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THE FUTURE OF RURAL TELECOMMUNICATIONS: IS UNIVERSAL SERVICE REFORM NEEDED?

HEARING

BEFORE THE

SUBCOMMITTEE ON RURAL ENTERPRISES, AGRICULTURE & TECHNOLOGY

OF THE

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CONTENTS

WITNESSES

	Page
Terry, Honorable Lee (NE-2), Congressman, U.S. House of Representatives	3
Williams, Mr. Robert, OPASTCO, Owner, Oregon Farmers Mutual Telephone Company	5
Johnson, Mr. Johnie, Chief Executive Officer/GM, Nex-Tech Wireless	7
Merlis, Mr. Edward, Senior Vice President, Government and Regulatory Affairs, U.S. Telecom Association	9
Henagan, Mr. Raymond, CEO/Manager, Rock Port Telephone	11
Schulte, Mr. Don, Missouri NEA	12
Black, Mr. Ed, President & CEO, Computer and Communications Industry Association	14

APPENDIX

Opening statements:	
Graves, Hon. Sam	26
Barrow, Hon. John	28
Prepared statements:	
Williams, Mr. Robert, OPASTCO, Owner, Oregon Farmers Mutual Telephone Company	30
Johnson, Mr. Johnie, Chief Executive Officer/GM, Nex-Tech Wireless	35
Merlis, Mr. Edward, Senior Vice President, Government and Regulatory Affairs, U.S. Telecom Association	49
Henagan, Mr. Raymond, CEO/Manager, Rock Port Telephone	52
Schulte, Mr. Don, Missouri NEA	57
Black, Mr. Ed, President & CEO, Computer and Communications Industry Association	59

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WEDNESDAY, MAY 3, 2006

HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON RURAL ENTERPRISES, AGRICULTURE AND TECHNOLOGY
COMMITTEE ON SMALL BUSINESS
Washington, DC

The Subcommittee met, pursuant to call, at 10:00 a.m., in Room 2360 Rayburn House Office Building, Hon. Sam Graves [Chairman of the Subcommittee] presiding.

Present: Representatives Graves, Sodrel, and Barrow.

Chairman. GRAVES. We will call this hearing to order. Good morning, everyone, and welcome to the Small Business Subcommittee on Rural Enterprises, Agriculture and Technology. Today we are going to be examining the sustainability of the Universal Service Fund and whether reform of this program is needed.

The bedrock of rural telecommunications was a commitment by the federal government to provide universal service to all parts of America, including areas that are scarcely populated and expensive to serve.

The ultimate goal of the Universal Service policy is to ensure that every citizen, regardless of location, has affordable high-quality access to the public telecommunications network. The government planned to accomplish this by enacting a cost recovery mechanism for providers that invested in network expansion in rural communities.

In 1996, when our nation's telecommunication laws were overhauled, the Universal Service Fund was expanded to provide a cost recovery service to low-income families, rural hospitals, schools, and libraries. Providing service comparable to urban centers was a major objective of the program.

For rural telecommunications companies, the Universal Service Fund support is a critical means of cost recovery, but, more importantly, it has afforded rural America the same technology and service as urban centers.

Additionally, its contributions have helped ensure that schools and libraries have access to affordable telecommunications and information services. This allows our children in rural communities access to resources important to their education. It further encour-

ages folks to stay in rural communities, further helping spur economic growth in these areas. That's very important.

After a decade, Congress is again looking at rewriting the nation's telecommunications law. I think it is very appropriate to look at reforming the Universal Service Fund. New services have been introduced, including broadband and voice-over internet protocol. Broadening the base of contributors and encompassing new technologies is important to the long-term sustainability to the Universal Service Fund.

My district is very much a rural district, and the Universal Service Fund is extremely important to so many of my constituents. I am going to work to ensure that all of our citizens have the same access to telecommunications options.

I applaud Representative Terry for introducing his legislation, H.R. 5072, the Universal Service Reform Act of 2006, and feel this discussion is important to have considering the recent developments on telecommunications matters.

Hopefully, with continued conversations about the Universal Service Program, we can encourage others to take a closer look into this matter and help make the necessary reforms to continue its contributions in our rural communities.

Now I am going to turn to Representative Barrows. I know he has an opening statement. And then we'll let Representative Terry give his testimony.

[Chairman Graves' opening statement may be found in the appendix.]

Mr. BARROW. Thank you, Mr. Chairman.

It's critical folks in rural areas have full access to telecom services, and I'm glad and I appreciate your calling this hearing to make sure that these services are both fair and effective and can reach everybody that we serve.

Americans need access to phone and internet services at an affordable rate, and this access needs to include both rural and urban areas. The Universal Service Fund has been critical in achieving these goals.

Unfortunately, it appears that we've reached a point where the Universal Service Fund is paying out more than it's taking in. We need to make sure that the fund remains solvent and continues to allow rural telephone companies to do their job. The fund, the businesses, and the consumers are all critical factors in the continued economic development of America's rural areas.

I want to thank all of the witnesses for coming in today. I want to apologize because I am not able to stay, but don't worry. We get to read all of your testimonies very carefully. And my staff makes sure that I do just that.

Working together, we need to identify the problems and the solutions related to the Universal Service Fund and make sure that we're taking care of rural consumers without placing an unnecessary burden on the backs of small providers.

Mr. Chairman, once again I thank you for calling this hearing. And I look forward to the results. Thank you.

[Ranking Member Barrow's opening statement may be found in the appendix.]

Chairman. GRAVES. Thanks, Mr. Barrow. All the statements of the witnesses and members will be placed in the record in their entirety.

Representative Terry, glad you came over, looking forward to hearing about your legislation. Please go on.

Mr. TERRY. Thank you, Chairman Graves.

STATEMENT OF THE HONORABLE LEE TERRY (NE-2), U.S. HOUSE OF REPRESENTATIVES

Mr. TERRY. I want to thank you for not only holding this hearing on universal service has been making me feel at home with the great Midwestern presence here. Ranking Member Barrow, I appreciate your interest in this bill.

I will stick to the text, but I do want to say that the beauty of this reform bill is that it is a true bipartisan bill. Rick Boucher and I have worked on this bill for nearly two years. Rick has been involved in this for the last year, all the way from our meetings to the drafting and improvements. And so this is truly an example of bipartisan effort. In fact, in our Committee, it will be a great bipartisan bill, mostly breaking down on urban/rural more than Republican/Democrat.

Now, nobody knows the importance of the Universal Service Fund better than those of us who represent rural America. Some of our colleagues believe that the marketplace will deliver new telecommunication technology to rural areas without the need of Universal Service Fund, but the Universal Service Fund is so important to the future of our rural districts and our states it is critical that Congress take the initiative and reform the current Universal Service Fund before rural America is left with no broadband deployment.

Reform of the fund is necessary. And I have drafted along with Rick Boucher of Virginia H.R. 5072, the Universal Service Reform Act of 2006, that will guarantee the future of the Universal Service Fund while delivering more broadband services to rural America.

America is in the midst of a technology transition that is critical to our nation staying competitive in a high-speed global economy. As telephony migrates to internet protocol and wireless systems, many areas of our country, especially in rural areas, could be left without access to new broadband technologies.

The Universal Service Reform Act of 2006 will keep rural America competitive with the rest of the country, and it will meet the needs of our rapidly changing telecommunication environment. H.R.5072 is technology-neutral, which means it does not discriminate between platforms. It doesn't matter if you're using fiber, wire, or a digital internet platform.

Being technologically neutral will ensure continued investment by all participants in the telecommunication infrastructure that will benefit rural America. What we say is if you are primarily voice, then you will pay into the system.

This bill seeks to broaden the base of contributors to the fund and change the current system, where more providers are offering broadband services but not paying into the fund.

This bill will make it explicit that if you provide access to the public switch, regardless of your technology, you will pay under the

fund or if you offer a service in which voice is your primary component, you will pay into it. This is just simply a fair concept of if you're playing in the voice market, you will pay under universal service.

Now, this failure to not broaden the base will lead to the eventual bankruptcy, as referenced by Ranking Member Barrow, of the fund and will create a technology gap across our country, making it impossible to complete a call or even deliver a data packet.

These are just a few of the reasons why H.R. 5072 is necessary to restore the financial future of the Universal Service Fund. The legislation Mr. Boucher and I drafted provides fair remedies to the inequalities that now exist and will meet the challenges of today's new technologies.

