleased to be here today to talk with you about our opinion about universal service.

Let me say we have submitted remarks, and I will be briefer in my comments. You should read my remarks to get the full report of my remarks.

The E-NC Authority has been working for 7 years to try to make certain that every citizen in North Carolina has access to the Internet, knows how to use a computer and knows how to access the applications that are there.

Today 82 percent of our households in North Carolina can receive if they wish and can pay for broadband access in the State. We are not yet at one gig to the home but we would like to see ultimately 100 megabits to the home, in North Carolina. We have worked very hard with all of the various companies in the State, both wireline and wireless, and cable and telephone co-ops, even electric co-ops, to try to make certain that access on the supply-side is there for everyone in North Carolina.

Recently, we worked also to say how can we go back out on a second go around to our citizens to work with and to explain to them why it is important for them to learn and to get online. So we have developed Capturing the Promise of Broadband for North Carolina and America. We released that yesterday, and we hope that you will have a chance to look at that. We think that it is the best compilation of what is going on in this country and the applications that are there for the citizens of the United States.

Let me say to you I am going to skip and say a couple things about universal services. Number one, universal service is important to all of the United States. It is important the we move forward to and move to broadband as a central part of universal service. A 2.0 plus, as Mr. Doyle said, 2.0, I would say shoot for the puck for where it should be and to be very flexible in moving broadband services across the country.

It is important to, I think, understand that all persons who use this should pay into the USF. All companies should be eligible to receive. I believe that in the E-Rate that everyone should be able to pay in and receive. And I think that except for wiring contractors. I won't get into that, but you might ask about that later.

I think it is important to also assist nonprofits and private and also the public. When it is important when you cannot get the companies to go into areas and local governments need to step up, we should support that as well.

I would like to just extend a couple of comments about Lifeline Link-Up. I think this is the finest part of the universal services area, and I believe that Lifeline should be changed and morphed into a situation where we support low-income individuals who are having trouble economically and that we should, in fact, make it so that we could have that for broadband access. I think it is important to realize that we have come to a point where telephones are ubiquitous and that perhaps now that you can use voice if you wish to call, and you have access in the Lifeline/Link-Up program. This program is a State-Federal program, so the State is sharing with the Federal Government on this, and I think that is important that the State share with this in the Federal Government in this aspect. So I would encourage you to look at Lifeline/Link-Up as a special issue and a very important one for this.

On the E-rate, we feel strongly in North Carolina now we have 1 gig to the local education agency. One hundred megabits to every school is because of E-Rate that we have that. And with the E-Rate, the State is paying a share of this for the schools, and then the Feds are also picking up a share.

I think the hospital program is in its second go around now in 15 years. The health program needs some additional assistance in listening to some of the people who have to implement that out at the local level.

I would also say that I do not know how much. I think the Benton Foundation has done an excellent job in looking at this, and we would certainly bow to them with their knowledge of how much should be in the Universal Service Fund.

The investment in broadband will pay off immeasurably for us in this country. You can look at the fact that economically we have now an estimated $500 billion in economic growth and an additional $1.2 million high wage jobs if in fact broadband is ubiquitous.

Those are the remarks that I would like to submit to you, and I would encourage any kind of questions about our efforts in North Carolina.

[The prepared statement of Ms. Patterson follows:]

US HOUSE COMMITTEE ON ENERGY AND COMMERCE

SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET

JUNE 24, 2008

Statement submitted by Jane Smith Patterson of North Carolina

Executive Director of the e-NC Authority

Former Chief Advisor to Governor Jim Hunt for Science and Technology; Former Vice President of ITT Telecom Network System Group and Alcatel North America; Former Vice Chancellor UNC-Wilmington; Elected Fellow of the National Academy of Public Administration

Washington D.C.

June 24, 2008

Mr. Chairman and Members of the Subcommittee

It is an honor and a privilege to speak before you today on a subject where I have spent my life working to see that the citizens of my state, North Carolina, and the nation's other 49 states and territories have the capability through telecommunications to interact with the world, their country, their state, and local communities of interest – whether for business, health, education, safety or quality of life purposes. I have worked at the state, national and international level in the telecommunications industry. I have worked at the state level in government, and on national advisory committees on telecommunications and connectivity. Within the university community, I have been involved in research, implementation and deployment of cutting-edge technologies to extend the benefits of virtual education and telemedicine to citizens.

Connectivity to the world for citizens and businesses levels the playing field, creating opportunities to enhance their capability to be successful in whatever venue they choose. For rural communities today, it is the last, best hope to be a credible place to live, work, play and raise a family. It is critical that rural communities are contributors, and not just a drag on the total economy of their state and country. Without connectivity and use of the Internet for economic purposes, the economies of rural communities will continue to decline, and at a faster rate.

Since the founding of voice telephony by Alexander Graham Bell, it became apparent that a telephone was a lifeline to the surrounding local community. It was not until the 1950s that one could instantly call across this country on your telephone from your home or business. Just as the Rural Electric Administration (REA) led to light in rural homes, stringing wires on fence posts and on trees enable telephone. These technologies together enabled rural America to become the economic engine that built and fed the cities of our country. North Carolina's agribusiness community funded our great universities, drove the fight for and funded the creation of the Research Triangle Park and built the small cities for commerce across our state. Light and voice empowered those rural economies and made possible the research and technology that has springboarded my state to a position of prominence in the knowledge economy.

Today, data joins light and voice as the engines that drive commerce and extend rural communities' market reach beyond the end of the next road to the far reaches of the globe. That first mile of connectivity is the critical key. Without it, economic activity with other

communities, cities, businesses in other state, or partnerships with companies in Asia or other parts of the world just cannot happen.

Let's look back. At the start, telephony service did not move too quickly. Small telephone cooperatives and independent companies began to fill-in the service gaps left by the large monopoly telephone companies. The Universal Service Fund (USF) was created to enable those large and small companies to deploy to more citizens wherever the economics did not support deployment. As you know, carriers became "carrier of last resort" and had to provide telephone lines in their territories to whoever asked for service.

The Universal Services Fund met a critical need. It has been a vehicle that has fed the deployment of phone service, and stands as a best practice that should be used to overcome existing Internet service gaps and do the same for true broadband access.

It was not until the USF was created that the larger companies had a funding mechanism that provided them with resources to deploy to areas of need. In 1995, I was chair of a committee of the U.S. National Information Infrastructure fund. Recommendations put forth by that Committee would have required: 1) a data port in every home, 2) the Life Line Link Up Fund (a fund which is a joint effort of the Federal Government and a state) be morphed into a similar fund that would support data connectivity for citizens who could not afford to pay the current ongoing data connectivity rates, and 3) broadband be added as a central focus for the USF.

These recommendations were before their time; the Internet was not yet the blazing connector that it is now. Today, our citizens have Interstate highways for travel, electricity that is ever

present, and local and long distance telephone service, but many lack the core connectivity service of choice, the Internet. They need this access to be available, whether on a cell phone, on their tractor, in their cars, through computers in their homes, or in their barns or packing sheds. They need this access to better manage their lives, their education, or a company that may be 1,000 miles away. They deserve it.

I would like to acknowledge all of the investments made by our major carrier providers – cable and wire line, our small independent wireline companies and our telephone cooperatives. These companies have helped North Carolina, along with the investment of our state government and the commitment of our General Assembly, to work together since the divestiture of the original AT&T and the regional bell companies through the Telecom Act of 1976 to be a leader among large fiber networks. Together we have been able to extend very dynamic services across major fiber highways in North Carolina. We have worked cooperatively, if not always smoothly, with each other to provide the best model, in my opinion, of moving connectivity to everyone in the entire country. The e-NC Authority is technology neutral in our efforts. We have also worked with satellite deployers and with our WISPS--wireless Internet service providers. We have made significant progress - **BUT IT IS NOT ENOUGH.**

The e-NC Authority was established by the N.C. General Assembly to serve as an advocate and catalyst to transform North Carolina from analog to digital in its 21st century focus on the communications environment. Our mandate was to move the entire state towards more technology-focused economic development — not entirely possible without ubiquitous broadband access. The Authority is a state authority, but with a hybrid organizational structure.

Housed in a nonprofit, we do not report to the nonprofit, the N.C. Rural Economic Development Center, but to a board that is named by the N.C. House, Senate and Governor. Our funding initially came from a nonprofit in the Research Triangle Park, MCNC, which was formed in the early 1980s by the N.C. General Assembly and former Governor Jim Hunt to jump start the semiconductor and information technology industries in North Carolina. MCNC gave the e-NC Authority, $30 million to start this effort of transformation. The General Assembly began to provide a small amount of operational funding to e-NC in 2005, and to provide funds for broadband connectivity in 2007. The Authority has, on average, an operating budget of $1 million to oversee all the activities. Over seven years we have managed more than 400 grants and contracts to other organizations and communities, with the purpose of increasing broadband supply building citizen's demand for Internet.

WHERE ARE WE?

At the state level, North Carolina ranks 11th in the number of "high-speed" lines, approximately 26th to 28th in household penetration, and 15th in the number of fiber lines.
At the end of 2006:

- 16 percent of our households had no "high-speed Internet access" (using the FCC's definition of 200 kbps in one direction)
- 21 rural counties had less than 70 percent access—four had less than 50 percent but by November 2008 all four will be above 70 percent

- In some rural counties served by telephone cooperatives and in-state independent providers, DSL has been extended to the entire marketing area. At least two cooperatives are deploying fiber-to-the-home with speeds of 80 Mbps in some portions of their territories
- Two municipalities, Wilson and Salisbury, are developing city-wide fiber-to-the-home systems
- Numerous wireless and fiber activities in small communities are on going
- Larger wire line companies seem to be capping out at 85 percent in rural communities

The e-NC Authority, where I serve as executive director, believes that where at all possible the private sector should be the provider of first resort. WE PARTICULARLY, ENCOURAGE PUBLIC PRIVATE PARTNERSHIPS; WE KNOW THAT THEY WORK. But, if the private sector companies cannot move out in a timely manner, even with incentive funds available, then the local communities should have the option to move forward to see that their community is connected to the world. Even with the best of intentions of all parties, sometimes, the only option is for communities to forge ahead on their own.

Let me offer some examples that illustrate our operating principle of being technology neutral and encouraging innovative partnerships. The e-NC Authority has funded a fiber sheath, where an electric cooperative, a for-profit cable company, and a non-profit middle mile fiber carrier navigate across some difficult mountain terrains. Those entities agreed to jointly maintain this fiber, to allow any other nascent companies to purchase facilities access from them at a discounted price from regular market price and to do so for the foreseeable future. The e-NC Authority incented the agreement to deploy this fiber with a grant of more than $600,000 from e-NC funds. Nascent companies can be profitable from the get-go, and survive to serve the rural communities, if they have a 25 percent discount below the market rate. Economic developers should take notice of this. Another important fact is that we had to develop the legal documents ourselves since lawyers have not yet in many rural areas learned the dialogue, or the instruments to define this sort of contracts in this sector. All law schools should please pay attention to this in revising their curriculums for the 21st century.

Our board voted to move forward this year with a more intense drive back into our communities and a renewed digital inclusion effort. We want to see broadband available, and we want to see it purchased and used. We initiated a review of the world of Internet that looks at the broadband revolution, deployment today and tomorrow, deployment and resulting economic development in North Carolina, how much bandwidth is enough for the U.S. and North Carolina, conclusions and in particular recommendations for North Carolina.

This report, entitled, *Capturing the Promise of Broadband for North Carolina and America,* was released yesterday through the auspices of the New America Foundation.

Diana Oblinger, President of Educause, speaking of their recent report, joined us in discussion at this release, as did FCC Commissioners Copps and Adelstein and a representative of the Fiber-to-the-Home Council. The summary of the report is on our Web site (www.e-NC.org) and will be filed with your Committee. Copies of the full report will be forwarded also to your Committee. I encourage you to review it. It is the fullest assessment that I have seen on the state of broadband — current until last week. Jim Baller and Casey Lide, of Baller Herbst law firm, were the principal authors of the report.

The ability for citizens to access new tools for managing knowledge of Internet availability, such as GIS-based mapping, exists only in a few states. We believe that North Carolina, through the e-NC Authority, was the first state to map broadband availability. (I am aware of HB 3919; North Carolina has mapped the access for our citizens since 2001. I can answer any questions later for your committees staff on this.) Surveys of citizens regarding Internet availability and their use of it have taken place every two-to-three years, and we will complete the fourth survey this fall. These surveys document the relevance of the Internet and connectivity to our citizens, their willingness to pay subscription parameters for bandwidth, their use of the tool to access content, content they prefer to access, why they have computers and access or why they do not, their incomes, household census and many other demographic statistics that give us data with which to plan for programs to drive connectivity access and subscription.

North Carolina has, through the e-NC Authority, spent the last seven years focused on the following:

- Mapping our state with a dynamic network visible daily on where connectivity exists. This is used to prepare a yearly report on high-speed access. We also offer an on-call handler to assist citizens who want access.
- Surveys about Internet use and subscription levels
- Free digital literacy programs for our citizens
- Free public access at more than 400 sites across North Carolina
- Development of e-communities plans, steering committees and e-champions
- Training for leaders on why connectivity leads to economic growth
- Development of Business and Technology Telecenters for seven very distressed rural counties
- Programs to transform local governments' capability into transactional web sites
- Funding of wireless and fiber networks in rural communities with citizens as managers
- Technical Assistance to communities to assist with decision making on whether to venture into this new world of community networks
- Manuals for e-business Training, Business and Technology Telecenter, and Podcasting

All of our programs are developed through research, local citizen and business input, implementation. Many or our programs and initiatives are assessed by reputable third parties to determine our outcomes — our success and our failures — and then reprogrammed to see new innovation. Our Web site contains all of our manuals and our training programs in an effort to be the one-stop shop for broadband knowledge for citizens and businesses.

All homes and individuals should have access to an Internet provider with broadband speeds. The new focus by the FCC, in its order released in March, is a step forward. Broadband speeds should be at least 768 kbps symmetrical but moving quickly upwards — within three years to more than 6-10 Mbps. My professional view is that it should be at least moving towards 80 Mbps to the home, considering that we are now 15th in the world in broadband deployment and perhaps lower if we addressed speeds. This will still put us at a distinct disadvantage when compared to the rest of the world.

Universal Service Fund

Now, I will move forward to respond quickly to your questions.

To Whom - Advancing broadband to all Americans has become more important than universal telephone service since universal telephone service is for all intents and purposes already here.

By Whom - All entities who pay into the Universal Service Fund

(Except when entities are involved with the E-rate for schools)

(Or Entities-nonprofit or private- that can demonstrate positive cash flow and five years of operations where there is no provider of service)

For What?

- For Homes connectivity

- Expand Life Line Link Up program to include broadband access
- Schools, nonprofit hospitals and clinics (health programs in the past not well defined and requirements too confusing). While building-out access to the Internet, these facilities would provide more economic development in rural communities.

How Much?

A well developed fund that would make ubiquitous broadband possible. The Benton Foundation notes that the current figure is too low. We have not researched this and accept their greater access to knowledge on the appropriate needed funds.

The investment in broadband will pay off immeasurably with technology-based economic development and benefits for education, health care and quality of life for citizens. An estimate of $500 billion in economic growth for ubiquitously available broadband could also see 1.2 million high-wage jobs as well as boost business productivity and enable small businesses to engage in global commerce. (Capturing the Promise of Broadband for North Carolina and America, June 2008.)

North Carolina Example:

One example of a program is our Business and Technology Telecenters. This program has returned more than $163 million in cash to seven distressed rural communities in North Carolina. Three have been in operation for six years, and four in operation for two years. These Telecenters serve as technology light houses, working to transform their communities from the agricultural, furniture and textile past to the 21st century of technology and knowledge-based enterprises. Without broadband access, this would not have been possible.

Incidentally, North Carolina lost more than 90,000 manufacturing jobs between 2001 and 2006. Significant growth took place in biosciences as jobs in that sector increased from 20,000 to 47,000. The state showed significant growth in biotechnology, pharmaceuticals, software and computer system design, data processing and banking and finance. Most of this growth took place in the Research Triangle Park and Charlotte areas. These Business and Technology Telecenters, which are located in counties that were ground zero in the loss of manufacturing jobs, **demonstrate that broadband access and the technology-based economic development it enables can be the platform for transforming rural economies into more vibrant engines of commerce.**

Mr. MARKEY. Thank you, Ms. Patterson, very much. There is a roll call on the House floor. There is only 5 minutes left to go for the members to go over and to make that vote. So what I would recommend is that we briefly adjourn for 10 minutes. We will return, and we will hear from Mr. Sullivan, and then we will begin the questioning of the panel by the subcommittee members. This hearing is in brief recess.

[Recess.]

Mr. MARKEY. The Subcommittee on Telecommunications and the Internet is called to order once again so that we may recognize for his opening statement our final opening witness. His name is Charles Sullivan. My mother was a Sullivan, and she said they were very intelligent people, and so I am looking forward to his testimony. He is the Executive Director of International CURE, Citizens United for the Rehabilitation of Errants. CURE works to ensure that prisoners have all the rehabilitative opportunities they need to turn their lives around. CURE was founded in 1972 by Charles and Pauline Sullivan as a membership organization of families of prisoners, former prisoners and other concerned citizens who work to reduce crime through the criminal justice reform movement. We thank you, sir. Whenever you are ready, please begin.