With the last few seconds, I have referenced broadband. What we do in this bill is not only reform Universal Service Fund to make sure that it survives in this new generation and new pressures but also explicitly say for the next five years that you can use your universal service dollars for the rollout of broadband in your area.

Then after five years, it is actually a requirement. So this is how we get a ubiquitous rollout of broadband throughout rural America and all of America.

With that, again I want to thank your Committee for looking into what I think is one of the crucial issues of how we are going to compete in a Twenty-First Century global economy.

Chairman. GRAVES. What do you think the chances are that we are going to see comprehensive Universal Service Fund policy this year?

Mr. TERRY. Well, a couple of months ago I would have said it was near certain, but the reality in our Committee is that our chairman is looking in other directions right now and is not a supporter of Universal Service Fund. We will have hearings but no promises now of an actual markup.

So we need to educate some of our members yet in how important Universal Service Fund is to rural America, that there isn't a competitive market yet that exists to the point that we can do away with Universal Service Fund.

It is I think as relevant today as it was in 1930, in 1935. So, you know, we're continuing to pressure, and we will have hearings like you're holding.

Chairman. GRAVES. Thank you, Mr. Terry. I appreciate it. We normally don't question members, but I appreciate that. And I appreciate you coming in. I know that I know what the ramifications are going to be for rural America if we don't do something, if we don't expand it.

And you're right. It's just as important now as it ever was. And we're going to get left behind if we don't move forward. It's hard to keep up.

Mr. TERRY. Yes.

Chairman. GRAVES. Thank you very much.

Mr. TERRY. Thank you.

Chairman. GRAVES. We'll go ahead and seat the second panel. If everyone will come up and get started on that. And I will introduce everybody, and then we will get started.

We have got a fantastic second panel and kind of looking at a broad range, obviously, of interests in the Universal Service Fund. For starters, we have Bob Williams, who is with the Oregon Farmers Mutual Telephone Company in Oregon, Missouri, which is in northwest Missouri; Johnie Johnson, who is with the Cellular Telecommunications Industry Association. He's the Chief Executive Officer from Hays, Kansas. Edward Merlis, US Telecom Association, Senior Vice President. He obviously does government and regulatory affairs here in Washington, D.C. Ray Henagan with the National Telecommunications Cooperative Association. He's also CEO and Manager of the Rock Port Telephone Company in Rock Port, Missouri. Don Schulte with the Missouri NEA from St. Louis, Missouri, obviously very interested in the educational aspects of the Universal Service Fund. Mr. Ed Black, President and CEO, Computer and Communications Industry Association here in Washington, D.C. Thank you all for being here, looking forward to this.

Bob, we are going to start with you if that is all right. And what we will do is go through all of the witnesses, and then we'll have questions after that.

The timer system, the way it works is it's five minutes on the testimony. There is a yellow light after one minute, but don't worry about that so much. If you have got something to say, I want you to say it. I don't pay a whole lot of attention to the lights.

So we'll go ahead and start. Bob?

Mr. WILLIAMS. Thank you, Chairman Graves—and Ranking Member Barrow is not here—and members of the Committee.

STATEMENT OF ROBERT WILLIAMS, OREGON FARMERS MUTUAL TELEPHONE COMPANY

Mr. WILLIAMS. I am Bob Williams, President of Oregon Farmers Mutual Telephone Company in Oregon, Missouri and Vice President of External Affairs for American Broadband of Charlotte, North Carolina. I am also the immediate past Chairman of the Organization for the Promotion and Advancement of Small Telecommunications Companies, OPASTCO. I am here today to testify today on behalf of the Coalition to Keep America Connected. I thank you for the opportunity to testify before you.

The Coalition to Keep America Connected effort is organized by Independent Telecommunications and Telephone Alliance, the National Telecommunications Cooperative Association, the Western Telecommunications Alliance, and OPASTCO, whose memberships include more than 700 small and mid-sized communications companies. Together, these companies serve millions of consumers and 40 percent of the landmass across America. The coalition also includes a vast number of rural consumers, small businesses, and local policy-makers.

The coalition's mission is to ensure that all consumers have access to affordable telecommunications services and the latest technologies, no matter where they live.

We are guided by three main principles. They are: fairness, affordability and access. Fairness means that urban, suburban, and rural consumers alike deserve to stay connected to their families, friends, and the world through communications technologies. Affordability means that technology is only useful when it's afford-

able to consumers. Congress must ensure that all Americans can receive communications technologies at affordable prices. Lastly, access means that every American should have access to the latest modern technologies, no matter where they live.

The Coalition has developed several universal service principles that we believe must be incorporated into universal service legislation. Those priorities are: the Universal Service Fund must continue to be an industry-funded mechanism and neither supported through general tax revenues—and I want to emphasize tax revenues—nor subjected to the federal Anti-Deficiency Act.

The base of contributors must be expanded to include all providers utilizing the underlying infrastructure, including but not limited to all providers of broadband connections and all providers of voice communications, regardless of the technology used.

Support shall be made available for the cost recovery needs of carriers deploying broadband-capable infrastructure. The contribution methodology must be assessed on all revenues or a revenues hybrid that ensures equitable and nondiscriminatory participation.

Support must be used to construct, support, and maintain networks to benefit all consumers and must not be a voucher, auction, or block grant-based. Support must be based upon a provider's actual cost of service. And support must not be used to artificially promote competition.

The coalition is very pleased that Congressmen Lee Terry, who was just here, and Rick Boucher have taken such a bipartisan leadership role through their legislation, H.R. 5072, which contains many provisions endorsed by the coalition that would modernize the highly successful Universal Service Program.

In particular, the coalition supports the expansion of the pool of providers and services that pay into the fund. The bill would require all providers that use telephone numbers, IP addresses, or offer a network connection for a fee to the public to contribute to the fund. This is long overdue. Changes in technology have created loopholes that have allowed many new providers to evade contributing into the fund, even though they benefit from the resulting network upgrades and investment.

Second, the coalition supports the provision to eliminate the Federal Communications rule that allows competitors to receive support based on the incumbent carrier's costs. Requiring all Universal Service Fund recipients to receive support based on their own costs will increase program accountability as well as reduce the demand for funds.

Third, the bill would implement stricter ETC designation requirements, such as demonstrating the ability to remain functional in emergency situations, satisfying customer service quality standards, offering local usage comparable to other telecommunications service providers in that service territory, and meeting the newly required broadband speed requirements.

The coalition, however, does not support the provisions contained in the Terry/Boucher bill that would cap the high-cost Universal Fund. A cap by its very nature means a carrier will not receive the support it is due and thus is antithetical to the very goal of universal service and is a disincentive to network investment. The cap will inhibit the bill's goal of 100 percent broadband deployment.

We believe the principles discussed here go a long way towards meeting Congressmen Terry's and Boucher's goal of limiting growth in the Universal Service Fund and make the proposed caps unnecessary. But we also feel as though there is a way that we can work to maybe find a cap that is acceptable.

The Coalition to Keep America Connected stands ready and committed to working with all of you on these issues so critical to rural consumers. Thank you for the opportunity to testify today. And I will be happy to address any questions.

[Mr. Williams' testimony may be found in the appendix.]

Chairman. GRAVES. Thank you, Mr. Williams.

Mr. Johnson.

STATEMENT OF JOHNIE JOHNSON, NEX-TECH WIRELESS

Mr. JOHNSON. Good morning. I appreciate the fact, Chairman Graves and honorable Chairman Barrow, that I am here as a rural telecom provider and also a rural small business person that I am here today in front of the Small Business Committee talking about something that is very important to the long-term sustainability of our business.

I am Johnie Johnson. I am CEO and General Manager of Nex-Tech Wireless, which is a wireless service provider providing wireless coverage in rural Kansas. We're based in Hays, Kansas and owned by a group of independent local exchange carriers.

Nex-Tech Wireless launched its wireless services in October 2005 and now serves approximately 9,000 wireless customers throughout western and central Kansas and eastern Colorado. And we currently employ about 50 people in the central and western Kansas area. The vast majority of our service area is rural and very sparsely populated. Some of those cities included in that area are Hays; Hoxie, Kansas; Rexford; Colby; Victoria, just to name a few.

In the Telecommunications Act of 1996, Congress recognized that the future of rural America depends largely on deployment of wireless telecommunications infrastructure that allows consumers to have choices in advanced services that are similar to those available in urban areas.

By permitting wireless carriers to access Universal Service Funding to construct network infrastructure in areas that would not otherwise support the investment, Congress has opened the door to rural consumers having the health, safety, and economic development opportunities that are critical to bridge the technology gap between urban and rural America.

As a member of CTIA and the Rural Cellular Association, we welcome the opportunity to provide comments on the draft bill by Congressmen Lee Terry and Rick Boucher. This testimony will examine the current USF system and explore ways in which it can be improved. In particular, Nex-Tech Wireless' ability to participate in the Universal Service Fund high-cost program will bring overwhelming benefits to the rural residents we serve. My testimony today will highlight some of those benefits, dispel some of the outstanding myths concerning the USF high-cost fund, and make policy recommendations about universal service we believe will benefit rural communities.

One point is under the current system, rural wireless consumers who contribute to the fund are not seeing the benefits that they want and they deserve. Wireless consumers now contribute roughly $2.5 billion per year to the federal universal service system, or 34 percent of the total fund. Wireless carriers that are designated as competitive eligible telecommunications carriers, or CETCs, have drawn approximately $1 billion in aggregate since 1996.

Incumbent local exchange carriers, ILECs, draw roughly $3 billion per year, or roughly 50 percent of the total fund, to maintain networks that are not growing. In the aggregate, we believe that the consumers have spent roughly $19 billion since 1996 to subsidize high cost support to wireline networks. Consumers served by rural wire line carriers pay in only 3.8 percent of the total fund.

Bottom line, Congress must make it a priority to provide federal high-cost support to fund wireless infrastructure development for rural consumers who desperately want high-quality networks. The health, safety, and economic development benefits that flow from investing in mobile wireless communications infrastructure are precisely what universal service should be funding in rural America. Wireless is truly the answer, not the problem.

CETCs are demonstrating to the states that support is being used to build infrastructure in areas that would not otherwise see investment. Anybody who uses a wireless phone services in rural America understands the huge difference in service availability and service quality compared in urban areas.

I know many of you as you are out visiting your constituents, you like the convenience of your Blackberry and having mobile access to your internet and staying in contact with your offices. And you understand that a lot of rural areas that, Chairman Graves, you serve don't have that same luxury as you would have here in D.C. or St. Louis or Kansas City. With the Universal Service Fund, we are able to bring that technology out to the far most rural areas.

CTIA and RCA members understand how important it is for consumers to have access to mobile wireless services. CTIA members and RCA members have constructed new cell sites serving underserved and unserved communities in their ETC service areas that would not have been constructed without support.

Nex-Tech Wireless is a great example of that. We are a green field bill. As I mentioned earlier, we launched our company October of this past year and have approximately 9,000 total subscribers in just a short 6-month time frame.

The vast majority of our states now require CETCs to report how support is being used. Vermont, West Virginia, and now Minnesota provide good examples of states that have gotten the reporting requirement right.

Bottom line is wireless carriers are demonstrating that their support is being used to drive infrastructure investments in rural areas that would not otherwise receive such investment. Again, wireless is the answer, not the problem.

The third point, the current system of providing support requires wireless carriers to make efficient investments. Wireless carriers can only get support after two factors: one, we build facilities; and, number two, we get customers. Wireless carriers are not guaran-

teed a return. So if we make a poor investment and only get a few customers, we are punished.

Support to wireless carriers in all areas is currently capped by the number of available customers in a particular area. In states like Washington that have targeted support to rural areas, several wireless carriers are fighting for a limited pool of support dollars in rural wire centers but receive no support for serving urban wire centers.

The bottom line is wireless carriers are concerned that all carriers be accountable. Moreover, consumers should only subsidize efficient investments. Again, wireless is the answer, not the problem.

Our last and final point is consumers are increasingly demanding wireless services and deserve access to the services they have paid for. In 2006, businesses will spend more on wireless services than on other wire line according to a study released in January by In-Stat. It is estimated that the demand for wireless data will grow at an average of 18 percent per year through 2009.

The bottom line is Congress should consider policies that guarantee rural communities keep pace with urban areas in the technology race, much like the example I gave with the Blackberry, being able to use that in the rural areas. Again, wireless is the answer, not the problem.

That concludes my testimony. I would be happy to take any questions.

[Mr. Johnson's testimony may be found in the appendix.]

Chairman. GRAVES. Thanks, Mr. Johnson.

Mr. Merlis.

Mr. MERLIS. Thank you, Mr. Chairman.

STATEMENT OF EDWARD MERLIS, U.S. TELECOM ASSOCIATION

Mr. MERLIS. I am Edward Merlis, Senior Vice President, Government and Regulatory Affairs, of the United States Telecom Association. On behalf of our more than 1,200 innovative member companies, ranging from the smallest rural telecoms to some of the largest corporations in the U.S. economy, I want to thank you for this opportunity to discuss the need for universal service reform.

Our member companies offer a wide range of services across the communications landscape, including voice, video, and data over local exchange, long distance, wireless internet, and cable networks. We are united in our belief that it is time to update the nation's communications laws to reflect the dramatic technological and marketplace changes all consumers have witnessed in recent years.

In late 2004, our board unanimously adopted twin principles that we believe should serve as the foundation for updating our nation's telecom laws: one, ensuring a strong and sustainable universal service system to provide affordable, reliable telecommunications for all Americans in the Twenty-First Century; and, two, establishing consumer-controlled, market-based competitive environment by eliminating government-managed competition.

The current universal service funding system is eroding at a rapid pace and must be reformed. These key steps will help strengthen and preserve universal service: broaden the base of con-

tributors; target recipients carefully; and provide universal service support to networks in order to speed broadband deployment, without placing an undue burden on fund contributors.

In your letter of invitation, you asked that we comment on several questions addressed in legislation recently introduced by Representatives Terry and Boucher. And I am pleased to do so.

First let me say that USTelecom applauds the comprehensive approach to universal service taken in H.R. 5072. On the contributions side of the ledger, the bill has sound policies that should improve the stability of universal service funds by: assessing intrastate revenues; allowing the FCC flexibility to assess numbers, revenues, or both; assessing VoIP; and assessing broadband.

Broadening the base of contributors to include intrastate services, cable modem, and VoIP will help to ensure that Universal Service Funds are available to meet the important goal of making voice service available to all Americans.

On the distribution side of the ledger, the bill takes a number of prudent steps to ensure universal service support is better targeted. These include: utilizing actual costs as the basis for universal service support; increasing support for high cost areas for non-rural companies; imposing greater accountability for use of funds; making broadband eligible for Universal Service Funds; and requiring communications providers that originate traffic to provide sufficient identification in order to stop phantom traffic.

The bill also fixes a problem with the application of the Anti-Deficiency Act. Another provision that should be of particular interest to this Committee would prohibit the FCC from restricting universal service support to a single, primary connection to the public telephone network.

Our companies construct and maintain networks in some of the most expensive service areas in the country, characterized by low population densities and difficult terrain. A primary line restriction would undermine their ability to sustain and to modernize these communication networks. And the cost of doing business in those areas would skyrocket, particularly for small businesses.

Mr. Chairman, we believe offering video over our broadband networks will be a key driver for broadband deployment across the nation. As local telecom companies deploy video services, broadband penetration rates will grow and, thus, provide the benefits of broadband deployment to ever-increasing numbers of citizens and small businesses across the country.

That is why USTelecom is committed to establishing a consumer-controlled competitive marketplace for video and eliminating unnecessary and burdensome government barriers to advanced services.

As Congress moves toward updating our nation's telecom laws, no segment of our country has more to gain and more at stake in this debate than rural America. It is critical that we have policies that encourage investment and head-to-head competition throughout the country, policies that speed new services, choices, and value to consumers while upholding vital social objectives that remain important to the nation, chief among them our commitment to ensuring affordable, reliable access to a dial tone for all Americans,

an objective that is met through a sustainable universal service program.

Again, Mr. Chairman, thank you for the opportunity to appear today. I would be pleased to respond to any questions you may have.

[Mr. Merlis' testimony may be found in the appendix.]

Chairman. GRAVES. Thank you, Mr. Merlis.

Raymond Henagan. Thanks, Ray, for coming in.

Mr. HENAGAN. Thank you, Mr. Chairman.