STATEMENT OF CHARLES SULLIVAN, EXECUTIVE DIRECTOR, INTERNATIONAL CITIZENS UNITED FOR THE REHABILITATION OF ERRANTS (C.U.R.E.)

Mr. SULLIVAN. Mr. Chairman, I would like to especially thank you for this hearing and also Congressman Inslee, we have met at Congressman Strickland's functions. Thank you for this opportunity to talk with you.

My name as you said is Charlie Sullivan. I am Executive Director and cofounder with my wife, Pauline, of CURE. We are a grassroots prison reform organization that began in San Antonio, Texas, in 1972 and expanded to a national organization in 1985. Our members come from every State in the Union. They are for the most part people incarcerated and their loved ones. A strong argument could be made that they are unfortunately the most economically disadvantaged segment in our society today.

The number of people affected by the prison experience is staggering. Although we only have 5 percent of the world's population, we incarcerate 25 percent of the world's prisoner population. A recent study points out that one in a hundred persons in our country is now in prison.

Thus, it would not surprise you that CURE was one of the many organizations that celebrated this year's passage of the Second Chance Act. This Act is an acknowledgement of just how important after-prison support is and how it must begin in prison. Our members understand this need on a very personal level. People being released know they need crucial social support, which loved ones in the free world often provide. In fact, studies show that if persons stay connected to their families while in prison, they have a six times better chance of not recidivating.

But, Mr. Chairman, sustaining these vital family ties is not easy. Visiting is not always possible because of the cost of travel, espe-

cially now with such high gas prices. Although letter writing is important, phone calls are the main method used to sustain this all-important connection.

And this leads to the issue I wish to discuss. The high cost of prison phone calls. For more than 10 years, CURE has been working to reduce these costs. In 2000, we organized a nationwide campaign, the Equitable Telephone Charges Campaign, to mobilize family members of prisoners and other concerned citizens to advocate for changes, and this campaign continues today. It has been a long campaign, but we are proud of the fact that we have seen substantial progress. When we started, only six states offered a reduced rate debit calling system as an option to the expensive collect calls. Now 20 states have a debit or prepaid option at reduced rates.

Despite the progress in many areas, there is one area that continues to be very troubling, and that is the high cost of interstate phone calls from many state prison systems. The reason these calls are so expensive is because the contracted phone company pays the prison system a commission for each call. These commissions can be as high as 60 percent.

But there are some states that have made pro-family decisions to make interstate phone systems much less costly. For example, family-friendly systems like Florida charge only $1.80 for a collect and $1.62 for debit or prepaid. In contrast, Washington State charges $17.41 for a 15-minute interstate call with no reduction in debit or prepaid. The handout that I have attached to my statement shows the latest information we have compiled on these interstate rates. Keep in mind that all of these systems have similar security features. Thus, there is no logical explanation for these significant differences.

We have not been alone in our efforts and want to take this opportunity to thank Congressman Bobby Rush for his leadership on trying to solve this problem by assuring affordability to those families who have loved ones in prisons. He introduced The Family Telephone Connection Protection Act last Congress and again this Congress, which is H.R. 555 on the table. We have a brochure on this piece of legislation. This legislation would authorize the Federal Communications Commission to one, prescribe maximum rates; two, require both collect and debit calling; three, prohibit commissions; four, require competition; and five, prohibit call blocking solely because there is not a billing agreement in place.

In closing, I want to express again how vital it is for prisoners and their families to be able to communicate with each other.

I would like to end with a very moving example of an extremely moving study that involved Walter Lomax, who spent 39 years in prison and was found innocent. His family stayed in contact with him by visiting, writing, and phone calls. And also he even in a way walked his daughter down the aisle when she married. At her wedding a relative held up a cell phone switched to speaker mode. Mr. Lomax listened on the other end from a phone in a Maryland prison. When the minister asked who was there to give his daughter, Wanda, away, it was Mr. Lomax who answered I do.

Needless to say we would be happy to work with the subcommittee to explore any and all possible solutions to making all interstate phone calls affordable for families of prisoners.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Sullivan follows:]

TESTIMONY OF CHARLES SULLIVAN, DIRECTOR
CITIZENS UNITED FOR REHABILITATION OF ERRANTS (CURE)
BEFORE THE
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON TELECOMMUNICATIONS AND THE INTERNET

"The Future of Universal Service"

June 24, 2008

Thank you for this opportunity to talk with you. My name is Charlie Sullivan. I am Executive Director and Cofounder with my wife, Pauline, of Citizens United for Rehabilitation of Errants or CURE. CURE is a grass-roots prison reform organization that began in San Antonio, TX, in 1972 and expanded to a national organization in '85.

Our members come from every state in the union. They are, for the most part, people incarcerated and their loved ones. A strong argument could be made that they are, unfortunately, the most economically disadvantaged segment in our society today.

The number of people affected by the prison experience is staggering. Although we have only 5% of the world's population, we incarcerate 25% of the world's prisoner population. A recent study points out that one in 100 persons in our country is now in prison.

Thus, it would not surprise you that CURE was one of the many organizations that celebrated this year's passage of the Second Chance Act. This Act is an acknowledgement of just how important after-prison support is and how it must begin in prison. Our members understand this need on a very personal level. People being released know they need crucial social support which loved ones in the free world often provide. In fact, studies show that if persons stay connected to their families while in prison they have a six times better chance of not recidivating.

But, sustaining these vital family ties is not easy. Visiting is not always possible because of the cost of travel especially now with such high gas prices. Although letter writing is important, phone calls are the main method used to sustain this all important connection.

This leads to the issue I wish to discuss: The high cost of prison phone calls. For more than ten years, CURE has been working to reduce these costs. In 2000, we organized a nationwide campaign (the Equitable Telephone Charges Campaign) to mobilize family members of prisoners and other concerned citizens to advocate for changes. This eTc Campaign continues today under the creative and expert leadership of its Coordinator, Kay Perry. See eTc Campaign website or call 269-383-0028.

It has been a long campaign, but we are proud of the fact that we have seen substantial progress. When we started, only six states offered a reduced-rate debit calling system as an option to the expensive collect calls. Now, twenty states have a debit or prepaid option at reduced rates.

Despite the progress in many areas, there is one area that continues to be very troubling and that is the high cost of interstate phone calls from many state prison systems. The reason these calls are so expensive is because the contracted phone company pays the prison system a commission for each call. These commissions can be high as 60%.

But, there are some states that have made pro-family decisions to make their interstate phone systems much less costly. For example, family-friendly systems like Florida charge only $1.80 for a collect and $1.62 for debit/prepaid. In contrast, Washington State charges $17.41 for a 15-minute interstate call with no reduction in debit/prepaid. The handout I am providing shows the latest information we have compiled on these interstate rates. Keep in mind that all of these systems have similar security features. Thus, there is no logical explanation for significant differences in the cost of doing business.

We have not been alone in our efforts and want to take this opportunity to thank Congressman Bobby Rush for his leadership on trying to solve this problem by assuring affordability to those families who have loved ones in prison. He introduced "The Family Telephone Connection Protection Act" last Congress (HR 4466) and again this Congress (HR 555). This legislation authorizes the Federal Communications Commission to: 1) Prescribe maximum rates 2) Require both collect and debit calling 3) Prohibit commissions 4) Require competition and 5) Prohibit call blocking solely because there is not a billing agreement in place.

In closing, I want to express again how vital it is for prisoners and their families to be able to communicate with each other. CURE members have told us many stories about persons in prison being involved in family life through phone calls. This includes helping their children with homework, offering encouragement, and making decisions affecting the family.

One of the most moving stories involved Walter Lomax who spent 39 years in prison and was found innocent. He was released in 2006. His wife, son and daughter stayed in contact with him by visiting, writing and phone calls. He even in a way walked his daughter down the aisle when she married. At her wedding a relative held up a cell phone switched to speaker mode. Mr. Lomax listened on the other end from a phone in a Maryland prison. When the minister asked who was there to give his daughter Wanda away, it was Mr. Lomax who answered, "I do".

Needless to say, we would be happy to work with the Subcommittee to explore any and all possible solutions to making all interstate phone calls affordable for families of prisoners. Thank you for your time and attention. I would be happy to answer any questions you may have.

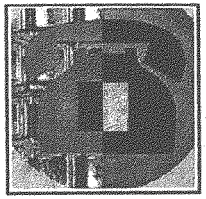
SUMMARY OF MAJOR POINTS OF TESTIMONY BY CHARLES SULLIVAN

1) Phone communication is the most important means of keeping people in prison together with their families and not recidivating.

2) Progress on reducing the high cost of these phone calls have been made in regard to intrastate calls but not in regard to interstate calls.

3) Passage of HR 555 would go a long way to reducing the high cost of these interstate phone calls.

CURE PO Box 2310 Washington, DC 20013 202-789-2126 cure@curenational.org



PRISON SYSTEM INTERSTATE CALLING RATES FOR A 15 MINUTE CALL

STATE	COLLECT	Debit/ Prepaid
AK	$17.30	
AL	$14.15	
AR	$10.70	
AZ	$17.77	
CA	$17.30	
CO	$17.30	$4.10
CT	$17.30	
DE		
FL	$1.80	$1.62
GA	$17.30	
HI		
IA		$7.50
ID	$15.60	$14.65
IL	$17.30	
IN	$5.00	
KS	$7.70	$6.55
KY	$6.50	
LA	$7.05	
MA	$13.35	
MD	$7.20	$4.50
ME	$13.35	$4.50
MI	$17.34	$17.34
MN	$17.30	$4.80
MO	$2.50	$1.50
MS	$13.35	

State	Collect	Debit/ Prepaid
MT	$5.75	
NC	$17.30	
ND	$6.06	$5.10
NE	$3.75	$3.00
NH	$2.70	$2.25
NJ	$15.10	
NM	$10.50	$7.50
NV	$17.30	
NY	$2.30	
OH	$17.30	
OK	$3.60	
OR	$17.30	$10.60
PA	$12.61	$9.75
RI	$5.80	$5.22
SC	$8.20	$6.56
SD	$11.75	$3.92
TN	$14.30	$12.87
TX		
UT	$10.31	
VA	$8.85	$8.40
VT	$10.75	$8.10
WA	$17.41	$17.41
WI	$7.25	
WV	$6.25	
WY	$12.85	$10.76

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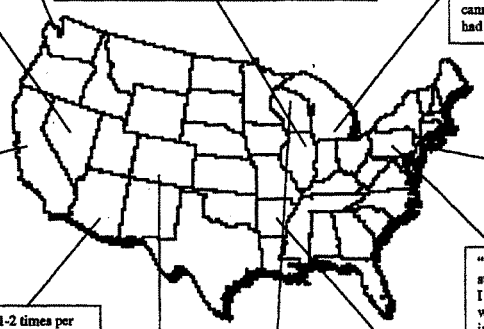
A Sample from CURE's Mail Bag



"I can only make two calls a year because each 15 minute call (one to Texas and one to California) costs $22."

"His phone calls are terribly expensive." (The bill enclosed with her letter included the following charges for calls with her fiancé: $30.65 for each of two 30-minute calls, $11.96 for a 9-minute call, and $27.98 for a 27-minute call.)

"My mom is 84-years old, in bad health, finances are terrible. I have not been able to phone her in 6+ years, because she has a rotary phone. Even if I could call her, she cannot afford the expensive calls! I have had no prison income in 6+ years!"

"It costs $38.00 to call my mom in Texas for 30 minutes. The prison gets over 50% of that. My mom went through chemo for colon cancer. She can't afford to talk to me. Yet my voice would help her and her love would help my sanity."

"I no longer can call home over this big rip off, because my family has a hard enough time trying to make ends meet."

"I won't call friends who decide to put money in the phone system account. Three to four calls is $50! And that's disrespectful..."

"My mother is in a nursing home and suffers from a neurological brain disorder. I write to her. Unfortunately, she cannot write back. Due to the low institutional income I receive once a month, paying for one call would leave me unable to buy hygiene products. This leaves me with no response from her."

"I can only call my mom 1-2 times per year; the cost of the phone bill is $19.41 for 15 minutes.... I would love to call my family members (in California, Utah, Nevada, and Colorado) more often, but they are on a fixed income."

"I must limit the number of calls to my family. My parents are retired and live on a set income, so my calling is just another burden I've caused them."

"Your family has to prepay for your phone call. There is a surcharge and for a local call it can be up to $8 for 15 minutes. Out-of-state is an automatic $10."

"My long time best friend Blanche is 81 years old and, despite my mistakes, still supports and encourages me to understand and stay hopeful.... We both look forward to our Saturday morning calls and always hope that others less fortunate financially could also.... Without Blanche, I would have lost any or all hope."

Mr. MARKEY. Thank you, Mr. Sullivan. And thank you to your wife as well, and we do want to work with you. Absolutely something that cannot continue.

The Chair will now recognize himself for a round of questions and I want to begin with you, Mr. Lucas. Could you please elaborate, talk about what higher-speed broadband can do for the classroom by way of course content, collaboration by students, and new applications?

Mr. LUCAS. Well, some of the things that we have experienced in the foundation are the fact that using the Internet in order to teach the children to find information, assess that information, and find out what is true and what is not true and then use that information creatively becomes the basis of sort of the 21st century school. It is a matter—it is very difficult now to teach all children all the facts, all the knowledge, everything they need to know.

But what we can do is teach them how to learn and how to find information. The Internet is absolutely crucial for that. We have had situations where people have been able to use the Internet to get to universities, the K through 12 students to look through microtelescopes to learn things, to help with their studies, to watch surgery in progress and to watch NASA launch spaceships. It brings a whole wealth of information into the classroom. It also allows the students to collaborate with kids from other countries. And it also means that we can bring in experts from all kinds of institutions, be it from the Library of Congress or the NFL, into the classroom to help the students to understand what they are learning.

Mr. MARKEY. And could you talk to us a little bit more about this concept of free in terms of the service which you propose be made available to children as the great equalizer in American society?

Mr. LUCAS. Well, again, we are moving ahead very fast, and wireless is the wave of the future, and if we are going to wireless then you are assigning and or giving away or however you want to describe it, frequencies to the phone companies and to the people who are using, you know, I mean providing the service. My feeling is that as a part of that access to the public airways, that a certain amount of the service be restricted, and say this is only allowed for educational institutions. Part of it I feel that we have a—there is an example of a system in Glasgow, Scotland, that has an Internet built through their schools and their whole educational system which works for free to all the schools and all the students. It is a very powerful system, and I think that possibly an educational Internet, a third Internet that is only for education and that is not charged and that the carriers cannot charge, would be a rather simple way to solve the problem. The idea of taxing people and taking the money away and then giving it back seems like a very cumbersome way to do something that you are already—you are charging people to use the system as it is. So if you are making people pay for the right to have the frequencies, why don't you just say well you can have it for a little bit less but you have to give the schools something for free.

Mr. MARKEY. Thank you, Mr. Lucas. Mr. Ramsey, you say that low-income citizens adopt broadband at a much lower rate then higher incomes. Can you talk about the adoption part of the A tril-

ogy which you laid out here for us in terms of how that impacts the low-income community now and into the long term?

Mr. RAMSEY. Thank you, Mr. Chairman. On the adoption side, when you look at the statistics and you look at behavior, low-income individuals will adopt at the same rate as other individuals. The question is what applications are available and are we doing anything particularly on the literacy side, on the human capital side, helping individuals who might have some literacy or language barriers to be able to adapt to using the Internet. But in terms of the aspiration, the goals, it is there for everybody, and it is just as strong with that population. There isn't any inherent inhibition to wanting to use broadband or the Internet in terms of that population.

Mr. MARKEY. I thank the gentleman, and I thank him for his work in that area.

To the gentleman from Florida, I have a bit of a problem right now. I have not made this roll call, so I have to run over to make the roll call, and is the gentlelady going to go over and make the roll call as well? OK. Well, then we won't have a member and majority to chair. I was hoping that was the case. So we will again, we will take a brief 10-minute recess, and the first Democrat that arrives who has made the roll call, we will ask them to reconvene the hearing and recognize the gentleman from Florida, Mr. Stearns. We will take another brief recess.

[Recess.]

Mr. MARKEY. The Subcommittee on Telecommunications and the Internet is reconvened. We apologize again to our witnesses. Congressional efficiency is an oxymoron, like jumbo shrimp or Salt Lake City nightlife, there is no such thing, and so this delay is something that is unavoidable but a part of, an integral part of, our system. Let me turn and recognize the gentleman from Florida, Mr. Stearns.

Mr. STEARNS. Thank you, Mr. Chairman. I don't know if Utah is going to appreciate your comments, but before I start I want to—I didn't hear Mr. Sullivan's opening statement, but I did look through it during the break, and I just want to commend him for what he is doing for the prisoners and working with the facilities there to get the support so that prisoners can actually talk to their families. And I notice as he pointed out that Florida is number one in terms of providing support for the prisoners so they can speak to their families and also in some ways help their children through that connection.