STATEMENT OF RAYMOND HENAGAN, ROCK PORT TELEPHONE

Mr. HENAGAN. Good morning. I am Raymond Henagan, CEO and Manager of Rock Port Telephone Company in Rock Port, Missouri. I am here today to testify on behalf of the National Telecommunications Cooperative Association. We thank you for this opportunity to testify.

Rock Port Telephone serves three exchanges in northwest Missouri, 189 square miles. It's 1,823 access lines, or about 9.6 customers per square mile. In 2005, we lost over 7 percent of our access lines. This is the first time in the history of Rock Port our local service actually went down this much. We have been losing access lines but not at the rate of seven percent. In contrast, to Washington, D.C., there are approximately 16,000 access lines per square mile. There are vast differences between the numbers of subscriber that we service.

Rock Port Telephone is a full-service provider. We provide local, long distance, dial-up, and broadband internet. I am proud to say that as of the end of 2005, we serve 72 percent of our territory with the DSL services.

Mr. Chairman, to answer your question directly, we believe universal service needs to be reformed. There are many elements in the H.R. 5072, the Universal Service Reform Act of 2006, that are the exact steps that need to be taken to ensure the sustainability of the critical fund.

Let me take a moment to mention some of the most critical elements that the policy-makers must keep in mind to reform the Universal Service Fund. The Universal Service Fund to construct, maintain, and upgrade the network to benefit all consumers.

In the infancy structure of telecommunication that larger companies decided they didn't want to serve the partially populated areas, the rugged terrain, they went ahead and served only the larger. It left the rural companies or the independent companies to serve out there in the high-cost areas.

Universal service was set up to help us serve these areas. And we have built networks out there today to sustain that and give them good voice-grade services.

The second thing is the base of the contributors must be expanded to include all providers who benefit from the network. Broadening the base of contributors to include all communications providers is vitally important to sustainability of the Universal Service Fund. The Universal Service Fund is wholly funded through the telecommunications industry. No federal appropriated money is used in this.

All service providers must benefit from the robust national network infrastructure. The current structure of the Universal Service Fund enabled us to achieve an impressive 94 percent penetration rate as of today. In order to achieve those same penetration rates with broadband or for whatever new technology will be offered after broadband, we need to modify the existing regime to broaden the base and expand the fund to include broadband services. Support must be based upon the provider's actual cost and not to be used to artificially incite competition.

Requiring all Universal Service Fund recipients to receive support based on their actual costs will increase the program's accountability. Rock Port, as small as we are, we pay into the fund. Everybody that is using the service should pay into the fund.

Additionally, many rural areas in our nation can't support more than one gas station, grocery store, or other commodities, let alone multiple communications providers out there.

The Universal Service Fund must not be capped. Unfortunately, this is something that is not in the House 5072. We believe that is very vital and very important on that.

Again, I would like to restate my support and NTCA's support for the Terry/Boucher bill. We believe it is an excellent start to reform our nation's universal service policy. We very much agree with many of the provisions in the bill, such as: expanding the scope of the Universal Service Fund to include broadband, broadening the base of contributors to the fund, tightening up the ETC status process, eliminating the identical support rule, permanently exempting the fund from the Anti-Deficiency Act, and eliminating the parent trap rule. We would like to work with the Representatives Terry and Boucher and members of the Committee to remove the cap on the fund.

Thank you again for allowing me to testify.

[Mr. Henagan's testimony may be found in the appendix.]

Chairman. GRAVES. Thank you, Mr. Henagan.

Don Schulte.

STATEMENT OF DON SCHULTE, MISSOURI NEA

Mr. SCHULTE. Good Morning, Chairman Graves. Thank you and the other members of the Subcommittee for allowing me to testify today about the benefits of the e-rate program and the need to ensure that it remains vital and stable.

My name is Don Schulte. I am currently a high school social studies teacher at Pattonville High School in Maryland Heights, Missouri. I have been a teacher for 19 years. And in that time, I've seen enormous changes in the technology infrastructure of our schools and the ways in which we use technology to teach, enhance curriculum offerings, strengthen parental involvement, and improve administrative efficiency.

Back in the dim ages, when I began teaching, there was not a single computer lab in the school. In 1992, we established our first lab with 12 computers. The students had to sit two students per computer, two students per computer. There was one AOL account that I could use to show students what the internet looked like.

Now every classroom has at least one computer in it, and every computer is wired to the internet. We have five computer labs for

technology-related courses. More and more content is Web-based these days, which makes the maintenance of connectivity not a luxury but a necessity in today's schools.

Thankfully, we are beginning to see more and more textbooks placed online. This helps combat a significant trend of back and hip injuries in our young people caused by carrying overweight backpacks full of books. My students have offered, by the way, not to carry those books. Anyway, that's different. We incorporate internet-based research skills into our lesson plans and homework assignments.

My school district is a suburban district with many course offerings. However, there are places in our state, in Missouri, that can only, only, offer a rich, well-rounded curriculum by using distance learning and internet connectivity. In fact, one of the first distance learning courses I remember was a Japanese course being offered online.

Currently, for instance, there are four school districts in southwest Missouri can only offer physics via distance learning. With the recent push in the business community and by the administration to place more emphasis on math and science, this simply will not be possible in many rural areas without internet connectivity. And I know that this is typical of rural areas across Missouri and across the country.

Parents have more ways to get involved in their children's education due to the e-rate program and what it has allowed our school districts to do. For instance, in Pattonville, parents can log onto a secure database to check their children's grades on assignments, check whether they attended a class, check whether they turned in their homework, and what the current class assignments are.

Routine, administrative functions are also made more efficient by the power of the e-rate program. Library card catalogs are now all electronic, as is the rest of the inventory of the library. So I can sit in my classroom and find out whether a particular book or resource material is currently in the library or whether it's been checked out.

My school district receives roughly $71,000 per year in e-rate funds. These funds help us pay for our T-1 lines, our emergency and alarm lines, and our long distance. Our superintendent's office indicates that without the e-rate funds, we would also likely loose access to library and media services offered through a company called MoreNet.

Given the importance of this funding, I am concerned, however, about the viability of the Universal Service Fund, which funds the e-rate program. As you know, the Telecommunications Act of 1996 requires traditional long-distance carriers to pay into the fund. But as other types of service increases, such as wireless and voice-over internet protocol, the stability and long-term viability of the fund is jeopardized.

That's why I along with the 2.8 million members of the National Education Association, support the Terry-Boucher bill, H.R. 5072, to ensure that e-rate funding continues to flow to schools and libraries across the country.

As I have indicated, internet connectivity is no longer a luxury. It is an absolute necessity if we're going to adequately prepare our young people to compete in the Twenty-First Century workforce.

Thank you very much for allowing me to provide an educator's viewpoint today.

[Mr. Schulte's testimony may be found in the appendix.]

Chairman. GRAVES. Thanks, Mr. Schulte.

Mr. Black.

STATEMENT OF ED BLACK, COMPUTER AND COMMUNICATIONS INDUSTRY ASSOCIATION

Mr. BLACK. Good morning, Chairman Graves, members of the Subcommittee. I am pleased to come before you today to discuss the pressing issue of universal service reform and Congressmen Terry's and Boucher's Universal Service Reform Act of 2006.

I am President and CEO of the Computer and Communications Industry Association. We're an association that represents a very wide range of hardware, software services, computer, telecom, internet companies, total revenues about $250 billion. So while we're involved in the building process, we're usually involved in the use of broadband in this country as well.

The century-old concept of universal service reflects a very noble and economically legitimate goal of promoting ubiquitous access to affordable communication service for all Americans, regardless of their geographic location. This commitment helped establish a communications network on which a social and economic fabric of the Twentieth Century was know.

However, in the Twenty-First Century, we're now witnessing increasingly swift and exciting changes in the technology of communications. The '96 Telecommunications Act sought to codify, preserve, and expand universal service. However, technological convergence has shattered the underlying assumptions of the act. Cable companies now offer voice. Phone companies are ready to roll out video services.

The telecommunications landscape has been dramatically altered, but the Universal Service Fund has not been changed. It has not adapted to encourage the more efficient, higher-quality technologies that could provide an exciting array of new services. It remains, instead, focused on promoting old copper wire telephone networks.

Traditional telecommunications services are migrating from old circuit switch networks to new and advanced internet protocol networks. This new technology can reduce the cost of providing services, especially in high-cost areas, and provide more advanced services, such as high-speed internet access. Access to advanced information services is essential for sustained economic development.

A small business in rural Missouri, Georgia, Oklahoma, or Alaska with access to a reliable high-speed internet connection can market and distribute their products globally as easily as a competitor in a large city.

The industrial revolution concentrated economic growth and expansion in large urban areas, but the information revolution makes physical location much less relevant. A correctly reformed Universal Service Program can help usher in a new age of prosperity

and growth for small businesses everywhere, especially rural America.

Universal service reform proposals tend to fall into two camps. One side sees universal service as a legacy system whose time has passed and seeks to gradually reduce the size and scope of the fund over time with an ultimate goal of its eventual termination. The other wishes to expand contribution base to a variety of new way communication services and provide new subsidies targeted at advanced services.

We believe we can both modernize the distribution mechanism and subsidize new technologies, not legacy ones, while carefully expanding the contribution base in a completely neutral manner while limiting the unchecked growth of the fund.

The perverse market distortions created by the current fund need to be corrected. Universal Service Funds were designed to support basic telephone service provided over a twisted-pair networks and exclude advanced services and networks, such as fiber optics and broadband internet access.

For decades, well over 90 percent of U.S. households have had basic telephone service. Thus, the fundamental goal of basic service has been met and been met for a while. Only about 20 percent of U.S. households, however, have broadband internet access. And the U.S. ranks about 12th or lower in the world in terms of broadband penetration.

To the extent the USF funds can be applied to support the development of rural broadband services, they are poorly targeted and inefficient. Many rural carriers actually realize a reduction in USF funding when their customers take broadband service. USF subsidies have lost their focus and have been morphed into a set of entitlement payments to a large or to a small group of largely rural income and telephone companies.

The application of other USF funds has created certain bizarre market distortions, one we call the Vail effect, where the largest portion of USF subsidies service the high-cost, typically rural areas. This means towns such as Vail, with very high real estate prices and some of our wealthiest citizens, is subsidized at the same rate as a poor Appalachian community or poor rural farm towns in Kansas.

We have also seen what we call the Nevada effect, in which the high-cost support funds are distributed according to total population on a statewide basis. So for a state like Nevada, which is extremely rural in most of its area but has two large urban areas, the statewide averaging means little or no support is assigned. As a result, a rancher in a very rural part of Arizona or other state would not be subsidized by USF but in the same type of geographic area in Montana would be.

We strongly applauds Congressmen Terry's and Boucher's legislation. It's a comprehensive bill designed to reform USF. Specifically, it updates the fund to promote broadband services, attempts to cap the fund to at least limit unchecked growth, and imposes a greater accountability for the use of fund monies. As the House moves forward in crafting the universal service reform, this bill could serve as a good framework for more extensive reform.

We do have a few specific concerns I would want to mention. One, the current fund is running a $700 million surplus from 2004. Any metric used to cap the fund should employ the amount of funds used in the previous year, not funds collected.

An eligible telecommunications carrier can only be a carrier that uses its own facilities. The vast majority of support from the fund will, therefore, be directed only at ILECs. We think some flexibility to experiment with other distribution mechanisms is worth doing at the state level.

We need information on the costs of building and maintaining a network in order to curb the growth of the fund and target the funds properly. That information for anyone who cares about efficient government spending is essential. And, yet, we don't have any requirement to gather that kind of information right now.

Finally, the targeting in the bill by wire centers is a very good approach to dealing with what we call the Nevada effect, but the Vail effect still is not actually addressed adequately in the bill. And we think you need to add, in addition to the wire center approach, some kind of a means test.

In conclusion, we want to stress that we care deeply about the important issues of communications ubiquity and economic competitiveness, both domestically and internationally, but unless restructured in the new context of today's rapidly evolving telecommunications and technology markets, universal service in America threatens to retard the very objectives it has traditionally served. We think correcting the disconnect between universal service policy and economic imperative to create a ubiquitous American broadband infrastructure is a major policy and legislative challenge that we cannot afford to not meet.

Thank you very much for the chance to testify and for your leadership in this area.

[Mr. Black's testimony may be found in the appendix.]

Chairman. GRAVES. Thank you.

I've heard mention the cap now three times, Mr. Williams, Mr. Henagan, and Mr. Black. You have all mentioned it. Can you talk to me a little bit more about that? You mentioned the cap is obviously designed to keep the fund from growing too much, but we also had testimony about removing the cap. In fact, Mr. Williams said we might be able to find a cap that is accessible. Could you explain that a little bit more and what would be acceptable?

Mr. WILLIAMS. Let me take a shot at that. And I think what I said was that the cap is antithetical to the scope of the bill that says we want to get a ubiquitous broadband network out there. And if there's a cap on the fund, there may not be enough dollars there to get the broadband network out there.

What I was referring to—and we have been working with Congressman Terry and Congressman Boucher trying to come up with some type of a cap that understanding that due to the politics involved, there may need to be a cap in whatever the House comes up with because of Chairman Bardin's opposition to USF.

And a couple of things we thought about as the fund, Universal Service Fund, as you know, now is capped. And as costs have grown and in some cases in the base of people receiving those monies has expanded companies are no longer receiving their actual

costs based on that they should be receiving because of the cap. So, in other words, in some cases, the monies they're receiving have been going down, maybe a reindexing of the fund to make sure that everyone is receiving the dollars that they should be, including the CETCs.

The wireless carriers, et cetera, who are in the fund, as I said in my testimony, if they receive dollars based on their own costs—and I think we can go along with that.

So that is just a couple of the ideas that we had when we were talking about it.

Mr. HENAGAN. What I was talking about was capping of the fund. I believe that if we take the right accountability of the fund today, it will seek its own level. If everybody reports on their own cost and we have some type of accountability of it, it will have adequate costs into the fund without a cap on it.

Mr. BLACK. I guess I would point out that the percentage, if you will, the fund is, in essence, a tax on providers. It has gone from its inception, I think, of about 4 percent up to about 12 percent. And some people are predicting that it may go in a few years up to about 17 percent of revenues of people inputting.

We want the fund. We want it to be used. We want it to be directed properly. But it is dangerous to have something which is just always expanding and taking more. The telecommunications industry at this point is at least close to being, if not the most, tax segment of the economy. And, yet, it has such dynamic potential.

So we're nervous about we're much better when we put good cost accounting, when we're making sure it's being well-used, but at some point the level of tax, in essence, is high enough. If we need extra money, frankly, we would be willing to have general revenues go into supplement if you need more.

The industry itself, the core industry, here should not be bearing a burden beyond a certain reasonable level. And I think we're concerned that it has seemed to have just been able to grow, mushroom its growth. And some kind of cap makes sense

Chairman. GRAVES. Let's talk about expanding it more, paying into it. And I'll just direct this to everybody. Can somebody give me an idea who at this point is not paying in? Obviously I think everybody has kind of mentioned expanding the folks that ought to be paying into it. And that is going to have an effect on the fund. But I will kind of throw that out there.

Give me an idea of who isn't at this point and how much it could be expanded. Bob?

Mr. WILLIAMS. Well, I mean, just a few that come to mind right now are VoIP providers, cable providers, broadband providers in some cases depending on what type of broadband. Those are three or four that come to mind, anybody that uses the network. And all those people use the network.

I might say here one of the things that concerned me about what Mr. Black had to say was he was talking about how we have no more need for this wired infrastructure out there because of the internet and the broadband that is available in these areas. Well, I don't know how it gets there if we don't have a network to take it over.

Mr. JOHNSON. And, Chairman Graves, one thing that I would like to clarify is that wireless carriers don't pay their fair share into the high-cost fund. Wireless consumers drew just over 10 percent of the total fund, approximately 330 million, but we now contribute over 34 percent to the total fund, or about $2.6 billion per year.

Mr. WILLIAMS. And, if you'll notice, I didn't mention wireless carriers.

Mr. JOHNSON. Okay. I just wanted to clarify any myth, though, that may be out there.

Chairman. GRAVES. We're kind of moving through, but you might expand it. How much could the fund be expanded if we opened it up? What is it going to do to the fund? Anybody can answer again.

Mr. WILLIAMS. Well, I think if you put it on—a couple of things that it does in this bill is it talks about when Mr. Black again is talking about the contribution level going to 17 percent, that is on interexchange carriers a percentage of their revenue—it's 17 percent—because that revenue base continues to shrink as long distance and interexchange carrier traffic goes down. And this network is used for all of these other means of communications that are not being there.