Mr. May, I am going to start out my question for you, which is, Mr. Barton and I are dropping a bill dealing with the universal service. As all the members know it is $7 billion a year, which most of the fraud, waste, and abuse that we have talked about is in the high-cost portion of that. The other portion is the low-cost as well as the rural healthcare and then the E-Rate, which Mr. Lucas has talked about. But if you would tell me just briefly why the Barton bill would—what it would do to solve this problem, and maybe that would help all of us.

Mr. MAY. Thank you, Mr. Stearns, and in my written testimony I did point out some very good features concerning the Barton bill that I didn't have a chance to address earlier. But basically the

Barton bill does these things which I think are very important in terms of actually furthering the principles that I talked about in our oral testimony. Number one, it caps the size of the funds, which is important to staunch the growth that everyone has talked about that has led to the 11 percent surtax that everyone pays now.

Number two, the Barton bill relies on a competitive bidding mechanism to affect the distribution of funds over time and this competitive mechanism is frequently referred to as reverse auctions. They have been talked about now for several years. There have been studies on this type of mechanism, but what it would do, would be over time it should ratchet down the subsidies to these high-cost areas as providers of last resort. There would be one provider that would be awarded the subsidy under the reverse auction and because of the technology continuing to improve and so forth, competition, the subsidy should go down. And then finally, and this is important on the financing side, it adopts a broad-based type of approach, largely a numbers—an assessment on numbers, which is broader than the current regime, and that is a good thing as well. So it does those things, which are very important.

Mr. STEARNS. You heard Mr. Lucas say he would recommend raising the $2.25 billion cap on the E-Rate program, extending it to provide free broadband for schools. Do you recommend that, yes or no, just yes or no?

Mr. MAY. No.

Mr. STEARNS. OK.

Mr. MAY. There are no free lunches.

Mr. STEARNS. All right. Mr. Lucas, as I pointed out or you pointed out, you want to provide free broadband to schools. Right now under the universal service and the E-Rate, some of the most wealthy communities in the country, for example, Greenwich, Connecticut, gets a subsidy of about $248 million a year, and in Berkeley Hills, their library gets $75 million a year. So this is being funded some of the most expensive libraries in the country, and perhaps they don't need it. Do you think perhaps we could do this without raising the rate, perhaps just try to find some way in the E-Rate program to maybe find some efficiency here?

Mr. LUCAS. Can I just say that when you meant thousand, not million.

Mr. STEARNS. Yes, thousands, excuse me, thousands. I am sorry, $248,000 for Greenwich, Connecticut.

Mr. LUCAS. OK. Thank you.

Mr. STEARNS. $75,000 for Berkeley Hills, yes.

Mr. LUCAS. What I am suggesting is as we move into the future most everything is going to end up wireless and as it ends up wireless you are going to be auctioning off bandwidth and as you auction this off all I am saying is why don't you just hold some back for schools and libraries. It doesn't cost you anything. You don't have this cumbersome system of taking money and then giving it back. You simply say this is an area you can't exploit and that is the price you pay to get this bandwidth or get these frequencies.

Mr. STEARNS. Would you consider going into the high cost part of the Universal Fund where most of us all talk about. Not all of the members agree here as you could here but in the high cost por-

tion do you think there is a possibility of eliminating waste and the fraud that is in that program and transferring it over to the E-Rate instead of using your language of raising the cap on the E-Rate program?

Mr. LUCAS. Well, I mean raising the cap is a short-term solution. You are going to have to ask yourself again in all of these, I think we all agree that having this service is extremely important to our country. It is extremely important to the educational system. It is extremely important to the people that have been left behind and to bring them back into society. And arguing about who is going to pay and how it is going to work, that is basically the job of you guys to figure that out.

Mr. STEARNS. All right.

Mr. LUCAS. If I had an answer I would give you, I would say this is the way you can do this. The service is necessary. It needs a lot of really bright minds and clever people to figure out how to solve that problem. I am not advocating—I haven't read the bill—but anything that works. I am a taxpayer too. I think that the cheaper you can do it, the better, but the service has to be provided.

Mr. STEARNS. So, Mr. Chairman, I assume that Mr. Lucas is endorsing the Barton Bill today, is that what you hear?

Mr. LUCAS. No, I am just saying yes, as a taxpayer I am saying do it the most inexpensive way possible.

Mr. MARKEY. All right.

Mr. LUCAS. Cut the waste, and as somebody that is advocating schools or whether it is prisons or whether it is the Internet or whether it is Internet access to the underserved, that has to happen somehow. So you have to figure out how to do that.

Mr. MARKEY. All right.

Mr. LUCAS. It is just like roads. Why don't we just get rid of all the roads and replace it with the Internet because, we got gas problems, we got car problems, we got everything. Why don't you just take all the money you spend on roads and spend it on the Internet? Because hey, 150 years ago that is what they would have done. They spent it on roads.

Mr. STEARNS. Thank you, Mr. Chairman.

Mr. MARKEY. The Chair recognizes the gentleman from Washington State, Mr. Inslee.

Mr. INSLEE. Thank you. Mr. Sullivan, first I want to thank you. There is a certain governor who will be real proud of your testimony and confirm his belief you are the most compassionate guy in Washington, D.C., and I will report your comments to him.

I want to ask just a question for the whole panel about a particular group that is seriously underserved, not for broadband but for any band. They don't even have a phone connection, and that is our tribal community and many reservations, many of which are geographically isolated. And the numbers just blew me away when I saw them this morning. We have 98 percent coverage for the rest of Americans. For the original Americans we have just maybe two-thirds just having a phone connection. We haven't even gotten to that level yet. And I just wonder if any of you have any thoughts specifically about the best way to address that issue for that particular group of Americans or just having a little brainstorming session here for free advice.

Mr. RAMSEY. If I might, Rey Ramsey here, with One Economy we are working on several tribal lands in Oregon, the Warm Springs and Umatilla and several other tribal organizations. The issue is, I think, in order for it to be successful, and what I have seen in terms of success, it is making sure that programs address not only just saying, oh is it available? And it gets back to the three-part test that I mentioned earlier but that it is more comprehensive in scope. Some of the tribes I have seen have been ripped off by folks who have come in and said, we are going to put this wireless mesh over the reservation, but there is no adoption. There are no applications for people that are culturally appropriate. Folks want to have content in some cases that speaks to them. Some of it is language-based. Some of it is cultural-based. There has to be a focus on the human capacity side in terms of digital literacy, getting young people involved. So in Warm Springs we are working with them on getting the young folks involved and trained so that they can train elders. There is content that we are producing that is culturally appropriate and in some of the native languages, as well as deploying wireless to make it work just given the geographic expanse to many of the places. So we have written grants we have gotten and supported by foundations and other entities. So there are gaps in the way we look at tribal access, affordability and adoption. So I would say that it has to be more comprehensive then just saying here is the conduit or money for switching or things like that. That is not going to ultimately when you step back and say are we successful. You aren't going to be successful if you are just putting money in narrow bands.

Mr. INSLEE. Well, that brings up kind of a broader question, too. As we have gone forward, we have always focused just on connectivity, and if it doesn't get used because someone can't afford the machine to connect to it or for some other reason we are not doing. Does this whole thing need reevaluation between our investment in connectivity and our investment in what it takes to actually get people to utilize broadband services? Is there a whole new issue discussion we should be having in that regard?

Mr. RAMSEY. If I just might and then I will stop. I would say that in terms of when we talk about digital divide, the definition now has changed. It would only be measured in the past in terms of do you have access or not. We now have a divide that deals with content. There is a content divide, which is the applications of technology. And I think we have to expand the way we are thinking about these divides, or the flip side the opportunity, and we have to look at the human capacity side. And I would just say one other thing in terms of "digital divide efforts" is that if you look at it in the United States, we have focused a lot on building centers, community centers, and E-Rate, which I support, which is a good program that still needs some tweaking but it is a very good program. But I would posit to you that the learning environment of the future extends beyond the school and that the learning environment is a full learning environment which includes the home. There is no place more powerful to bring technology then bringing it into the home. We have housing authorities in this country where we are building and subsidizing affordable housing, and we do nothing to make sure that connectivity goes to housing authorities. There

are 3,600 housing authorities in America, and I would say start there.

Mr. INSLEE. I want to make sure Mr. May can get a comment here.

Mr. MAY. Thank you very much. Two things, and I think Mr. Ramsey has illustrated these. Number one, on the question of availability, which was part of your original question in terms of the reservations or areas, again the important thing is where there are unserved areas, we need to do a much better job of targeting the subsidies narrowly if we are going to have subsidies. And you can do that through mechanisms that are being used now. Secondly, everything that Mr. Ramsey has said today, I appreciate it a lot, because he is emphasizing that the issue that we ought to be discussing is not just the availability of service, but also part of the focus should be on adoption and reasons why people don't have broadband. Because the fact of the matter is there are a lot of pockets, but we have made extremely rapid progress in this Nation actually in dispersing the availability of broadband. And there are ways when you talk about people not having computers or some of the cultural things he is talking about, they are much harder to get at through throwing money at, I believe, and subsidies.

Mr. INSLEE. Thank you.

Mr. MARKEY. I thank the gentleman very much. The gentleman's time has expired. The Chair recognizes the gentleman from Nebraska, Mr. Terry.

Mr. TERRY. Thank you. I appreciate that, Mr. Chairman. Mr. May, have you also read the Terry-Boucher or Boucher-Terry bill, as well?

Mr. MAY. Last year I know I did. It has been awhile.

Mr. TERRY. Very good. You do remember that it had caps in it as well, capping it at its current state.

Mr. MAY. That is good.

Mr. TERRY. That is OK. I will remind you of that. That also in the side of the reform that we include phone numbers but we also put in IP addresses and other things that we just don't imagine today may be the moniker of defining the communication, so we give that type of breadth that you complimented the other bill, so we share that. Also, in the Terry-Boucher bill you raise the issue of competitive bidding through reverse auctions to be more like the carrier of last resort. And in our bill we kind of worked through that issue and decided what we would do is just define that to be eligible for the funds that you have to walk like a duck and actually be a carrier of last resort, as opposed to just come in and picking off some of the bigger population areas. But keep in mind bigger population areas and the high-cost area may be 1,500 or 2,500 people. So keeping that in mind, do you think that is an admirable goal that we keep it to the universal service funding whether through reverse auction or actual distribution of funds to people or to an entity that is a carrier of last resort?

Mr. MAY. Yes, Mr. Terry, I think those are admirable goals, and I guess the only thing I would just emphasize again, and your bill goes a ways towards this in the ways that you suggested. But I think ultimately the competitive—the distribution method is important to achieve greater efficiency, and I would urge the use of a

mechanism like the reverse auction to make sure that we are continuing to ramp down the cost of these programs to take advantage of the lower cost from new technology.

Mr. TERRY. Well, and one of the things that I would like to stress here, and we could get into this at the next hearing, and maybe you could be at that one as well, but the explosion in the high-cost fund is because now there are areas that one area of 2,500 people has three entities or more getting Universal Service funding, which to me defies the logic of its original intent.

Now, with my last 2 minutes here I would like to start with Mr. May and go on down to Mr. Sullivan, if they think the other, probably the more controversial, item of the Boucher-Terry bill is that we say if you are going to get universal service monies that you should now in the 21st century combine plain old telephone service with broadband. We equate that today those are pretty much one and the same or equally as necessary in a 21st century. Do you think if we are going to subsidize either through the traditional means of universal service checks or through a reverse auction that you should also have to supply broadband?

Mr. MAY. The preference would be to make a cleaner break with the existing regime in the past and recognizing the importance of broadband as I did in my testimony, and in recognizing that there may be a need for some subsidies, I would prefer actually to do it separately and have broadband funded through general appropriations.

Mr. RAMSEY. Yes, I would add that I probably concur closely with Mr. May but with a heavy preference on more subsidy for broadband, recognizing there are pockets in terms of phone, particularly tribal lands and a few other rural places, which shouldn't be ignored but much more preference for broadband-related subsidy.

Mr. TERRY. Actually, I think your answer would probably agree with my statement more.

Mr. RAMSEY. Yes, if we are going to spend a dollar on upgrading a system, it should also include broadband in it too, yes.

Mr. TERRY. Mr. Lucas.

Mr. LUCAS. Well, obviously broadband is essential now to schools and that is the sort of the key application that we have been pushing for the last 15 years, because once you get to be able to move video back and forth and to telecommute and that sort of thing with schools, it makes it a whole different ballgame.

Mr. TERRY. Ms. Patterson.

Ms. PATTERSON. I would make sure that we move more towards the broadband side and look at the technology to enable you to be able to get the plain old telephone service. I would also say that I think it is important for us to move forward to the 100 megabit nation, which is still below others, and the resolution in the House that is out there is very important between Markey, Doyle, and Eshoo.

Mr. MARKEY. I thank you very much, and the gentleman's time has expired. We now recognize the gentlelady from California, Ms. Harman.

Ms. HARMAN. Thank you, Mr. Chairman. First, let me commend you for holding this hearing. We have held a lot of hearings in this

subcommittee. Some of them have landed you and me in the—to be quoted by comedians late at night—but others have been on topics very significant. This is probably up there in terms of the most significant topic we could address. And I want to quote something you said during the Telecom Act of 1996 debate in support of the E-Rate program. You said we must bring all kids along to the future. And I think the key is what we are talking about today. There is no question in my mind that if we don't provide resources to schools and libraries, especially schools, to give our kids 21st century learning tools, those kids won't come along to the future, and they will be left behind by kids in other countries whose schools and libraries will have those tools. We are behind already, and there are really no excuses for this country to be behind in this area. And so I want to salute everyone, every witness here, for the efforts you are all making to help us move faster, whether that be in terms of federal funding, charitable giving, pushing the private sector, all those efforts are going to be necessary so we don't leave any child out of the future.

I want to imagine what our schools will look like in 10 years if we do this right. My three grandchildren are 2, 6, and 5 months, and they are all geniuses, and I am sure that the grandchildren that are children of other members of this committee and of all of you are geniuses as well, or potential geniuses, and a lot of kids in a lot of inner city neighborhoods are, too. So I want to start with you, Mr. Lucas, you have imagined the future in many creative ways for many years, and you are passionate about this subject, and I think you are a father and possibly grandfather yourself. What could you imagine our schools will be capable of doing in 10 years?

Mr. LUCAS. The advantages of the Internet in the school system is just—completely it is going to revolutionize our educational system, because it can get information in the schools much faster and much cheaper, and it gives access to the students to unlimited amounts of information and training and tutoring. The issue really comes down now which is to help the schools. I know that is not the part of this committee's worries, but the educational, part of the educational thing that has to happen here is the teachers need to be trained to use the technology, need to be trained to use the Internet. And that is a big facet of all of this, and it would be great if this committee and the education committee could work together to try to make sure that there are some kinds of programs put in place that if we do get broadband visibility in the schools that the teachers have the availability to learn how to use them. We have come a long way, and when I was here before, we had only 4 percent of the schools that were connected to the Internet, and now 94 percent is connected to the Internet. Except according to the Department of Commerce, out of 55 industries, education is dead last in its use of technology. Now, education is the one that is training the people to work in these 55 industries, and unless students know how to use the Internet, and how to use the computers, and how to use the technology, and have access to information, and know how to use that information, they are not going to be viable for the industries that are the future.

Ms. HARMAN. Well, thank you. Let me ask other witnesses as well. I really was asking about the creative possibilities for students, and I would just observe regardless of the jurisdiction of this committee, which is quite broad, shame on us as parents and grandparents if as members of Congress we don't do everything we can to make certain that every kid has the maximum opportunity to be creative and to be a constructive citizen of the world. Do others have comments on what the educational workplace could look like 10 years from now if we do our best not just with the E-Rate but with broadband deployment?

Ms. PATTERSON. I would like to make a comment if I could. I think that 10 years from now if broadband is ubiquitous to the schools and to the students at home, whether they are wirelessly connected or whether they are connected through wires, that you will find that the schoolplace is not just in the school. It is a school without walls and that they are learning at night and on weekends. And I think yesterday Educause made a statement about a very small percentage of time of students today are actually spent inside the schools learning, and it is important to realize that students train the teachers today. The teachers are not trained to be able to work with the broadband, and it takes 5 years for a teacher to be trained and to use that technology to be able to do the kind of learning that Mr. Lucas speaks about. But I think it is important to note just for everyone here that the adoption in our State, it does not matter whether you are Indian, whether you are Latino, whether you are Caucasian, or whether you are African American in our State, if you have a computer in your home, and predominantly you will if you have students in schools. And that 89 percent of them are connected to the Internet. The issue you need to be concerned about is the ability of the folks to pay for this at home to be able to get access to that broadband, because they are learning at home at night and using it for all library searches, et cetera.

Ms. HARMAN. Thank you, Mr. Chairman. My time has expired. I just would hope that 10 years from now there are a lot of little George Lucases running around who are as creative as you have been and have the tools in their schools, which I don't think you did, to dream big.

Thank you. I yield back.

Mr. MARKEY. The gentlelady's time has expired. The Chair now recognizes the gentlelady from Wyoming, Ms. Cubin.

Ms. CUBIN. Thank you, Mr. Chairman. As I sit here I fully appreciate the testimony from the panel, but I have to tell you that I am very, very worried about the future of the Universal Service Fund. Wyoming is the smallest populated State in the Union, and it covers about 100,000 square miles. And some of the small companies in Wyoming serve three people per square mile. And I just wonder, especially you Mr. May, if you have any concept of this kind of situation when you are talking about a market forced to deal with this. But we will get back to that in just a minute.

I want to give a few examples of what the Universal Service Fund has done in Wyoming. A small co-op in Wyoming has been able to offer fiber-to-the-home technology in Ten Sleep, Wyoming, and as a result of that there is a business that has been set up to teach English to people in South Korea. It employs 170 people.

Rural school districts—Ten Sleep, Wyoming, by the way, has a population of 304 people. Rural school districts in Dubois, Wyoming, a population of 983 people, and the Wind River Indian Reservation use the E-Rate program to ensure that students can connect to the University of Wyoming. These schools are located hundreds of miles away from the University. Cheyenne Medical Regional Center connects to drug treatment centers around the State, clinics around the State. And so those are wonderful things that the Universal Service Fund has done.

But let me tell you what losing the universal service would do. There is a school in a town has a total enrollment in this school from grades 1 to 12 of 20 kids. And there is a really bright, bright boy in this school. He is a junior in high school. If you live in Casper or Cheyenne, you can take calculus when you are a junior or senior, but this boy can't. And that happens all over the State of Wyoming all the time.

And our small providers are very willing to talk about any kind of solution to reforming the Universal Service Fund, but I have to speak frankly here. Many of these small businesses, and also I, see dark clouds on the horizon, because I am afraid that this reform of the inefficiencies is a veiled attempt to eliminate the Universal Service Fund. And I think that has to be dealt with right up front. And if people are committed to it, they need to be committed to it.

But you have to realize it is not just Wyoming where those situations exist. Every State in the Union has situations like some that I have described where there is absolutely no service. If you, a rancher and you need to get your cattle to market, you need service. If you work in the oil fields or the energy fields, you have to be able to get in touch with customers and train your employees. And it is just not possible without the Universal Service Fund.

So, Mr. May, you noted in your testimony that The Free State Foundation understands that government has a role to play in helping ensure communications services are available to everyone. I appreciate that. However, you go on to say that in terms of broadband deployment, market forces should be relied upon. That paradox that you laid out accurately describes the kind of dilemma that rural members like me face with regard to the USF. I am in general a believer in free markets, more so then most members of Congress, I can tell you that. But I can take you to places in my State where market principles simply do not meet our connectivity goals. How does the free market solve these problems, and how should the government respond to these kind of conditions?

Mr. MAY. Thank you, congresswoman. In my testimony, I am pretty sure what I said was that to the greatest extent possible that we should rely on market forces. And I believe that is important, because the market, free market, is bringing service to most places through new technologies that develop wireless, and there are even, there are satellite phones, and we can talk about those. But I went on to say beyond that, that I understand there are places, and Wyoming would be a good example, where if the market, the free market forces haven't provided service to everywhere, that there may be a need for government subsidies. And I understand that. And then the important thing is that when you get to that point, you need to do it in a way that is different from the way

that the current Universal Service Fund works, because I talked about the principle of targeting the distributions narrowly and funding it broadly. And the current system is totally at odds with those principles. It turns them on its head. So you can find a way to serve those pockets that need to be served, getting money to them but doing it in a much more focused way that is more efficient and less costly.

Mr. MARKEY. The gentlelady's time has expired.

Ms. CUBIN. Thank you, Mr. Chairman. I will submit further questions to the panel.

Mr. MARKEY. And we would ask in writing that that question be answered back to the committee. The Chair recognizes the gentleman from Illinois, Mr. Shimkus.

Mr. SHIMKUS. Thank you, Mr. Chairman. Thanks for the witnesses. Sorry that our schedule is such that we are coming and going and missing a lot of this. We appreciate you coming here.

This is for the whole panel one after another. Is it your perspective that broadband today is as important to all Americans as telephone connectivity in the 1930s, when the USF was established? Mr. May, would you start?

Mr. MAY. Yes, I think it is as important. Then the next question is what approaches do you take to make sure that it gets to as many Americans as possible on the least costly basis, because we all have to pay for these things, and that is the important question.

Mr. SHIMKUS. And that is correct, and of course, from our side we understand that there is no free lunch for anything. Someone is going to have to bear the cost. Mr. Ramsey.

Mr. RAMSEY. I would probably say, Mr. Congressman, that it is more important today. For example, you have a plethora of companies that will require that you apply for the job online. So if you don't have that kind of access, you are out of luck for employment. And there are many other examples like that with E-government and other things the way we are moving, so it is more crucial.

Mr. SHIMKUS. I think that is a good point. Mr. Lucas.

Mr. LUCAS. Yes, I agree that, especially in terms of education, broadband is really the backbone of the new educational system.

Mr. SHIMKUS. I have young kids, so it is amazing what they do on their research versus what we did grabbing the old encyclopedia.

Mr. LUCAS. There is a generational thing. It is hard to sit here and have this discussion when there is a generation sitting there right now using broadband, using the Internet, using all of these things, and it is an integral part of their life. I mean absolutely crucial part of their life.

Mr. SHIMKUS. Ms. Patterson.

Ms. PATTERSON. Yes, and I would say that you just underscore what I hope everyone in the, on the panel will take as central to what I am saying is that economic development of this country, the creation of wealth in rural communities and the distressed areas of urban areas, it is critical to that. And I think we should remember that. It is critical to the education, but you have to have the creation of wealth in our country, and it is critical to that.

Mr. SHIMKUS. And, Mr. Sullivan.

Mr. SULLIVAN. Well, let me say, Congressman, that of course we are concerned about the telephone issue with families of prisoners being able to communicate with their loved ones and vice versa, where prisoners can communicate with their children. There are only three ways that prisoners can communicate. That is through visiting, through letter writing, and through the telephone. And we have learned through the telephone the concern of course is security. And I think this is an area that maybe we would—the question came about the 10 years in the future—that we can begin to do this and hit the right note in regard to security where there would not be abuses. I think we could move in that direction. But, of course, what we are at now we are trying to do is, of course, the phone issue that I brought to the Committee's attention today.

Mr. SHIMKUS. Thank you. And I don't want to make—I have been a johnny one-note on energy now for a long time, and I don't want to turn this into an energy debate, Mr. Chairman, but with the escalating costs of gas and diesel fuel, especially in rural America, can't you make the argument that you have to deploy broadband? I mentioned in my opening statement about telemedicine activities and driving multiple hours to get to specialists versus being able today. Isn't that another critical piece for—in reality we open up OCS. We go to quota liquid. We do all this stuff. Demand is going up. Prices are not going to go down to the consumer any time soon, so we need to find new ways to get information to rural America. Is that a safe segue as far as the benefits of broadband?

Ms. PATTERSON. There are many studies, Mr. Shimkus, I am sorry, that show that telemedicine brings tremendous efficiencies into the healthcare system, and for individuals it means that they have a greater ability to get more quality care when they can interact directly with specialists from wherever they are. And they save the money from driving the car to get to the specialist, and they save the money from their company having to pay somebody else to take their place while they are driving to the specialist.

Mr. SHIMKUS. And we have with the veterans issue in going to VA hospital if they have retired in rural America and they have a VA hospital like John Cochran in Saint Louis or Marion in Marion, Illinois. Many are driving two hours to have access to that care that is owed them by the government because of their service. So those are important things, but I think broadband is a critical part of this whole debate. Mr. Chairman, I yield back.

Mr. MARKEY. I thank the gentleman, and as the gentleman knows I am an anyone-note on energy issues, taking the opposite position of the johnny one-note. But on this issue, you and I agree. This is a—even a blind squirrel anyway. And so we should work together on this.

The Chair recognizes now the gentleman from Oregon, Mr. Walden.

Mr. WALDEN. I want to follow up where my colleague from Illinois left off in terms of getting broadband out into the rural areas. As I mentioned, my district is about 70,000 square miles, and so if you want to talk about rural, we got it. And that is a big challenge. And, Ms. Patterson, you mentioned telemedicine. I visited a hospital out in John Day a few years ago that had just been able

to hook up into broadband, and precisely what you outlined is the case. A gentleman who used to have to commute to Bend, and it was several hours drive, and if the roads were snowy and icy, which they frequently are from about oh, October until about oh, October he didn't have to do that for whatever the procedure was. He could sit in the hospital there in John Day. They communicate over broadband with Saint Charles. And it would be a 20-minute visit in the hospital, but he would have to drive several hours each way to achieve that. And so it strikes me that when it comes to our healthcare, Mr. Lucas, when it comes to our education and, Mr. Ramsey, when it comes to reaching out into Native American tribes, it is all about getting this wire or wireless communication. And so I am curious, Mr. Ramsey, in terms of the work you are doing with the Umatilla and the Warm Springs, how much of this is an issue there is no wire to the house, versus other socio-economic issues? And can we trump all of that as Mr. Lucas has indicated by going wireless, which being an old radio broadcaster, we were sort of there before it was popular to do the wireless thing.

Mr. RAMSEY. Well, congressman, there is no question that wireless opens up a lot of possibilities, because you have always had the last mile issue. So when large rural areas, when you look at the promise of issues like WiMAX and what that might potentially do again, it opens up the opportunity to get people access. And we still have to make sure it is affordable. And then we still have to work on the application side of it so that we can make sure adoption occurs. In a lot of rural areas, one of the issues that comes up is the ability to age in place. And so technology gives you the ability to age in place, because it opens up opportunities. Intel is doing some amazing work around aging in place. You also have chronic disease management.

Mr. WALDEN. Right.

Mr. RAMSEY. And there are more opportunities being opened up by using that. So these are all crucial issues, urban and rural, but clearly greater opportunities to take advantage of this in rural areas.

Mr. WALDEN. Mr. Lucas, in terms of the wireless future, can we just sort of leapfrog from where we are with USF and do you think go into the wireless future that is broadband and get your phone and your Internet or not?

Mr. LUCAS. I work all over the world, and it is an interesting conundrum that in the United States in Wyoming we can't get wireless. But I work in the middle of Africa, in the middle of nowhere, and I can get wireless.

Mr. WALDEN. Right.

Mr. LUCAS. I can get it in Eastern Europe, I can get wireless. I can get wireless almost any place in the world except in the United States. So something is not working, and that is what is important.

Mr. WALDEN. And is that because we have the embedded cost structure with a wired system, and so you have sort of that cost everybody is trying to deal with where these other countries have leapfrogged to wireless? I woke up in the middle of the night, and I don't know, some show on about, is it the panacea where they are doing all of the with cell phones in India and elsewhere doing all their banking now, texting.

Mr. LUCAS. Well, in a lot of schools in Africa, they are using little cell phones to do their schoolwork. They are using them as computers. And they are getting their information.

Mr. WALDEN. From each other, no.

Mr. LUCAS. From the Internet.

Mr. WALDEN. Not during the test now.

Mr. LUCAS. The thing about wireless is that ultimately there is lots of technology and lots of ways of acquiring that. Then you break it up into a lot of different issues, which is what kind of unit do you have at the end of the system.

Mr. WALDEN. Right.

Mr. LUCAS. And you can have a wide range of those. Some that are extremely inexpensive and you can give away. And some of them which are more complicated that cost money. And you also have local Internet wireless, and you have satellite wireless. So there is—it is much easier then actually running a wire someplace, which is a guy on a pole, which is a lot of work.

Mr. WALDEN. Yes, and one of the places I mentioned earlier in Wheeler County is going to get its first cell service. The guy who used to run the electric co-op was on the board, told me that one person for every 9 miles of powerline. And so when you think about that and in terms of the telecommunications strategy, Ms. Patterson, you were sort of shaking your head about this leapfrog concept.

Ms. PATTERSON. I think that far be it for me to disagree with Mr. Lucas, but I do feel that from my past experience in technology that wireless is appropriate. All technologies are appropriate. Wireless is very possible to be in Africa in many different small spaces. But ultimately you have to have a fiber connection. You don't have today the capability of wireless to carry the same bandwidth that the fiber carries. Nor does it have the capability to survive a lot of the weather conditions that you have with wireless, so I think you are going to have all technologies. And I would hate for the panel to begin to think that it is just going to be totally wireless, because fiber plays a very important part in this.

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

Mr. WALDEN. Thank you.

Mr. MARKEY. Let me just note right now that Mr. Pickering, if no one else arrives, will be our final questioner. Then what I am going to do is ask each one of you to give us our final 1-minute summation that you want the subcommittee to remember as we go forward, and then we will adjourn the hearing. So the Chair recognizes the gentleman from Mississippi, Mr. Pickering.

Mr. PICKERING. Mr. Chairman, thank you, and I appreciate you having this very important hearing. I would like to put a few things in context. In 1934, our policy was universal and monopoly. In 1996, our policy changed to universal but competitive. Under the premise that there is only one thing worse then subsidizing, I mean there is only one thing worse then subsidizing competition, and that is subsidizing monopoly, that with competition you give choice in investment, innovation into all markets. And so what I am concerned, Mr. May, with reverse auctions, could reverse auctions take us back to subsidizing monopoly and simply locking in in a lot of markets, rural markets, one provider so that there is no choice in

rural America? What is your belief if we went to reverse auctions? What would be the outcome in those types of markets, would we have competition or not?

Mr. MAY. Well, I would only recommend, and I have recommended, that you do reverse auctions and that you provide subsidies in unserved areas. So we are talking about areas that are by definition presently unserved. I think the reverse auction is the way of identifying the least costly way to serve that area. It doesn't preclude others from coming in on top of the provider of last resort if they can provide a competitive service. And as part of the reverse auction mechanism, periodically over some period of time you rebid and so if you have a lower bidder. But keep in mind that you are talking about areas in which you are assuming that there is no one who has come in to provide service. That is the way I think of using it.

Mr. PICKERING. But then there is no place in the country where we don't have service, because remember we are universal. So every market there is someone who is being subsidized. Now, right now we are subsidizing competition, both the incumbent wireline, new interest in wireless and independent wireless, if they come into a market they can receive those subsidies. And so we have multiple providers receiving subsidies but, and this is where I think it would be a better policy. Instead of going to reverse auction where the incumbents or the large companies, AT&T or others, would simply be able to underbid and low bid to eliminate competition, I think it would be better and based on right now it is on identical support, which is on the least efficient technology, the wireline cost. Should we move to a transition where we allow competition to continue but is based on the most efficient technology or the lowest cost technology over time, and that would be primarily wireless, would that be a better type of reform? Going to a declining cost, most efficient technology, but maintaining competition?

Mr. MAY. The problem I have with the way you stated it, Mr. Pickering, is, and it is somewhat of the same mind when I was thinking about Mr. Lucas, I don't think it is useful or ultimately productive to identify, think that you can identify for policymakers in advance what the least cost technology over time will be. That is counter to the whole history of telecommunications.

Mr. PICKERING. Well, let me say this, Mr. May. I agree with you. It should be technology neutral, but I do think that it is fairly obvious that wireless is a more efficient technology. Now, I agree with Ms. Patterson that today wireless does not have the robustness, the reliability, the capacity as fiber. But we have just done the 700 auction, and we are about to see 4G wireless, broadband wireless and over the next 10 years, wireless will be as robust, reliable and have the broadband capabilities that today wireline has, but it will be lower cost. And it can reach into geographic areas in smaller markets more efficiently and at a lower cost. I think what our policy should be, Mr. Chairman, is to look over a 10 year transition. How do we incentivize broadband? How do we get to the least cost, which is probably wireless, and how do we maintain competition? I don't think that two providers, a duopoly or a monopoly, is what our government's policy should be, and we should try to find the

incentives to get us there in education, telemedicine, and in competition. Mr. Chairman, with that, I yield back.

Mr. MARKEY. Great, the gentleman yields back, and without objection I move to enter into the record the following, the testimony for this hearing by the National Tribal Telecommunications Association including their comments, in the FCC's ongoing proceeding, and a statement by Willard Nichols, President of the American Public Communications Council.

Now, we are going to recognize each of you for 1 minute. Tell us what you want us to know as we go forward looking at reforming the Universal Service Fund. What should our goals be? We will begin with you, Mr. May.

Mr. MAY. Thank you, Mr. Markey, and thanks for holding the hearing. I think it is very important to focus on the future of universal service, and I think this has been a useful discussion.

I think there is significant agreement that with respect to narrowband service, the original goals of universal service have been largely achieved, and that is why the focus has been on broadband today. I just want to reiterate that as we examine that issue, the basic principles that should guide us are really important.

Number one, market forces should be relied on to the greatest extent possible in order to avoid the cost that we incur when we provide subsidies. In places where market forces aren't going to provide service or haven't provided service, then subsidies may be appropriate. And in distributing those subsidies, it is important that they be targeted as narrowly as possible to achieve the objective. And it is important the financing system for those subsidies be as broad as possible. And I would say that actually the subsidies should be financed through the general treasury if this is an important national goal, the promotion of broadband. But those principles are in my view very important to keep in mind as you think about how to get broadband dispersed to the country as widely as we want it to be without market forces.