So I think part of the thing—and in the bill, it says, "Connections: IP Addresses," et cetera. If you take the amount of all of those — and I'm talking off the top of my head now, and don't hold me to this. But I think if you fully funded today's fun on a per-connection, per-IP address, per-number basis, it may be a dollar per number or per connection.

So when you put it in those things and you talk about all the connections to our network out there, I think it becomes a much more manageable way of doing it.

Chairman. GRAVES. Mr. Henagan?

Mr. HENAGAN. Mr. Chairman, one thing I would like to mention on paying into the fund is phantom traffic. Today Rock Port Telephone gets 17 percent today coming in as phantom traffic. I cannot track that.

Chairman. GRAVES. Expand on that. Talk to me about phantom traffic.

Mr. HENAGAN. Okay. Phantom traffic is—and I'm going to use towns in Missouri as how it gets into. Today people out of Rock Port, we get our traffic from Kansas City, goes into Stanberry. It goes into Maryville, Missouri.

My tandem is Maryville. Out of Maryville, I have what we call common trunks, which means all of my traffic goes together, two-way trunks. Everything that goes in and out of Rock Port is on common trunks. I have 117 common trunks. Out of that, the only way I can record it is that I get sufficient information to know what carrier it is over these common trunks.

Somebody is today stripping off what we call kit codes or how I know who to bill for it. They strip off the kit codes or strip off the billing data off of it where I cannot get it. So whenever I get the traffic and I record it in my switch, 17 percent my traffic for terminating in Rock Port, I cannot bill to anybody.

So we have to have accountability out there today so that we know who we need to bill. If we could keep on expanding and keep

on doing things as far as bringing more traffic in and opening this up without the right accountability, still it's going to be expanding up to a greater where we will have what we call phantom traffic, where there is no accountability to it. Does that—

Chairman. GRAVES. How widespread is that? You talked about in your particular area, but how widespread is that, phantom traffic? Is it happening everywhere?

Mr. HENAGAN. In Missouri. I have talked to other companies in Missouri, and it is happening in Missouri for sure because today we are getting traffic in without the right accountability on it to be able to do it.

Mr. WILLIAMS. I think it is an issue throughout the country. I know Mr. Merlis has probably got something to say about this.

Mr. MERLIS. Mr. Chairman, if I may, we have filed a petition with the Federal Communications Commission calling upon the commission to impose a rigorous tracking methodology in order to ensure that this phantom traffic is no longer phantom traffic.

The telecom carrier receives revenues from three sources: the end user; inter-carrier; that is, the traffic which needs to be tracked and billed; and universal service. If the traffic is not properly identified and the phone company cannot bill the phone company that sent the traffic, then the costs have to be borne by someone else in order to remain whole.

It is essential that the phantom traffic problem be resolved. Otherwise, increased demands will be placed on the Universal Service Funds, demands which at the current rate in the current environment further erode its long-term sustainability.

Mr. BLACK. Mr. Chairman, if I could, we agree that having accounting and costs in tracking this and we recognize phantom traffic is a problem, but I should point out it is really not. It's an inter-carrier issue.

What we are fundamentally talking about is the amount taxed to the Universal Service Fund itself. And, frankly, from one angle or perspective, what happens inter-carrier is very important to companies, but it is not that important in what amount of service is delivered to citizens and does not affect how much money goes into the fund.

I think those are really the core issues still that are out there: who pays into the fund, for whom does it go, what formula is used.

Mr. HENAGAN. Mr. Chairman, I believe that if we have everybody paying into the fund, the percent on the fund is going to go down, which I'm at the percent going up to 17 percent, but then if we have everybody paying with accountability or phantom traffic for the VoIP, for the cable, for all the others, that percent is going to go down. So out of this, if we get everybody paying in the right amount, it will seek its own level. And it will have a level that everybody will be pleased with, I believe.

Chairman. GRAVES. I don't want to completely dominate. Mr. Sodrel, do you have questions?

Mr. SODREL. Thank you, Mr. Chairman. I guess first I would just like to say there was a 100-year-old gentleman in our neighborhood. On his birthday—he lived in a rural area. And they asked him what was the most important thing that happened in his lifetime that made life better in the rural area. And he said highways,

the fact that they could get to market and the markets could get to them. I think being on the super highway, the information super highway, is going to be important for rural America in the coming century.

This really is interesting to me, Mr. Henagan, about this phantom traffic. I was in a bus business and trucking business before I got here. Obviously I wasn't in the communications business. If somebody used one of my vehicles or my facility and didn't pay me, I would really be upset. As a matter of fact, I look at that as theft, at the very least trespassing.

What is the penalty for somebody? If somebody sent phantom traffic on your trunk line and you knew who the person was, what is the penalty?

Mr. HENAGAN. Today because we have common trunks, I do not have a tandem and I have no direct connections with me, I cannot do anything with that traffic today. I cannot cut them off. I can't do anything. They can send phantom traffic to me today, and I have to accept it because it's coming over common trunks as they can send it in and I cannot put it in my switch to deny it because it is already in me and it's part of the system, the public switch network.

So somebody at Kansas City or somebody in Dallas can take it out, strip it out. And immediately it goes on the public switch network. And it gets delivered to me, and there is nothing I can do about it.

Every morning we record all the minutes that we have first thing. 8:00 o'clock every morning, we record every minute from the last 24 hours. We have been doing this since 1999.

I have all of the records involved of all of the phantom traffic. And we look at what we are losing on a daily basis and a monthly basis whenever we sum it up to see what we are losing.

And out of that, there is nothing I can really do. The theft is there. There's no doubt. But because it's common trunks, unless I go in and put a tandem in where I can have direct trunks come in to me and each carrier come in—and it's not feasible to do that because I have 1,800 access lines. Tremendous costs would go into the fund to do it.

Mr. SODREL. So, even if you knew somebody was doing this to you, you don't really have any recourse?

Mr. HENAGAN. That's correct. I cannot cut them off.

Mr. SODREL. You know, that not only affects the Universal Service Fund. I mean, that affects the prices people are paying in the rural area for the service. If you had 17 percent more traffic, obviously you wouldn't have to charge as much per minute for the existing customers.

Now, we a little earlier talked about the subsidies distorting markets. And, frankly, subsidies always distort markets. I mean, by their nature, they distort markets. So the question is, how do we want to distort the market? In what direction do we want to distort the market?

And I have always had an attitude the companies are not taxpayers or tax collectors. The ultimate payer is the customer of the company that's paying the tax. I mean, if you follow the string back to the end, it's actually the customer who pays the tax. So every-

body who uses the communications network anyplace is paying a tax for this Universal Service Fund.

So it seems to me that trying to find the common ground here, the goal being to keep rural people on the information super highway, the goal being to make sure they have access to markets and markets have access to them. And in doing that in a fashion that they can afford ought to be the goal, it seems to me. We ought to be able to get all of the parties together and figure out how we are going to do that.

Mr. Chairman, I was just amazed that somebody could basically steal your service and there's no recourse. You know, it's mind-boggling to me.

And I understand. See, I was in the service business as well. Sometimes people get the attitude when they steal service they're not really stealing because it's intangible. They can't put their hand on it. You know, if you go in the grocery store and you come out with 12 apples and you only paid for 6, it's tangible. People know they stole six apples. When you're in the service business, it's a little more difficult to convince people they stole something.

You know, if they agreed to pay for 100 miles and they took 120 miles, it's kind on intangible. They really couldn't see it, touch it, and feel it. But they are shoplifting. And that really troubles me. There ought to be some accountability in this system.

I don't really have any further questions, Mr. Chairman. Thank you.

Chairman. GRAVES. Mr. Merlis.

Mr. MERLIS. Thank you, Mr. Chairman.

Congressman, just to amplify what Mr. Henagan said, this is a situation which is very, very grave for the industry. As technology advances, there could be more of this forthcoming. And, as opposed to being in other services business—you mentioned the trucking business—you know from whom you receive that truckload.

What Mr. Henagan was describing is we don't know from whom we received that call in order to bill the person. So there is no remedy at law or in any other fashion other than to put the call through because you're not going to deprive the consumer of the call that had been made to him. And you're stuck with the bill. That's really what it comes down to.

The commission must act, the FCC must act, in this area in order to impose appropriate requirements and appropriate remedies so that phantom traffic is diminished. Now, there could be inadvertent dropouts of some of this information, but clearly at this level it is a conscious effort by some people in this network system to strip out the information.