Mr. MARKEY. Thank you, Mr. May, very much. Mr. Ramsey.

Mr. RAMSEY. Mr. Chairman and committee, the key principle for me is that as we live in the 21st century, to reform the universal service to think not only in terms of supply but also demand. As I mentioned earlier, to not only look at the issue of access, but to make sure we are looking at affordability, as well as the applications, the adoption of that technology. And as we are thinking about education, to think about an expanded 21st century-learning environment that is both the school, the home, as well as the community. And one very specific issue is again to think about, as we expand opportunities potentially for digital technology in thinking about the home, let us think about low-income people who live in public housing in every community in this country. We could do something very targeted, very focused, much like how we focused on schools, we could do that in housing for the poorest of the poor and really bring digital opportunity to every single person.

Mr. MARKEY. I would like to work with you on that, Mr. Ramsey, as we are going forward. I think it is a very important problem. Mr. Lucas.

Mr. LUCAS. I think I want to move to Mississippi, because he seems to have the right idea about things.

But it is extremely important to bring wireless and broadband into the schools as well as the rest of our country. What we are arguing here is to invest in the printing press. Abraham Lincoln couldn't read his books by the fire if we didn't have the printing press in rural Illinois. And at the same time we are also thinking about financing federal roads so that people that are lost out in the wilderness, people who need to get their products from market to homes and that sort of thing, have a way of doing it. That is what this is. This is the transportation system of the future. This is the printing press of the future. And our schools won't be able to exist without it.

Mr. MARKEY. Thank you, Mr. Lucas, very much. Ms. Patterson.

Ms. PATTERSON. Well, I would like to say that Abraham Lincoln probably could not have won the Civil War without the telegraph, so I would point out that technology is very important. We need to have a national commitment to broadband and as House members should, in fact, I think, support that. Secondly, we should revamp the Universal Service Fund and move it towards broadband. Third, it should be a partnership between State, Federal, and local government. And fourth, we should invite everyone to participate. The private sector should lead if at all possible, but if not, we should really provide the subsidies to bring about universal broadband.

Mr. MARKEY. Thank you, Ms. Patterson. We will just wait 10 seconds. Yes, you are recognized, Mr. Sullivan.

Mr. SULLIVAN. Mr. Chairman, phone communication is the most important means of keeping people in prison together with their families and not recidivating. Our progress on reducing these high costs of these phone calls has been made in regard to intrastate calls but not in regard to interstate calls. I wanted to share with Mr. Terry, and maybe his staff is here, that Nebraska did a very good thing a few years ago. Because of the pro-family policy, they cut out the commissions that they were receiving from the phone company. Even though Florida has the best system right now, Nebraska is very close. And so it can be done. Passage of H.R. 555 by Congressman Bobby Rush of this committee would go a long way to reducing the high cost of these interstate phone calls. 555 is basically a resolution. It does not tie the hands of the FCC. It just encourages them to do something about the exorbitant rates that families are being charged to communicate with their loved ones.

Mr. MARKEY. Thank you, Mr. Sullivan, for your testimony. We thank each of you.

We can look back now at the 1996 Telecommunications Act and we can see that on the day that it passed, only 4 percent of schools had access to the Internet, and now 94 percent of schools have access. So that is a success. But as we analyze it today, we can see that there are problems with the rising of rural rates, that there are problems in the rural healthcare communications program, that there are 11 percent now fees on telephone calls. But at the same time, we can see this rapid pace of technological change as well, and we have to make sure that the poorest children are kept up to speed. You can't support NAFTA and GATT the way I did

speeding up the economy and not simultaneously speed up the rate at which the young people in our country gain access to the skill sets for these new jobs, or else we will be continually besieged by high tech firms begging us to have more H1B visas that we can bring people in from around the world who are being given these skills. As Mr. Lucas says, we put our own young people at a disadvantage if we don't give them access to those skill sets.

So in many respects what we did in 1996 seems like a galaxy far, far away in terms of these modern technologies. And it is our responsibility to focus not only on that but on the future and what we have to do while we are protecting ratepayers, making sure it is more efficient, but also making sure that we make our country a brighter, more prosperous place not just for the well-to-do but for everyone. We owe that to all of the young people in our country, and your testimony today helps us to focus upon that objective.

With that and the thanks of this committee, this hearing is adjourned.

[Whereupon, at 12:20 p.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

Testimony of the National Tribal Telecommunications Association before the House Committee on Energy and Commerce on Solutions to Telecommunications Regulatory & Market Barriers in Tribal Communities.

Honorable Members of the House Committee on Energy and Commerce, I am honored to present this testimony to you today on behalf of the National Tribal Telecommunications Association.

The National Tribal Telecommunications Association (NTTA) is comprised of tribes that have formed their own telecommunications companies to serve their tribal lands. Currently, out of the 563 Federally-recognized tribes of the United States, only eight own and operate full-service telecommunications companies that provide our people with 21st Century service. Therefore, we eight tribes are the only entities in the country with direct and specific knowledge of the market and regulatory barriers confronting tribal access to communications services.

Mr. Chairman, the last time the Communications Act was reviewed was 12 years ago. Because Congress may not review the Communications Act again for another 15 years, today we are compelled to ask Congress to confront and address why tribal communities are the worst served and least connected communities in America. The Census Bureau reports a telephone penetration rate on tribal lands of 67 percent, compared to the national average rate of 97 percent. It is clear that this disparity can no longer be ignored.

Failure to address the needs of our Nation's first communities would spell disaster for the future of our first peoples. To wait another 12 years before tackling the needs of tribal communities would condemn the children, seniors and Native American families to yet another generation of poverty and hopelessness. I implore you to give the 555 tribes of America, who have not had the opportunity to launch its own telecommunications service, a choice of options and a real opportunity to be connected to mainstream America.

Mr. Chairman, the Communications Act has failed our tribal communities. As many in both chambers applaud the progress made in the 1996 re-write of the Communications Act, we note that only two tribes in those 12 years have been able to start their own tribal telecommunications companies.

Why is it important to encourage and support tribal options to provide telecommunications service to their own communities? In 1990, six of these eight tribal communities had less than 10 percent telecommunications service penetration (a seventh community, the Cheyenne River Sioux community, began their service in the 1950's). Yet today, seven communities—the eighth, the Hopi community only started their service last July—have increased their service penetration rate to tribal residents by at least 600 percent! In two of these communities, service penetration level to families on the reservation is over 98 percent, representing a 900 percent increase from the 1990 levels.

The GAO report on tribal access to telecommunications service points to the challenge of extreme geographic conditions and distances, population distribution, and poor

economic conditions of tribal communities. This is indeed the challenge in Indian country. While many argue over service penetration rates in Indian communities, GAO asks for more comprehensive data, there is no disagreement that tribal communities are the very last communities to receive equitable service and universal access to telecommunications service promised by the Communications Act of 1934. Fewer than 10 percent, some say less than 5 percent, of tribal residents have access to broadband.

Today, we would like to bring solutions to the Commerce Committee. NTTA urges the Committee to apply out-of-the-box thinking, common sense and pragmatic solutions to telecommunications isolation of Indian communities. NTTA strongly believes that if these proposed solutions were given a chance, tribal rural communities might enjoy parity of service and options enjoyed by urban and non-tribal communities.

The National Tribal Telecommunications Association submitted comments on the Federal Communications Commission's proposed Universal Service rules on April 17, 2008—see attachment. In these comments, NTTA highlighted the continuing telecommunications gap between middle-America and Tribal America. Insofar as the FCC proposed rule changes aimed at cost efficiencies and more stringent management of the Universal Service Fund, NTTA pointed out the unique impact some of the rule changes might have on tribal communities—where the job of connecting communities and families are far from being done. NTTA generally asked the FCC to prioritize targeting of limited resources on communities that are "unserved."

In the NPRM comments, NTTA urged embracement of two fundamental policy tenets for Tribes, reflecting both need and urgency. NTTA called for adoption of a voice dial tone safety net for Indian America and empowerment options for historically unserved communities.

Voice Dial tone Safety Net

NTTA calls for a safety net policy to ensure that every tribal member have dial tone access to call for emergency service, to connect with work or to connect with families. The voice dial tone safety net mandate is technology neutral and urges a floor, not a platform or capacity ceiling, to ensure that all tribal members are connected to mainstream America. The policy solutions proposed below would provide market incentive to connect tribal communities where current market forces are not able to effect change.

Empowerment Options for Unserved Communities

Tribal communities are the historic victims of underservice. In tribal communities incumbent service providers have not connected the "last mile" families in their service area. Regulatory policy debate typically revolves around 2 parties, the regulators and the providers. The third party to this equation, the consumer, has no leverage to effect change, demand quality of service, or attain parity of rates or options. NTTA urges the adoption of a bold new concept to give the victim of historic underservice, the tribal community, the option of choosing the provider that will connect their entire community—by using the service area Universal Service Funds. By giving victims of underservice the leverage of choosing their high-cost loop support service provider, Tribes can leverage connectivity for their communities. This empowerment of

the consumer not only solves a market barrier, but further strengthens the sovereignty of Indian Tribes. (see full discussion in Part IV, page 9.)

Policy Proposals:

I. Clarify Federal Telecommunications Role in Tribal Communities:

A. Acknowledge and implement the Federal government's responsibility to Tribal communities in the Communications Act.

Issue: Tribal communities are the last communities to be served. The Federal Communications Commission has an obligation to connect "unserved" areas under both the Communications Act and under the FCC's Tribal Trust Policy, adopted in 2000. Tribes are not aware what rights they have or what obligations the Commission and the states have regarding telecommunications connectivity for tribes. Among the traditional sovereignty concerns is the issue of who regulates tribal regulatory services and how Tribes can consult with the FCC or regulators regarding service to their communities.

Proposal: Amend the Communications Act to specify inclusion of Indian nations in the Act's coverage, specify the United State's trust responsibility to Indian nations in the Act, to clarify which entity has the obligation to promote parity of connectivity to tribal communities. This ensures that universal service obligations extend to tribal communities. Because of historic underservice, the federal government should prioritize funding, incentives, resources and enforcement authority to bring universal service to tribal communities. Among the clarifications should be the option for a tribe to choose the regulatory jurisdiction for Eligible Telecommunications Carrier status for a tribal carrier. See Section 214(e) (6). (Also see later proposals under "consumer's provisions" about giving tribes a choice of providers.)

Discussion: If the Federal trust responsibility to tribes were statutorily clarified and fully implemented, tribes may be able to attain parity of telecommunications service with mainstream America.

B. Use every means to meet the Communications Act's public interest mandate to connect all communities, particularly those in "unserved areas"

Issue: The Federal government needs to deliver on the Communications Act mandate to provide universal service to all communities. Up to 30% -40% of tribal communities do not have voice dial tone and up to 95% of tribal communities do not have broadband service, essential for participation in the mainstream economy.

Proposal: Amend the Act to define "unserved areas" as a rate 15% below nationwide service penetration average for that service in a service area, to prioritize service support and service incentive.

Also: Amend the Act to authorize the Commission to issue certificates of convenience for tribal service areas that match the boundaries of federal tribes in "unserved areas."

Discussion: Tribal communities are the most underserved among all American communities. The proposed changes provide a trigger for Federal action and a priority for funding and assistance.

The FCC must use every means to meet the mandate of providing universal service to all American communities. By clarifying what the term "unserved areas" mean, Congress compels affirmative effort to meet the Act's requirement to serve the "public interest" requirement to provide service in "unserved areas." "Public interest" obligations should oblige the FCC to employ wide-sweeping incentives and enforcement means to connect communities in "unserved areas."

By mandating the Commission to issue new certificates of convenience for tribal communities (in "unserved areas"), the Commission would be encouraging carriers to compete for tribal service areas that are not "connected" or that are "unserved" to fully connect the tribal community. By definition, a carrier serving an "unserved area" would not be usurping an incumbent service area, particularly as the carrier has not deployed infrastructure to all parts of that regulatory service area.

C. Provide Federal Resources to Support Tribal Communications Planning & Technology Assessment Efforts

Issue: Most tribes do not have sufficient information or resources to be able to decide and plan for their telecommunications future. GAO recommends more Federal resources be directed to help tribes develop communications infrastructure to meet their communities' needs.

Proposal: Using all federal funding, resource and enforcement authorities, help tribal communities to plan and assess tribal telecommunications infrastructure options and learn how to provision their telecommunications needs.

Discussion: Tribes need resources to learn and plan how telecommunications infrastructure can help a tribe meet their community's needs and obligations, including tribal services, economic development and educational services. Understanding how the needs of a community can be met using the right telecommunications service is a complex process, requiring technical knowledge and planning. Many tribes cannot afford crucial planning, feasibility and educational activities.

II. Remove Regulatory Barriers to Tribal Efforts to Manage and Own Their Own Communications Solutions.

A. Remove a crucial universal service barrier to tribes starting their own telecommunications service to permit tribes to receive the same high cost support that legacy independent carriers enjoy (The Parent Trap).

Issue: Tribes purchasing facilities from large (price-capped) incumbent carriers to serve their communities are not eligible to receive high cost universal service support.

Proposal: Amend the Act to waive current regulatory provisions that bar smaller telecommunications companies from receiving high cost universal service support by allowing tribal governments to avoid grand-fathering into the large incumbent's universal service status (excluding larger incumbent LECs from receiving high cost loop support) when a tribe purchases the service territory of larger incumbent carriers and RBOC sellers--and also to permit tribes to automatically qualify for a separate tribal service area after purchasing their own tribal service territory.

Discussion: The high cost loop support of the Universal Service Fund is the most crucial revenue source enabling telecommunications carriers in rural markets to sustain and expand their operations. Small companies, after a May 1997 FCC rule change, now inherit the same regulatory status as sellers that are price-capped carriers, thereby depriving rural and tribal startup companies from receiving the high cost loop support that comprise the most crucial revenue source. Receiving high-cost loop support can make a four-fold difference in the revenues of a small independent carrier. Current rules permit some expansion construction costs to be recaptured, but does not provide the same revenue support that rural providers operational before May 1997 enjoy. This fix—access to necessary high cost loop support that legacy companies receive--will enable tribes to serve themselves as a tribal enterprise. Not fixing this provision makes it impossible for tribes to operate their own services.

B. Preserve the Universal Service Fund and Eliminate Inefficient use of the Fund:

Issue: To ensure that the universal service funds are used to target "unserved areas" and remain viable as the key source of rural telecommunications service, federal government needs to be smart and more efficient about how the universal service fund is used and link connectivity as required outcomes for recipients.

Proposal: Amend the Act to increase scrutiny of how the Fund is being used, ensure parity of requirements and contributions, and eliminate waste in the Fund.

A) Require contribution into the Fund by all who connect with the Public Switched Telecommunications Network (PSTN) system or provide communications services.
B) Permit fund support only to service providers that contribute to the USF
C) Require all carriers receive USF support based on their actual costs to provide services;
D) Hold all carriers, regardless of technology, to the same requirements of responsibility and standards of reliability, as well as connectivity measures for assessing performance.
E) Target and prioritize "unserved areas" for connectivity: Support services and providers that deliver actual connectivity outcomes in tribal "unserved areas";
F) Make every effort to avoid overlap of universal service funding by eliminating funding to carriers trying to serve the same customers, service population areas or serving customers already connected by a USF provider and discourage bypassing unconnected residential areas;
G) Any policy that prioritizes or assesses service efficiency as a criteria for allocating universal service support must be technology-neutral, look beyond underlying technology cost to actual gains in connectivity or outcomes in connectivity to "unserved areas", as well as to reliability of service delivery to rural customers; and,

H) Measure and assess what Universal Service funds comprising profits are re-invested in service areas, particularly in "unserved areas."

Discussion: The Universal Service Fund is the primary source of revenues enabling rural exchange carriers to serve high-cost rural markets. The goal of reaching "unserved areas" in rural communities has not been achieved. Yet demands on the fund are increasing. We need to ensure that all providers that receive support from the Fund pay equitably into it. Further, any disparity of requirements, expectations or outcomes between differing technologies and providers should be eliminated. We need to re-affirm the principle that scarce universal service funds should be targeted (prioritized) for "unserved areas" of the country. ETCs should not be permitted to receive funds to serve customers already connected by another provider, or be rewarded for bypassing families and areas in more difficult or "unserved" areas. Those receiving Universal Service funding or government credit in "unserved areas" must show actual and increased connectivity to continue to receive USF support or Federal benefits. As for efficiency, consider not the costs for deploying service and infrastructure, but "outcomes" for connecting previously "unserved" areas—tribal telecos have increased connectivity in their communities, in extreme high-cost areas, by up to 900 percent, and, by providing broadband access to 98% of their community where there was 0% broadband access prior to tribal service. This assessment of outcomes and "connectivity" is more relevant to measurement of "efficiency."

III. Federal Spectrum Regulatory Barriers to Tribal Broadband Service.

A. <u>In the most remote market and "unserved" areas, use radio spectrum to provide "unfunded" and unlicensed capacity to deliver voice dial tone and broadband service.</u>

Issue: Lack of funding, lack of commercial return on investment, and lack of capacity or medium limits the delivery of voice dial tone and broadband service to remote and tribal communities.

Proposal: use unlicensed spectrum to promote broadband capacity and voice dial tone access to remote and tribal communities.

Discussion: Tribal communities are the last communities to be connected for geographic, investment cost, consumer financial capacity, population density and technology reasons. Radio spectrum is the promise of all future infrastructure services and is the only regulatory medium that is entirely controlled by the federal government, not the states or municipalities. Yet radio spectrum is the least accessible medium—by regulatory and congressional limitation—for telecommunications use. An unlicensed spectrum set-aside, whether using white space or prospective license allocation, for tribal communities (and rural communities) can bring broadband and voice dial tone connectivity to rural and tribal communities without a single Congressional appropriation or governmental intervention into technology protocols. Borrowing on the Internet model, unlicensed and non-proprietary spectrum set-aside for tribal communities can bring capacity and open solutions to remote rural areas in a hurry.

Proprietary ownership of public spectrum is inefficient use of scare public resources. Moreover, if spectrum over tribal rural communities continues to be sold to private high-bidders, tribes will remain unconnected to the outside world and few tribes would be able

to own spectrum licenses or use spectrum to meet their own needs. By keeping spectrum public for universal access by tribal communities, tribes can strengthen the stewardship of public resources while paving the way for innovative use and free-market solutions for their communities. Reserving public spectrum on tribal lands will also enhance the deployment of homeland security and public safety networks.

Finally, a key roadblock to the use of unlicensed spectrum for broadband use in rural America is the reliance on spectrum licensing auctions for revenues. At a time when many policy leaders have called for broadband reach to all of rural America, it is important to weigh the balance of what loss there may be from auctions revenue for spectrum in extreme and rural tribal areas compared to appropriating federal funding for rural broadband deployment. Tribal communities only number 2 million members for all of America. The loss of revenue for tribal service areas re-sized down from normal service delivery areas would be negligible considering most wireless providers would not deploy services to sparsely populated tribal areas—in contrast to governmental cost of having to fund broadband deployment to tribal and rural communities.

B. Wireless service deployment is a private deep-pockets investors' arena versus wireline service deployment, which was regarded as a public need and a public service.

Issue: Wireline service deployment (and ownership) was publicly funded while wireless service deployment and ownership is privately funded. The result: public property—the radio spectrum—is not being used efficiently to meet public needs: the lack of broadband and connectivity in rural areas.

The current success of rural universal access to communications services has been the direct result of public financing for infrastructure purchase, development and service provision provided by the Department of Agriculture's Rural Utility Service. RUS loans are the primary catalyst to the proliferation of rural local telecommunications services. Yet in the wireless arena, there is no parallel public financing for spectrum purchase and service deployment. The result: no public ownership, no public access to radio spectrum, and a crying need for rural broadband and rural voice dial tone connectivity.

Proposal: Amend the Communications Act to for either unlicensed spectrum use by tribal communities and "unserved areas", or encourage federal assistance for license purchase in spectrum auctions and for service build-out by Tribal governments.

Reason: Spectrum is the gateway for many future telecommunications services and for innovative use of technology. RUS is a public financing source for purchase of wire-line facilities and service territories. However, there is no similar public financing for the purchase of wireless spectrum in auctions. As long as the Federal government continues to sell off public radio spectrum to private investors, only deep-pocketed companies will garner spectrum that becomes scarcer and more valuable each year. To compound spectrum scarcity, license winners hold their licenses in perpetuity, paying only minimum renewal fees. NTTA feels that tribal communities, with their lack of connectivity in predominantly "unserved areas", lack ownership options to use spectrum connectivity to meet their communities' needs. Without public loan sources, few poor rural communities can afford spectrum license purchases to provide wireless service to their own communities.

C. Modify the *Tribal Bidding Credit rules* of the FCC to avoid unjust enrichment and give tribes a true opportunity to use spectrum to help tribal communities.

Issue: The FCC's Tribal Bidding Credit program has not benefited tribes by any of the following criteria: A) increasing tribal license ownership; B) connecting tribal "unserved areas"; C) fostering tribal business or economic development; D) giving tribes greater control or management of spectrum on Indian lands; E) fostering innovative use of spectrum to meet the tribal community's needs (witness the absence of wireless broadband on reservations.); or F) lowering the cost of tribal communications services.

Proposal: Amend the Communications Act to alter the FCC's Tribal Bidding Credit regulations to require the following outcomes: A) increased Tribal license ownership; B) increased actual connectivity in tribal "unserved areas"; C) increased tribal business or economic development; D) increased tribal control or management of spectrum on the Indian reservation; E) increased access to or use of spectrum by tribes to meet tribal needs—particularly the deployment of wireless broadband in the community; and F) lowered cost for tribal communications services.

Discussion: The Tribal Bidding Credit was created by the FCC to address the lack of telecommunications connectivity and advanced services on Indian lands. Yet none of the program's provisions, with the exception of requiring tribal certification for facilities siting on tribal lands, has benefited tribal communities. Benefit to tribes can only be assessed using the six criteria discussed above: 1) by increased ownership of spectrum licenses; 2) by increased connectivity to tribal "unserved areas"; 3) by increased tribal business or economic development; 4) by increased tribal control or management of spectrum; 5) by increased use of spectrum to meet tribal needs—as in wireless Broadband; or 6) by lowered communications costs to tribal residents. By these criteria, the Tribal Bidding Credit program fails Indian tribes. In fact, this program is ripe for unjust enrichment by wireless auctions winners**, that may lead to windfall rebates to wireless providers, deprive Tribal community of scarce spectrum, and deny revenue to the treasury.

**We have seen an example of a $3 million discount given to a wireless provider in 2003 for a $12 million national license for the offer to extend service to a single tribal community. This discount of $3 million was attained at a time when the program's cap on discount was 25%, now the program permits a 30% discount on the purchase price that *can be further discounted upon approval by the FCC.* In return the provider merely has to assure a service reach to 75% of the tribal population—not actual connectivity.

D. Create Tribal wireless service delivery areas to increase ownership opportunities and to improve service to tribal communities

Issue: Current FCC auctions procedures deploy licensing areas that overlap or cross tribal reservations. For tribal communities, having different service providers for different regions of a reservation means less consistent and efficient service to the community. Also, having tribal territories being subsumed and mixed into larger service areas relegates tribal communities to the being last market targeted for service build-out.

Proposal: Amend the Act to recognize tribal trust responsibility and require special responsibility be taken to ensure tribal communities are connected, particularly tribes in "unserved areas"--by designating tribal service delivery areas to match the boundaries of the tribe.

Discussion: By providing a mechanism to invoke a tribal service area designation, Congress enhances tribal sovereignty by giving tribal nations a better chance of attaining a better quality of service by a focused and uniform communications service provider. This Tribal choice of a tribal service area may increase a tribe's opportunity to participate in a spectrum auction or and encouraging a non-tribal licensee to focus a service plan that more directly meets the needs of the entire tribal community.

E. Use Spectrum Licensing to drive universal access to communications service by predicating service buildout requirements on actual connectivity of tribal residents and families.

Issue: Wireless ETC providers are not held to a requirement to connect customers in "unserved areas", nor is there a "service" definition or requirement for participation to connect unserved areas or customers to the public network system. Instead build-out requirements for regular licenses and to receive for Tribal Bidding Credit is only predicated on turning on a transmission signal that reaches a percentage of the service population. High cost loop support is not tied to the requirement to reach "unserved areas" but credits those—using incumbent cost proxies—serving customers that are largely already connected to landlines.

Proposal: Require wireless providers to abide by the Communications Act mandate to serve all communities by requiring actual service connectivity to customers in a tribal community, particularly those in "unserved areas", in order to retain their territorial licenses, to receive Universal Service funds, or Federal credits.

Discussion: Wireless providers, with proprietary control of scarce and valuable spectrum have an obligation, in return for exclusive possession of highly profitable medium, to meet the Communications Act requirement of providing universal service to all American communities—at reasonable rates and with comparable quality of service as urban areas. Spectrum services will pave the way for Broadband in rural and tribal communities. Not requiring actual connectivity in exchange for exclusive rights to spectrum or for Federal funding support or credit rebates where there are "unserved areas" is a waste of scare public resources and revenues, as well as a violation of the universal service requirements of the Communications Act.

IV. Empower Tribal Governments and Consumers with Carrier Choice, Using Universal Service Funding as Market Incentive.

Issue: Continued lack of service to tribal communities comprises a violation of the Communications Act's "public interest" mandate to provide parity of service or connectivity with urban areas.

Proposal: Amend the Communications Act to:

1) give tribes in "unserved areas", a territorial high-cost funding certification to use to invite competition or use in a reverse auction to bring alternative carriers in to serve the tribal community; and

2) develop a public mechanism to enable a tribal government, tribal resident, or any public entity acting on behalf of a tribal government or tribal resident to: A) challenge the performance of eligible telecommunications carriers (ETC) serving the tribal area with the FCC; B) upon a finding of failure by the carrier to meet the carrier-of-last resort obligations, or on finding of discrimination, cause the carrier to lose its ETC status for the tribal community; C) permit the community to choose an alternative ETC provider to serve the tribal community; and 4) cause the FCC to certify an alternative carrier (which could include the Tribe serving itself) to receive high cost support funding to serve the tribal community.

Discussion: In rural areas, universal service funding is the essential revenue source for rural telecommunications carriers to operate a business. In return for serving companies receiving universal service funding, Federal regulatory credits, benefits or rebates, which give them an important advantage over other providers, they should be held accountable for connecting tribal communities, particularly those in "unserved areas." Failure by the carrier to meet the Communications Act's mandates to serve an "unserved area" or, if proven that a provider has discriminated against a community in an "unserved area", the carrier should lose support funding—or regulatory benefit--for that service area. The Tribe should then be able to choose how to attain alternative service for the tribal community. In accordance with current rules, new providers should enjoy the same level of support as providers in other high-cost areas receive.

Conclusion:

Mr. Chairman, Congress must take action now to address the plight of tribal communities as the last and least-served communities in America. A 67 percent penetration rate to an American community in 2008 is patent neglect of Federal responsibility and an abrogation of the universal service principles of the Communications Act. Congress must do all it can to connect tribal communities

Congress has an opportunity in these deliberations to do what is needed to help tribal communities to gain parity of service and rekindle their hope for the future. Failure to take immediate action on behalf of tribal communities will condemn tribes to continued isolation and commercial deprivation.

The National Tribal Telecommunications Association today presents positive solutions that will make a difference for tribal communities—but only if they are embraced and implemented. Many of these innovative ideas require Congress and the FCC to change their view of tribal communities and to alter "business as usual" practices in government. We ask for your help to open up the mind and heart of Federal government and call on Congress to fulfill the vision of a fair and just America envisioned in the Communications Act of 1934. Tribal communities ask for nothing more than to be part of the evolving future of America and to be part of the global community.

Thank you for the opportunity to bring these important ideas and opportunities before you.

Derek White
Chairman
National Tribal Telecommunications Association (NTTA)

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Federal-State Joint Board on Universal Service	)	CC Docket 96-45
	)	

Comments of the National Tribal Telecommunications Association

I. Introduction

The National Tribal Telecommunications Association ("NTTA") hereby submits these comments in response to the Notices of Proposed Rulemaking ("NPRMs") captioned above. NTTA is a national trade association representing tribally owned telecommunications companies and their customers. NTTA members serve and are a part of their respective tribal communities. These comments address the concerns of NTTA.

Within three NPRMs, the Commission outlines broad potential reforms to the federal universal service support fund ("FUSF"). As both Eligible Telecommunications Carriers ("ETCs") and Providers of Last Resort ("POLRs"), NTTA members understand the economic and political pressures currently building on the FUSF and applaud the Commission's intent to relieve these pressures. However, NTTA urges the Commission to ensure that the original goals of universal service policy are fulfilled for *all* areas of the country prior to pursuing additional goals. Further, the Commission needs recommit itself to its policy of a government-to-government relationship with tribal governments and ensure that tribal governments have equal opportunities to those available to any other governing authority. Specifically, NTTA proposes 1) the Commission adopt a definition of unserved areas; 2) recognize the authority of tribal governments regarding the use of FUSF funds on tribal lands; and 3) designate tribal lands as separate study areas.

II. Federal universal service policy has failed tribal land residents.

Seventy-four years after the federal government promised "to make available, so far as possible, to *all people of the United States*, ...a rapid, efficient, Nation-wide...wire and radio communications service with adequate facilities and reasonable charges,"[1] communications services on tribal lands lag far behind that of the rest of the county. According to the 2000 decennial census, the telephone subscribership rate of Native American households on tribal lands was 68.6 percent.[2] The national penetration rate for the same year was 97.6 percent. The 29 point gap between an average American community and an average community located on a federal reservation is more than startling; it is shameful. This failure only increases when considering advanced information and wireless voice services. Specifically, the General Accountability Office ("GAO") recently reported to Congress that '[t]he status of Internet subscribership on tribal lands is *unknown* because no federal survey has been designed to track this information."[3] In contrast, as of December 2006, the Commission reported that more than fifty percent of U.S. households subscribed to broadband-speed Internet services.[4] In 2006, the Commission reported 217 million wireless voice lines in 2006. However, as NTTA recently noted in comments filed with the Commission, there is very little, if any, reliable data regarding provisioning of wireless services on tribal lands.[5]

The Commission's response to this failure to adhere to the mandate of the Communications Act has been mixed at best. In 2000, the Commission pledged that it would, in cooperation with tribal governments, "address communications problems, such as low penetration rates and poor quality services on reservations, and other problems of mutual

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[1] 47 U.S.C. 151 (emphasis added).
[2] *Challenges to Assessing and Improving Telecommunications for Native Americans on Tribal Lands*, United States Government Accountability Office, Report to Congressional Requesters, Telecommunications, January 2006, GAO-06-189, p. 11 ("GAO Report"). Many tribal leaders dispute the data gathered by the Census Bureau as being inaccurate.
[3] GAO Report, p. 15 (emphasis added).
[4] *Matter of High-Cost Universal Service Support, Federal-State Joint Board on Universal Service*, Recommended Decision, FCC 07J-4, WC Docket No. 05-337, CC Docket No. 96-45 (rel. Nov. 20, 2007), para. 59 ("Joint Board Recommended Decision").
[5] *Matter of Implementation of Section 6002(b) of The Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Services*, Comments of the National Tribal Telecommunications Association, WT Docket No. 08-27, WT Docket No. 07-71 (filed Mar. 26, 2008).

concern."[6] It specifically set a goal to "work with Indian Tribes on a *government-to-government* basis consistent with the principles of Tribal self-governance to ensure, through its regulations and policy initiatives, and consistent with Section 1 of the Communications Act of 1934, that Indian Tribes have adequate access to communications services."[7] However, the Commission has implemented very little direct action focused on bridging the large divide between tribal areas and the rest of the country.

There are eight bright spots in what is an otherwise bleak picture of telecommunications in tribal land areas. Eight tribes, out of the 563 tribes within the United States, have met the goal of owning their own telecommunications company, a Commission-recognized *sovereign* right.[8] These eight carriers range from Cheyenne River Sioux Tribe Telephone Authority celebrating its fiftieth year of service to the Cheyenne River Sioux Tribe, to the newly-founded Hopi Telecommunications, Inc. which received its ETC designation in 2006 to serve the Hopi Tribe. The other six carriers are: Fort Mojave Telecommunications, Inc. serving the Fort Mojave Indian Tribe of Arizona, California and Nevada; Gila River Telecommunications, Inc. serving the Gila River Indian Community; Mescalero Apache Telecom, Inc. serving the Mescalero Apache Tribe; Saddleback Communications, Inc. serving the Salt River Pima -Maricopa Indian Community; San Carlos Apache Telecommunications Utility, Inc. serving the San Carlos Apache Tribe; and Tohono O'odham Utility Authority serving the Tohono O'odham Nation. All serve exclusively on their own lands, as designated by the federal government. By significantly increasing consumer access to an advanced communications network, these unique carriers demonstrate that universal service can be brought to all citizens of the country.

While all eight tribally-own carriers have dramatically improved telecommunication services to their respective communities, Mescalero Apache Telecom, Inc. ("MATI") example is particularly striking regarding how, through tribal direction and focus, universal service can be achieved in unserved areas at an astounding pace. In 1990, the Mescalero Apache Reservation had a telephone penetration rate of under ten percent. The tribal lands were part of a much

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[6] *Matter of Statement of Policy on Establishing a Government-to-Government Relationship with Indian Tribes*, Policy Statement, FCC 00-207 (rel. June 23, 2000) p. 4 ("FCC Policy Statement").
[7] FCC Policy Statement, p. 4 (emphasis added).

larger serving area of a non-tribally owned carrier. MATI had its tribal lands established as its study area by the Commission in 2001.[9] By 2007, only six years later, MATI had increased the telephone penetration rate within its study area to *ninety-eight percent.*

Throughout the three NPRMs at issue here, as well as in the universal service docket, the Commission has implied that the goal of universal voice service, first set by Congress in 1934 and later affirmed in 1996, has been achieved. However, as the evidence proves the policy of universal service, as currently implemented by the Commission, has utterly failed in Indian Country. While thirty percent of the residents of tribal lands wait for simple dial tone, the Commission is preparing to provide broadband and mobile services to those who already enjoy universal service. The current situation is unacceptable and the Commission must take all necessary steps to ensure that the promise of universal service is finally achieved in *all* areas of the country.