Mr. SODREL. Thank you, Mr. Chairman. I don't have any further questions.

Chairman. GRAVES. Changing gears a little bit,—and I do want to ask Mr. Schulte because I can specifically deal with Missouri. What kind of service is there from the Universal Service Fund for, say, Missouri. I mean, how much do we get in terms of we have a state that has some very rural areas.

And we obviously have some very urban areas, St. Louis and Kansas City for starters, and then, of course, some pretty affluent areas in some of the smaller cities around. But just how much do

we get? You know, how much bang for the buck is there in a state like ours?

Mr. SCHULTE. Well, I was given advice, if I were asked a question I didn't know the answer to, to say, "We'll get that to you in writing." And I may just have to fall back on that.

I can give you something other than an exact number. We use something called MoreNet. Most every school in this state does. And the money that we receive helps pay for that and helps subsidize it, especially for rural districts.

You know how rural some of our districts are. I mean, it's miles and miles before you get to a school building. And there's no way they're going to get the access they need without some kind of subsidy from somewhere.

Chairman. GRAVES. Well, let's expand on that just a little bit because I know in some areas, we still don't have service. I mean, in my district, my Blackberry, for instance, only works in a very few places.

Obviously, you know, some of my friends, some of my constituents, you know, they don't have high-speed internet. So we're obviously still expanding and we're still going through the process of providing a lot of service to a lot of individuals.

My question to everyone is, if we don't expand or overhaul the Universal Service Fund, if we don't continue that service, then what does that leave? Where does that leave some of these schools? Where does that leave some of these customers?

I mean, it's just going to, as technology continues to advance, they're going to fall further and further behind. And in some cases, they're still behind because we just haven't been able to get service to them.

Mr. WILLIAMS. I think that's a good lead-in to what I wanted to say. So I think one of the things maybe we haven't emphasized up here today—and I think it goes back to the purpose for the Coalition to Keep America Connected. And we need to focus on the consumer, consumer and the school district, so be it, if you want to focus on both.

The important thing is that all of those consumers have access to the latest technologies, no matter where they live. And while I'm going to sit here and I may think that the wire line infrastructures to do that, my wireless friend thinks that the wireless infrastructure is the way to do that, I think at the end of the day, we have to have a system where the most economically efficient and the person best able to provide those services to everyone, no matter where they live, is going to need some support in rural areas and maybe even in urban areas because there are urban areas in your district that can't get broadband service to their house because of the way the infrastructure is.

So I think overall it's important that the consumer have those access to those services. And I think economically as this thing plays out, we've got to find out which is the most economically efficient way to do that.

And you're right. The job is not done right. It's not done yet, but we're working on it. We're working to expand it every day. And it's going to take some money. And that's why we're here. And that's why we're talking about universal service.

Mr. JOHNSON. We were talking earlier about capping the fund and what the impact of that would be, negative or positive. From my chair, I think it would be a negative impact, simply because, as Congressman Lee mentioned earlier, we're in a technology transition, more so in the rural areas, where experiences, such as yours, Chairman Graves, where your Blackberry works in St. Louis and Kansas City but you go to Sedalia, Missouri or Lexington, Missouri and it's not going to work.

You know, capping the fund would limit and prevent people in the rural areas for taking advantage of these emerging technologies. You know, people demand and want the same technology that they have in the urban and rural areas.

And I think a situation recently, where we're working with the Ellis County Management Association, the ambulance service, where Ellis County Management Association is covered by the 26,000 population area, primarily rural. Hays is a population center, but Victoria, Ellis, and some of the smaller communities are in that area of Kansas.

But they are looking at our technology to be able to transfer life-saving critical data to the hospital as they pick up a victim from a car accident or an industrial accident and transfer those vitals via a wireless network to the hospital to save minutes and possibly save somebody's life. But without the fund or capping the fund, I think that, capping the fund, would have a negative impact on bringing those types of technologies and services to the rural areas. And those services are available in the urban areas currently.

Mr. HENAGAN. Mr. Chairman, I would like to make a statement concerning what services. Currently we have six wireless carriers in our service area. Five of them are using what we call the traditional land line service. Either I'm feeding them with five or I'm feeding them with copper paired depending on what type of services they want.

For us to bring broadband out there, either wireless or it needs to be under some type of land line system depending on what they want, and to bring economic development in rural America, for us we need to look at all of the technologies. We need to be able to provide whatever the customer wants out there at affordable price. The customer is the primary thing.

We currently have a new company that is moving in to Rock Port, Rural Source, Incorporated, trying to bring jobs in from overseas. And we are providing them broadband access. They want to have at least a T-1 starting out with a DS-3 real near to the future. They're talking about bringing up to 50 jobs to rural America, to Rock Port. I need the funds to be able to build out in fiber to that building and to light that fiber.

And also providing good cellular service out there is very vital. We're mobile people today in a mobile society. So we need both sides. But it should be on accountability work. The cellular gets their costs, and we get our costs along with bringing the lowest cost available to the subscriber. Subscriber is the main thing.

For us to sustain northwest Missouri, that we can provide it out there with our loss of population, our loss of subscribers, we are doing economic development to bring that in. And universal service is very vital for us to do this.

Mr. BLACK. Maybe without rehashing some of the broad points, I'll mention a word that hasn't been really used in terms of who pays in and pays out, which is symmetry. If we're going to expand the base of who pays in, we ought to realize that companies who pay in and categories of companies also need to be—those categories need to be expanded on to pay out. They may be high-quality services that can be provided that will provide various benefits to citizens that also need to be on the receiving end to build those.

So it's just we really want to see universal service and see it strong. The cap I think is a recognition of political reality. We don't believe unended entitlement programs are growing and growing. But I think the restructuring of it can make sure that the funds when they are expended are really bringing the high level of technological advantages that will make people able to compete economically.

That's what we're after. We're not just after a physical thing. We're after a whole range of high technology capability that we want people to have at their fingertips. And I think that's why a rethinking of the formulas, both in and out, is very important and needs to be at a good level of funding that's tied to real cost, but it can't be totally open-ended.

Chairman. GRAVES. Mr. Sodrel.

Mr. SODREL. I don't have any further questions. Thank you, Mr. Chairman.

Mr. SCHULTE. Could I just tell one quick story—

Chairman. GRAVES. Yes.

Mr. SCHULTE. —that I think applies here just to illustrate what this means? And I think everyone here might already agree. I am a speech and debate coach, done it 19 years now. I was talking with a coach at a tournament about five years ago, and there were a bunch of us. One of the other coaches said to this coach—I believe he teaches in McDonald County, which is about as rural as you can get in the mountains of the Ozarks. And they said, "Your teams have just been doing great these past couple of years. They have just gone from being also ran, canon, fodder kind of teams to winning and doing great."

And he said, "Well, about two years ago, we got the internet, like you all have already always had. And that has made all the difference." See, when we're teaching, we're busy with the kids and the girl whose boyfriend—I spent an hour with her the other day. Her boyfriend broke up with her on Monday, and prom is Friday and all of that.

We're focused on other things. And we really appreciate, and we need you to have our backs when it comes to things like this to keep the internet and to keep the connectivity going so that we can focus on the kids.

Thank you for all you do here.

Chairman. GRAVES. Well, one of the main purposes for this hearing—and Representative Terry stated it—is to bring as much emphasis to this issue as possible to continue to try to push so we can move some legislation.

And I do believe we need to expand the Universal Service Fund. I think we need to do it in such a way that it accounts for technologies in the future. You know, we don't want to have to come

back because you all have a much better idea on where things are going than I do. But we know for a fact that technology is going to continue to change. There are going to be more and different ways of providing service and better ways of providing service.

And I think we need to update. I do think we need to overhaul the Universal Service Fund. We need to continue to provide technology to those rural areas. We have just got to figure out how to do that and how best to do it.

I appreciate everybody coming in. I know many have come from a long distance. But this is important. This issue is important. And the more pressure we continue to, the more attention we continue to bring to this issue, the better. And you all have helped out with that in a great deal. And we have had some great opinions. I appreciate you coming in.

Thank you very much. The hearing is adjourned.

(Whereupon, at 11:29 a.m., the foregoing matter was concluded.)