III. Immediate action must be taken.

As noted above, federal universal service policy appears to be speeding toward providing advanced services to parts of the country that already have ubiquitous voice service. However, *prior* to spending scarce federal funds on those who have the most, the Commission should first look to serving the least served, indeed, the unserved communities in America.

A. The Commission should define "Unserved Area."

The Commission should first define the term "unserved area." While this term is often used in the universal service reform debate, it has no statutory or regulatory definition. Therefore, while much lip service is paid to bringing communication services to all areas of the country, little action results and some areas continue to be left far behind. NTTA proposes that the Commission immediately adopt a definition of "unserved area" as an area where the penetration rate for a communication service, including basic and advanced services, is fifteen

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[8] *Matter of Federal-State Joint Board on Universal Service*, Report and Order, FCC 05-46, CC Docket No. 96-45 (rel. March 17, 2005), para. 66 (emphasis added).

[9] *Matter of Mescalero Apache Telcom, Inc., GTE Southwest, Inc. and Valor Telecommunications of New Mexico, LLC, Joint Petition for Waiver of Definition of Study Area Contained in Part 36, Appendix-Glossary of the Commission's Rules, Mescalero Apache Telcom, Inc. Waiver of Sections 61.41(c)(2), 69.3(e)(11), 36.611, and 36.612 of the Commission's Rules,* Order, 16 FCC Rcd 3813, 3816 (2001).

percent below the nationwide average for that service. Further, in order to accurately measure the progress of universal service policy in the unserved areas of the country, the Commission should issue an annual report regarding unserved areas and the progress made, or lack thereof, toward universal service.

B. The Communications Act and the federal trust responsibility to tribes require the adoption of a voice dial-tone safety net for tribal communities.

Tribal communities are the worst-served communities in America. Therefore, the Commission must make every possible effort to address the needs of tribal areas. Due to the lack of adequate service in tribal communities, a greater effort partnering with tribal governments is required to solve market and economic barriers to telecommunications access. Sovereignty of tribes must also be accorded in this regulatory policy process. The Commission has given nodding recognition to this imperative with its trust policy guidance to consult "with Tribal governments *prior to implementing any regulatory action or policy* that will significantly or uniquely affect Tribal governments, their land and resources."[10] However, very little direct action has been taken to implement this consultative process. Seven Indian Telecom Initiative forums have been held to deliver information to tribes. However, those meetings generally have not been conducive to listening to tribal proposed solutions or to working with tribes to create solutions improve access to telecommunications. Further, two of these meetings focused on broadcast issues and one on homeland security efforts.

Twelve years after the passage of the 1996 Telecommunications Act (the "Act"), a law intended to enhance telecommunications access for American communities, only two Indian Tribes have become their own service providers, the Mescalero Apache Tribe and the Hopi Tribe. This represents a self-provisioning gain of one tribal enterprise every six years since passage of the Act. While becoming a tribal telecommunications provider is not the sole venue to increase service penetration in isolated rural communities, the seven self-provisioning tribes[11] have shown a profound achievement rate of improving connectivity for previously unconnected

[10] FCC Policy Statement, p. 4 (emphasis added).
[11] Hopi Telecommunications, Inc. began providing service in July 2007.

customers. As noted *infra,* several of these communities have made 980 percent gains in improving connectivity for their native communities.

Due to the severe disparity of voice dial-tone access in tribal communities as compared with the national average, the Commission must apply innovative solutions to deal with the analog and digital divide in Indian America. The Commission should declare a Voice Dial-tone Safety Net that would re-align its decisions on the requirements of ETCs to meet the needs of unserved tribal areas. This proposal would also give the victims of underservice a stronger participation in and use of mechanisms to drive service outcomes. Tribes that are in unserved areas should be able to, after a requisite determination that an ETC has not met the connectivity needs and outcomes in a service area, designate the new ETC to serve their land. This authority both recognizes and promotes tribal sovereignty and is in keeping with Commission proposal to auction universal service funding for service areas.

Through the tribal dial-tone safety net proposal, 555 tribal nations will finally have the parity of service as non-Indian communities. In unserved tribal communities, the Commission should mandate that all ETCs serving on tribal lands consult with the respective tribal government on plans to connect all residents in the tribal service area. In addition, as a practice, the Commission should ensure that limited federal funds are being used first and foremost in unserved areas where the market has not worked to meet service needs. After applying new outcome performance measures to connect unserved areas, the Commission should require the respective ETC(s) to file an annual compliance report with the tribal government and the Commission regarding the progress in bringing universal service to the tribal land area. The annual compliance report should specifically demonstrate rates of connectivity on tribal lands, including incremental gains in connecting previously unconnected residential customers in unserved areas.

Finally, the Commission should stand ready to enforce any failure of an ETC to fully connect all geographic areas in tribal land areas, particularly when it is proved that equitable services have not been provided or there is a lack of material gains in connectivity in unserved areas. This enforcement should include making a determination regarding whether the provider

has discriminated against a tribal community or not provided substantial and equitable service as compared to a non-tribal community. If such a determination is found, then the ETC should be stripped of its designation regarding the tribal land area and the tribal government should be delegated the authority to designate the next ETC to serve on the tribal lands. Again, it should be the victims of historic underservice and failed connectivity outcomes who determine which carrier should receive FUSF support to better connect residents in the tribal service area.

C. Tribal land areas must be designated as separate study areas.

The Commission should immediately declare all federally-recognized reservations as separate study areas. This declaration would greatly aid the policy of universal service by specifically focusing FUSF support where it is most needed. It would also clarify the authority of tribal governments over their land.

As the experiences of all eight tribally-owned carriers prove, by classifying the tribal land as a separate and unique study area, FUSF support is tightly focused on those areas that require the most funding – the unserved areas. As noted above, MATI was able to increase telephone penetration rates by 87 percentage points after the tribal land it serves was removed from a much larger service area. Another telling example is that of Fort Mojave Telecommunications, Inc. ("FMTI"), the tribally-owned carrier of Fort Mojave Indian Tribe of Arizona, California and Nevada. Prior to the establishment of FMTI, the penetration rate of the tribal land stood at 35 percent. FMTI began providing service in 1992 solely on its tribal land and, by 2003, had increased telephone penetration rates to 98 percent.[12] As the Tribe's name indicates, tribal land reaches into three states and, prior to FMTI, was served by at least two separate carriers. It was only after one study area encompassing the whole of tribal land that penetration rates drastically increased. The Commission should look to the examples of MATI, FMTI and the other tribally-owned carriers as it seeks to complete the first goal of federal universal service policy – the provisioning of voice services to all Americans.

[12] Testimony of Nora McDowell, Tribal Chairperson, Fort Mojave Indian Tribe, given before the United States Senate, Committee on Indian Affairs, *The Status of Telecommunications In Indian Country*, May 22, 2003.

IV. The Commission must specifically consider the effect of "reform" on tribal lands.

The facts attest to a vast technological divide that exists in this country. As the Commission considers the impact of reforming federal universal service policy, including spending even more money on areas that are already connected to the public communications network, it must keep the other side of the divide – namely, tribal lands – at the forefront of its consideration. All efforts to "reform" universal service policy must be specifically considered as to their effect on tribal lands.

A. The Joint Board's Recommended Decision would harm universal service in tribal lands.

Overall, the Joint Board's Recommended Decision would harm the pursuit of universal service on tribal lands. This is due mainly to the false assumption that the goal of national universal service has been achieved in the area of wireline voice services. This incorrect supposition is found in the recommendation that the five elements of the federal high-cost fund be capped at their 2007 levels.[13] If the Commission adopts this cap, then it must exempt tribal land areas and allow such areas to receive FUSF support unfettered by an artificial cap.

As noted above, telephone penetration rates on tribal lands lag thirty points behind the rest of the country. If the Commission adopts the cap without exempting tribal areas, then it is sentencing these unserved areas to a desolate future. For some areas, with a newly established ETC focused on providing service to tribal lands, 2007 levels of support will most likely be based on the costs of the previous provider. These costs are not reflective of providing service to the whole of the tribal land area and, therefore, would be inadequate to provide universal service. For tribes that are planning on self-provisioning service but have not yet completed the necessary regulatory process, again, 2007 levels will most likely be insufficient in the face of antiquated facilities and underserved and unserved areas. A cap on high-cost support in tribal areas, areas that are a full thirty points behind the rest of the country, does not "preserve and advance universal service."[14] In the face of the circumstances present in tribal areas, the Commission

[13] Joint Board Recommended Decision, para. 32.
[14] Joint Board Recommended Decision, para. 26.

must accommodate the buildout costs to the unserved areas by exempting tribal lands from a cap on FUSF.

B. The Joint Board's Recommended Decision ignores the sovereignty of Tribal Governments.

The Joint Board throughout its recommendation proposes to strengthen the role of state governments in the administration and distribution of federal universal service funds. However, the Joint Board neglects to discuss tribal sovereignty and tribal authority over their land and infrastructure services. The Commission must sufficiently modify the Joint Board's Recommended Decision to preserve tribal governments' authority and the unique legal relationship between the Commission and tribal governments by excluding tribal communities from the proposed universal service funding policy.

The Joint Board would divide the current federal universal service high-cost fund into three separate funds: The Broadband Fund; the Mobility Fund and the Provider of Last Resort Fund.[15] For two of the proposed funds, the Broadband Fund and the Mobility Fund, the Joint Board recommends that states distribute the specific support amounts.[16] States are also tasked with determining rates of broadband and mobility access. As indicated above, it is the *tribal* land areas in this country that are vastly underserved in these two areas. Of particular significance is the fact there is no accurate data regarding the provisioning of either of these services on tribal lands. Because of the lack of clarity about the jurisdiction of states and tribal governments, as well as the lack of data about provisioning of service in tribal areas, states should not be the decision-maker on providing universal service funding to tribes.[17] To allow the states to wholesale administer the funds where jurisdiction is unclear would arguably signal a contrary new jurisdictional policy that was not intended and create further confusion about the jurisdictional rights of tribal governments and states. The Commission should directly administer the funds to tribes and should consult with the tribal governments on the implications of universal service proposals being considered by the Commission. This direct administration of

[15] Joint Board Recommended Decision, paras. 12-23.
[16] Joint Board Recommended Decision, paras 14, 17-18
[17] Tribes may, as sovereign entities, specifically elect to permit a state to make that determination.

funds and consultation process would strengthen the sovereign standing of tribal governments before the FCC.

Under both federal law and sovereignty principles, a tribal government has standing equal to that of a state government. The Joint Board's Recommended Decision must be modified in the following manner: Any allocated monies from either the Broadband Fund or the Mobility Fund to a state that includes federally-recognized tribal land should reflect a funding authority for tribal governments and a funding level to meet the needs of tribal build-out within that state.

Just as states are "best suited to identify unserved areas,"[18] tribal governments are best suited to identify the unserved and underserved areas of *their* land. Due to cultural and religious sensitivities, certain areas of a reservation may be not accessible to anyone outside the tribe. The Joint Board's recommendation of states determining the unserved areas must be modified and allow tribal governments their equal role. Determining unserved areas on their land is the role of the tribal government, not the state government.

C. Reverse Auctions as an FUSF distribution mechanism is inappropriate for tribal areas.

One of the NPRMs being considered in the instant proceeding seeks comment on the use of reverse auctions as a FUSF distribution mechanism. NTTA is concerned that a reverse auction would not provide enough network investment incentive to truly achieve the goal of universal service in unserved areas. It strongly recommends that the Commission reject reverse auctions as an FUSF distribution mechanism. If the Commission does adopt this questionable policy, then it should exempt tribal land areas.

Federal universal service policy has historically focused on improving access to telecommunications. In short, FUSF support is provided in areas where the market would otherwise fail to provide necessary services. However, reverse auctions are not about providing comparable and substantial services but rather about providing services at the lowest cost.

[18] Joint Board Recommended Decision, para. 46.

NTTA fears that under a reverse auction mechanism, tribal lands, many of which are unserved and expensive to serve, would continue to be neglected.

NTTA is also concerned about the investment currently in place or that is planned – investment that does provide universal service. In the realm of finite support funds, reverse auctions are unworkable because it interrupts the life-cycle of capital cost amortization. Failure to recoup costs will only discourage long-term investment in high-cost infrastructure. This effort to fund the lowest cost infrastructure will dissipate incentive to make high cost investments in unserved rural areas. Reverse auctions are also improbable as the Commission cannot force the sale or liquidation of the incumbent provider's equipment and assets. If the winning bidder in a reverse auction was not the incumbent, then the new provider would have to duplicate and overbuild the entire network in the service area. This would result in an even higher and inefficient cost to the FUSF to replace and overbuild existing infrastructure.

Further, when considering unserved and underserved areas, the Commission should seek to measure efficiency, not by cost of deployment, but by outcomes concerning connectivity. As indicated above, once various regulatory hurdles were removed, tribally-owned carriers such as MATI and FMTI were able to greatly increase the connectivity rate of previously unserved customers. In six years, MATI connected 98 percent of all Mescalero residents with voice-dial tone, a 980% increase! By any measure, this end result is an efficient use of federal dollars and should continue to warrant universal service support.

If the Commission adopts a reverse auction policy, then it must exempt tribal lands or provide a role for the tribal government within the auction process. In extreme rural areas higher quality and reliability of service is crucial. In these areas, real cost reimbursements are crucial to accounting integrity. Because of the obligation of the federal trust responsibility to Native Americans, quality and reliability of service cannot be sacrificed for the cheapest infrastructure available.

NTTA proposes, if the Commission adopts the reverse auction mechanism and does not exempt tribal land areas, then tribal land areas be recognized as separate geographic serving

areas. As noted above, this carve-out of federally-recognized reservation land would better enable tribes seeking to self-provision communications service as well as specifically focus scarce high-cost support where it is most needed.

Under the Commission's universal service fund reforms and well as in NTTA's proposed Commission-delegated authority for a tribe to determine or auction —by best value, not price— universal service funding, the Commission should mandate that ETCs serving tribal unserved areas[19] with specific deployment and buildout requirements are linked to service penetration levels for previously unconnected residents. Should the Commission adopt a reverse auctions policy, this requirement should be placed on the winning bidder. These buildout requirements should mandate that priority be given to unserved areas. The winning bidder should be mandated to consult with the respective tribal government regarding the proposed buildout plan and file a copy of its plan with the tribal government and the Commission. The winning bidder should also be required to file annual updates with the tribal government. If, after a reasonable period of time, such as a year, it is determined that adequate progress toward increasing connectivity on tribal lands has not been achieved, then the winning bidder should be stripped of its ETC designation. The Commission should then delegate the authority to the tribal government to determine, by competitive bid applying best value criteria, which new provider should receive FUSF support for its lands.

D. The Commission should remove universal service policy barriers hindering tribes.

NTTA directs the Commission's attention to a material barrier to tribes attempting to establish a tribally-owned telecommunications company. Referred to as the "Parent Trap" rule, Section 54.305 poses an impossible economic barrier to a tribe seeking to launch a self-

[19] NTTA again puts forth its proposed definition of "Unserved Area" as an area where the penetration rate for a communication service, including basic and advanced services, is fifteen percent below the nationwide penetration rate average for that service. See, infra. p. 4.

sustaining tribal regulatory service. Section 54.305 was implemented by the Commission to ensure that purchasers of exchanges did not place "unreasonable reliance upon potential universal service support..."[20] as a decision to start a telecom company. Under Section 54.305 a buyer inherits the regulatory status of the selling LEC. Therefore a small company (a tribal carrier) that purchases the facility and certificate of the predecessor price-cap ILEC would most likely not receive high-cost loop support for its investments. This makes it impossible for a tribally-owned carrier in a high-cost area to be able to start its own telecommunications services. If the same purchaser were to start services prior to May 1997, it would automatically be eligible to receive high-cost loop support funding from the USF.

To exacerbate the problem, most tribal communities are geographically remote and under the service authority of large price-cap ILECS. These service areas are served with facilities that are generally technically exhausted and antiquated. Any small or independent purchaser would be strapped by prohibitive costs from undertaking the renovation and upgrading necessary to provide the tribal community with modern and technology competitive services.

The regulatory rationale underlying Section 54.305 – to prevent the gaming of federal USF – is simply inapplicable when a tribe seeks to self-provision telecommunications service. Clearly, the Commission never intended to harm or raise regulatory barriers for tribes by adopting Section 54.305. Indeed, the Commission has recently granted waiver of Section 54.305 to carriers serving tribal communities. However, as long as this provision stands as applicable to all providers, it sends a very discouraging message to tribes and is at odds with the Commission's efforts supporting tribes' efforts to provide service to its community. In order to advance universal service to unserved areas, the Commission must exempt tribal service areas from coverage of Section 54.305.

[20] *Matter of Federal-State Joint Board on Universal Service*, Report and Order, FCC 97-157, CC Docket No. 96-45, adopt. May 7, 1997, rel. May 8, 1997, para. 308.

V. The Commission should take all necessary steps in pursuit of universal service.

As noted by Commissioner Michael Copps, "Universal Service is a critical pillar of the Telecommunications Act of 1996."[21] While the Commission through this proceeding proposes to build upon that ideal, for many residents on tribal lands, the pillar of universal service seems more like a plant stand. However, the Commission can take steps in this proceeding to advance universal service "to all Americans, no matter who they are or where they live."[22] The Commission's "choices in this proceeding will have a dramatic effect on the ability of communities and consumers in Rural America to thrive and grow..."[23] The Commission should sincerely examine the effect that past choices in universal service policy have had on Indian Country while determining how the future will affect this part of our country. Bringing true universal service to high-cost areas takes time, money and, most importantly, a diligent pursuit of a policy to benefit the whole of the country. As the past seventy-four years have proven, universal service is a policy that provides excellent returns.

In summary, NTTA proposes that the Commission embrace the opportunity before it to address the mandate by the Act that all Americans are connected to a communications network. Specifically, NTTA calls on the Commission for innovative measures including:

1. Tribal land carve-out from any caps on FUSF support, permanent waiver of the parent trap rule and waiver from any reverse auction policy. These measures will enable communities in the most economically challenged and high-cost areas a hope that they, too, will be connected.

2. The Universal Service Fund's primary mandate is to provide "voice dial-tone" connectivity for the hardest to reach market areas. The hard to reach areas are the highest-cost areas of providing service. Therefore an artificial cap on FUSF support, a

[21] Joint Board Recommended Decision, Statement of Commissioner Michael J. Copps, Approving in Part, Concurring in Part.
[22] *Ibid.*
[23] Joint Board Recommended Decision, Statement of Commissioner Jonathan S. Adelstein, Approving in FCC 08-22, Approving in FCC 08-4, Concurring in Part, Dissenting in Part in FCC 08-05.

reverse auction incentive to only provide the cheapest infrastructure, or severely limit spending in the highest-cost areas for tribal communities are the worst regulatory solutions imaginable.

3. NTTA has advocated self-provisioning through tribal telecom development as a key empowerment of building tribal sovereignty. NTTA asserts that the costs entailed with providing self-service to connect tribal communities, viewed from the standpoint that only one tribally-owned telecommunications company has been formed every six years since passage of the Act, and the impact on the Universal Service Fund to promote tribal self-service will be minimal.

4. NTTA's call for the Commission to define the term "unserved areas" as communities at least fifteen percent below the nationwide service average for service access is a crucial recognition that universal service funds need to be better directed and held more accountable. The Commission's universal service policy reform must prioritize funding and efforts to connect unserved communities, particularly tribal communities as required by both the mandates of the Communications Act and as required under the Federal Tribal trust responsibility.

5. In assessing innovative solutions for tribal communities, the Commission needs to clarify and define its trust responsibilities to tribal communities. Issues of tribal sovereignty, tribal authority, and tension between tribes and states must be assessed by examining how greater self-service may improve connectivity in unserved areas, and how the use of outcome predicates and metrics for universal service support might enhance efforts to serve "the last mile" communities. Increases in connectivity in tribal unserved areas must be measurable, proven, and sustained to receive FUSF support.

6. Focus has been directed at using "efficiency" as a predicate for allocating universal service funding. Efficiency as a criteria for eligibility as ETC carrier, at least in tribal areas, should not be predicated purely on "price", but should include the true "build-out" costs to "connect" all geographic areas of the service area, with particular emphasis on

reaching previously "unconnected" residents. An ongoing metric and outcome, as well as incremental gains in connecting previously "unserved" or "unconnected" residents must be part of the measure of efficiency and use of universal service funding. See the example of the Mescalero Apache community's improvement from under 10% service penetration in 1990 to 98% connectivity in 2007 under Mescalero Apache Telecom's enterprise, as a more significant measure of efficiency.

7. The Commission must enforce failure to fully connect all geographic areas in tribal areas, particularly when data and determination show that a carrier has failed to provide equitable service, or material incremental gains in connecting unserved areas. When a determination has been made that a provider has discriminated against a tribal community or provided substantial lack of equitable service compared to a non-tribal community, the tribe should be delegated the authority to choose or bid—by value, not price—the next provider using the tribal area high-cost support to connect and serve the tribal area.

8. There should only be one ETC in a rural area, particularly in a tribal unserved area. Competing technologies and providers vying for the same customer is inefficient use of FUSF support, increases accounting burdens on the universal service system, and lends itself to the continuance of unconnected customers being bypassed for more cheaply "connected" customers.

9. Service plans in unserved tribal areas should be negotiated with the respective tribe(s). ETCs operating in unserved or historically underserved areas should be required to consult with tribes on how to improve connectivity in the tribal area and to file a plan with the Tribe and the Commission on proposed efforts. Failure to comply with its service plan, particularly coupled with failure to improve on connectivity in the tribal unserved area should result in the ETC losing the high-cost support for that tribal service area.

10. All providers should be held to the same standards of quality of service and reliability in order to attain or retain their ETC designation. In that parity of standard principle, all

ETCs must demonstrate specific outcomes of connectivity and incremental gains in connecting previously unconnected residential customers in tribal unserved areas. Failure to make "incremental gains" or to demonstrate improvement in connectivity should result in the provider losing their ETC status in the tribal area.

11. The Tribe, as victim of the failure to provide fair and reasonable service, should have the delegated authority to choose or bid out its universal service provider.

12. Tribes should be given every direct assistance, resource and opportunity available through the Commission's auspices, particularly in issuance of certificates of convenience and wireless licensing, to self-provision service.

13. An annual report regarding the state of unserved areas with a specific emphasis on unserved tribal areas should be provided to the public by the Commission.

While the Commission considers the breadth of public comment, facts and figures a proceeding of this magnitude will generate, NTTA respectfully requests that one fact remain prominent: Twenty-nine percent of the people of the United States living on tribal lands do *not* have access to telecommunications and information services comparable to those in urban areas. It is far past the time for that fact to remain true.

Respectfully submitted,

By: [electronically filed]
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April 17, 2008

APCC

American Public Communications Council, Inc.

Statement of
Willard R. Nichols
President
American Public Communications Council, Inc.

Submitted to the
U.S. House Committee On
Energy and Commerce
Telecommunications and the Internet Subcommittee

The Future of Universal Service:
To Whom, By Whom, For What, and How Much?
June 21, 2008

The American Public Communications Council, Inc. ("APCC") is a national trade association of approximately 1,000 independent (i.e. non-telephone company) providers of payphone equipment, services and facilities. Utilizing the most recent Federal Communications Commission (FCC) data available, we estimate that currently 830,000 payphones are deployed nationwide, approximately 500,000 of these payphones are operated by independent providers and the remaining payphones are operated by the incumbent local telephone companies. In the past five years as the incumbent local telephone companies have increasingly gotten out of the payphone business, independent payphone service providers have taken over a portion of these phones with the remaining phones generally being removed. While the overall number of payphones has declined over the last ten years, a billion and a half calls are still made on these phones annually.

This statement explains the role that public pay telephones have played in contributing to "Universal Service" and describes how various possible universal service assessment system proposals would adversely impact that role. This statement also offers

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thoughts on the future relationship between payphone service and the Universal Service Fund.

The Unique Role of Payphones in our Communications Network

Payphone service is an "on demand dial-tone/per use" wireline, high-quality communications service readily available to all members of the public twenty-four hours a day, seven days a week, 365 days a year. Users are not required to make an initial investment in equipment, await activation of the service or pay recurring monthly charges. Any member of the public can place a call anywhere at any time. Users have the option of paying for calls with coins or by use of calling cards, prepaid cards or other access code arrangements.

In many instances, payphones provide access to the communications network at no cost to the consumer. Emergency 911 calls are available at all the payphones in the country free of charge to the caller, around the clock. Users also can place calls using 800 and similar "toll free" numbers at no charge to the caller at the payphone. These numbers provide a variety of services to callers including access to public services such as: Social Security; Women, Infants, and Children Nutrition (WIC) programs; the Internal Revenue Service; Veterans Benefits hotlines; and domestic violence hotlines.[1] By providing all Americans, no matter what their income level, with readily available, affordable and reliable access to the telephone network, including free access to 911, 800 and other services, the public communications sector (also known as "payphone service") constitutes a vital contributor to universal service on a national scale.

As Congress recognized in 1996 when it mandated the FCC to promote the widespread deployment of payphone service, payphones are important to all Americans

1. Studies show a large percentage of "social service" calling takes place on payphones.

regardless of their income or where they reside. Users of wireless service need ready access to payphones when their wireless phones are out of a service area, lose battery power or are not otherwise available for use. Additionally, the population of Americans that can not afford a wireless phone deserve readily available access to the communications network when outside their homes. And, as we have seen from the national emergencies, and disasters of this decade, payphones provide a layer of redundancy and availability which is essential for unfortunate and tragic events such as the terrorist attacks of September 11, 2001, the blackout of 2003 and the hurricanes of last year.

Payphone users exist in every stratum of society and in every neighborhood and region of the country. They rely on widespread access to payphones to meet both every day and critical needs. In addition, payphone service is vitally important to low income Americans, particularly the 6 - 10 percent of the general population without any kind of phone. Those without home or wireless phones need access to payphones not only in the communities in which they live but also in the many communities in which they commute to work each day.

The value of readily available, reliable, high-quality public wireline service cannot be underestimated as the events of Hurricane Katrina illustrated when, shortly after the hurricane hit, payphones both in and immediately surrounding the affected areas, could be found in use. These phones were critical to the many dislocated persons affected by the hurricane. The events of September 11 also clearly demonstrate the continued value and need for payphones. New Yorkers were lined up to access payphones when other forms of communication were unavailable. In these uncertain times, the public needs to know that in case of emergency whether local, regional or at the national level,

they have access to dependable, reliable and readily available pay phone lines through which they can contact their families, alert authorities, or access information.

The Current Situation: Decreasing Payphone Deployment

The expansion of wireless services since 1998 has had a dramatic effect in reducing the overall volume of calls made at payphones. As call volume has declined, payphone service providers have been under pressure to remove payphones from locations where they still are needed by the public but may no longer attract a sufficient number of calls to offset costs. Payphones with as many as 100 calls per month have been, or are at risk of being, removed from service as unprofitable. If a payphone with 100 calls a month is removed, callers must find some other way, or location, to connect to our communications network or must wait to make these calls. Unfortunately, this holds equally true for emergency as well as ordinary calls.

In addition, complicated payphone compensation regulations and judicial challenges to these have created regulatory uncertainty and delays that have been damaging to the payphone industry and have resulted in decreased compensation for payphone providers and consequently lower deployment for payphone users.

From March 2000 to the present, the number of payphones in the U.S. has declined by more than 50 percent. And with AT&T's announcement that they will be out of the payphone business by December 2008, this decline will continue, particularly to the extent that independent payphone service providers are unable to take over payphone locations and maintain deployment. While cell phone usage has increased, with a billion and a half calls still being made on payphones, the need for this type of access to phone communications remains.

Current Universal Service Fund Payphone Assessments and Proposed Alternatives

Under the current revenue-based system, payphone service providers are assessed by the Universal Service Fund (USF) on the basis of their revenues from interstate coin calls. In addition most pay local exchange carriers a monthly USF surcharge. Payphone Service Providers, which generally run their businesses on fairly small margins, have no rational way to pass through these assessments to customers. While all other contributors to the Fund pass through their costs to their customers, PSPs, generally small business owners, are forced to pay these costs out of their own pocket. These assessments contribute, on a percentage basis, a very small amount of support to the USF, but constitute a burden on payphone deployment and the unique form of universal service that payphones provide. PSP assessments, on both a direct and pass-through basis, contribute approximately $7.5 million annually, a very small percent of the USF. Importantly, payphones do generate substantial revenue for the IXCs, which do recover their USF costs from customers, and then make significant contributions to the USF fund based on the revenue they derive from end users for dial around calls made from payphones. The net effect of payphone line assessments on PSPs is that universal service, in the broad sense of broad public access to the network for voice grade services, suffers more than it would benefit if payphones were not assessed. Exempting payphones from the USF, coupled with strong enforcement of payphone compensation regulations at the FCC, would help prevent the decline in payphone deployment we have seen in the past several years thereby helping to ensure that public phones remain available to those that do not have their own phones, or for whatever reason are in need of a phone when outside their home.

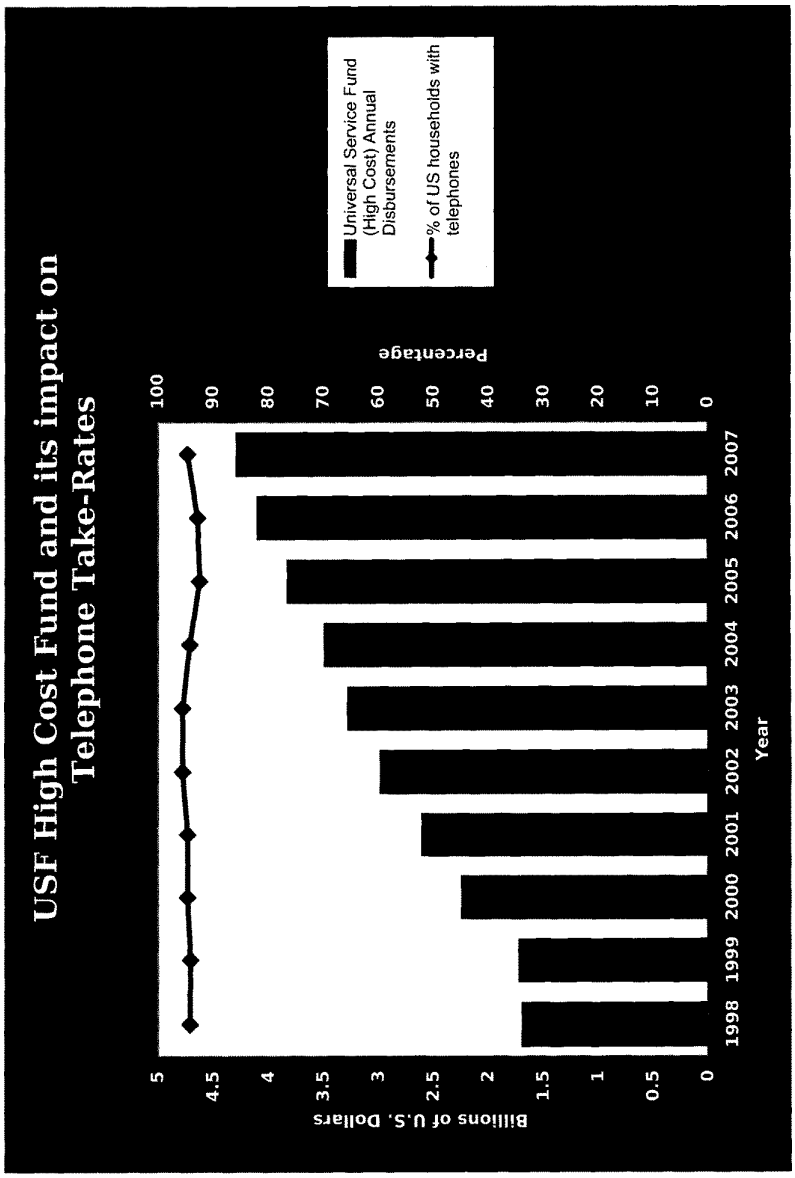
If payphones are not exempt, payphone lines should be assessed at the lowest rate available reflecting their role as a "lifeline service," the Congressional mandate for widespread deployment, and payphones' unique characteristics (e.g., a very small number of coin-paid interstate calls from which to recover universal service contributions, predominantly one-way outbound calls, and an access line that is shared by many public users). Just as lower connection-based rates have been proposed for pagers than for other categories of telecommunications services, so too should it establish a lower rate for payphone lines. Regardless of what long-term action is adopted on universal service assessment methodology, the assessment rate, if any, for payphone lines should, at a maximum, be no higher than the current average level of payphone line assessments.

Legislation that could result in raising the rate paid by payphone service providers would greatly accelerate the removal of payphones. To help stabilize the deployment of payphones, Congress and the FCC can and should refrain altogether from burdening payphone service providers with these per-line charges which they, unlike other telecommunications providers, must absorb rather than pass on to their customers.

Conclusion

PSPs provide a readily available, reliable, low cost connection to the communications network that is useful to everyone on an everyday basis but is especially important as an additional connection to the telephone system in times of emergency. This is a valuable service that should be exempt from universal service fees. If it is not exempt, Congress and the FCC should look carefully at any assessment levied. Any assessment that would increase costs beyond the current average per line charge would

by necessity be absorbed by these small businesses that have no rational way to pass on these costs. At a time when consumers are already experiencing a diminution in services, any increase in costs would further accelerate the decline in available payphones. If fewer payphones are available to pay into the fund, increasing the assessment would not ultimately meet the goal of increasing the size and viability of the USF. Universal Service "on the street" for our citizens, particularly lower income and minority, will suffer measurably in both respects.


USF High Cost Fund and its impact on Telephone Take-Rates
Billions of U.S. Dollars
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Percentage
100
90
80
70
60
50
40
30
20
10
0
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year
Universal Service Fund (High Cost) Annual Disbursements
% of US households with telephones

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