Opening Statement
Chairman Sam Graves
Rural Enterprises, Agriculture and Technology Subcommittee

Good Morning and welcome to this hearing of the Rural Enterprises, Agriculture and Technology Subcommittee. We will be examining the sustainability of the Universal Service Fund (USF) and whether reform of this program is needed.

The bedrock of rural telecommunications was a commitment by the federal government to provide universal service to all parts of America, including areas that are scarcely populated and expensive to service. The ultimate goal of the universal service policy is to ensure that every citizen, regardless of location, has affordable high-quality access to the public telecommunications network. The government planned to accomplish this by enacting a cost-recovery mechanism for providers that invested in network expansion in rural communities.

In 1996, when our nations telecommunications laws were overhauled, the USF was expanded to provide a cost-recovery service to low-income families, rural hospitals, schools, and libraries. Providing service comparable to urban centers was a major objective of the program.

For rural telecommunications companies, USF support is a critical means of cost recovery, but more importantly, it has afforded rural America the same technology and service as urban centers. Additionally, its contributions have helped ensure that schools and libraries have access to affordable telecommunications and information services allowing our children in rural communities' access to resources important to their education. It further encourages folks to stay in rural communities helping spur economic growth in these areas.

After a decade, Congress is again looking at re-writing the nation's telecommunications law. I think it is very appropriate to look at reforming the Universal Service Fund. New services have been introduced including Broadband and Voice Over Internet Protocol. Broadening the base of contributors and encompassing new technologies is important to the long-term sustainability to the USF.

My district is largely rural, and the USF is extremely important to my constituents. I will work to ensure that all of our citizens have the same access to communications options.

I applaud Representative Terry for introducing his legislation, H.R. 5072, the *Universal Service Reform Act of 2006,* and feel this discussion is important to have considering recent developments on telecommunications matters. Hopefully, with continued conversations about the Universal Service Program, we can encourage others to take a closer look into this matter and help make the necessary reforms to continue its contributions to rural communities.

Now I am going to turn to Representative Barrow to give his Opening Statement.

STATEMENT
of the
Honorable John Barrow, Ranking Member
Subcommittee on Rural Enterprises, Agriculture and Technology
Hearing on "The Future of Rural Telecommunications:
Is Universal Service Reform Needed"
House Committee on Small Business
May 3, 2006

Thank you, Mr. Chairman. It's critical for folks in rural areas to have full access to telecom services, and I'm glad you've called this hearing to make sure these services are both fair and effective.

Americans need access to phone and internet services at an affordable rate, and this access needs to include both rural and urban areas. The Universal Service Fund (USF) has been critical in achieving these goals.

Unfortunately, it appears that we've reached a point where the USF is paying out more than it's taking in. We need to make sure that the fund remains solvent, and continues to allow rural telephone companies to do their job. The fund, the businesses, and

the consumers are all critical factors in the continued economic development of America's rural areas.

I want to thank all the witnesses for coming in today. Unfortunately, I can't stay, but don't worry – we get to read over your testimonies very carefully. Together, we need to identify the problems and solutions related to the USF, and make sure that we're taking care of rural consumers without placing an unnecessary burden on the backs of small providers.

Thank you Mr. Chairman.

Good morning. I am **Robert Williams,** President of Oregon Farmers Mutual Telephone Company in Oregon, Missouri, and Vice President of External Affairs for American Broadband. I am also the immediate-past chairman of the Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO). I am here today to testify on behalf of the **Coalition to Keep America Connected**. I thank you for the opportunity to testify before you.

The Coalition to Keep America Connected effort is organized by the Independent Telecommunications and Telephone Alliance (ITTA), the National Telecommunications Cooperative Association (NTCA), the Western Telecommunications Alliance (WTA) and OPASTCO, whose memberships include more than 700 small and midsize communications companies. Together, these companies serve millions of consumers and 40% of the landmass across America. The Coalition also includes a vast number of rural consumers, small businesses and local policymakers.

The Coalition's mission is to ensure that all consumers have access to affordable telecommunications services and the latest technologies - no matter where they live. We are guided by three main principles. They are: Fairness, Affordability and Access. Fairness means that urban, suburban and rural consumers alike deserve to stay connected to their families, friends

and the world through communications technologies. Affordability means that technology is only useful when it's affordable to consumers. Congress must ensure that all Americans can receive communications technologies at affordable prices. Lastly, access means that every American should have access to the latest, modern technologies, no matter where they live.

Universal Service has remained the cornerstone of our nation's telecommunications policy for more than six decades, ensuring that all Americans enjoy the benefits of a nationwide integrated communications network. The Universal Service Fund is an essential element to ensure the fairness, affordability and access I just described. It ensures that necessary cost recovery is available to those who make the commitment to serve the national's most economically challenging markets.

The Coalition has developed several universal service principles that we believe must be incorporated into universal service legislation. Those priorities are:

- The universal service fund must continue to be an industry-funded mechanism, and neither supported through general tax revenues nor subjected to the federal Anti-Deficiency Act.
- The base of contributors must be expanded to include all providers utilizing the underlying infrastructure, including but not limited to all

providers of broadband connections and all providers of voice communications regardless of technology used.

- Support shall be made available for the cost recovery needs of carriers deploying broadband capable infrastructure.
- The contribution methodology must be assessed on all revenues or a revenues hybrid that ensures equitable and nondiscriminatory participation.
- Support must be used to construct, support, and maintain networks to benefit all consumers and must not be voucher, auction, or block grant based.
- Support must be based upon a provider's actual cost of service.
- Support must not be used to artificially promote competition.

The Coalition is very pleased that Congressmen Lee Terry and Rick Boucher, together with their staffs, have taken such a bipartisan leadership role through their legislation in working to ensure the vital policy of universal service remains solvent and forward looking. The Terry/Boucher bill, H.R. 5072, contains many provisions endorsed by the Coalition that would modernize the highly successful universal service program. The bill appears to have two goals: spur deployment of broadband services and control growth in the fund.

To this end, the bill attempts to expand the universal service program to cover deployment of broadband networks. I don't think anyone would dispute that broadband is an integral part of the commercial, economic and social viability of any community.

In particular, the Coalition supports expansion of the pool of providers and services that pay into the fund. The bill would require all providers that use telephone numbers, IP addresses or offer a network connection for a fee to the public to contribute to the fund. This is long overdue. Changes in technology have created loopholes that have allowed many new providers to evade contributing into the fund even though they benefit from the resulting network upgrades and investment.

Second, the Coalition supports the provision to eliminate the Federal Communications Commission rule that allows competitors to receive support based on the incumbent carrier's costs. Requiring all universal service fund recipients to receive support based on their own costs will increase program accountability as well as reduce demand for funds.

Third, the bill would implement stricter ETC designation requirements, such as demonstrating the ability to remain functional in emergency situations, satisfying customer service quality standards, offering local usage

comparable to other communications service providers in that service territory and meeting the newly required broadband speed requirements.

The Coalition, however, does not support provisions contained in the Terry/Boucher bill that would cap the high-cost universal service fund. A cap by its very nature means a carrier will not receive the support it is due and thus is antithetical to the very goal of universal service and is a disincentive to network investment. The cap will inhibit the bill's goal of 100% broadband deployment. We believe the principles discussed here go a long way towards meeting Congressmen Terry and Boucher's goal of limiting growth in the universal service fund and make the proposed caps unnecessary.

The Coalition to Keep America Connected stands ready and committed to working with all of you on these issues so critical to rural consumers. Thank you.

TESTIMONY OF

MR. JOHNIE JOHNSON
CEO AND GENERAL MANAGER
NEX-TECH WIRELESS

BEFORE THE

U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON SMALL BUSINESS
SUBCOMMITTEE ON RURAL ENTERPRISES, AGRICULTURE AND TECHNOGOLGY

MAY 3, 2006

INTRODUCTION TO NEX-TECH WIRELESS AND CTIA

I am Johnie Johnson, CEO and General Manager of Nex-Tech Wireless, a wireless service provider serving rural Kansas. Based in Hays, Kansas and owned by a group of independent telephone companies, Nex-Tech Wireless launched its wireless services in October 2005 and now serves approximately 9,000 wireless customers throughout Western and Central Kansas and employs over 50 people. The vast majority of our service area is rural and sparsely populated.

In the many decades since rural wireline networks were in their infancy, universal service subsidies have helped carriers construct vital infrastructure that underpins our nation's telecommunications network. In the Telecommunications Act of 1996 ("1996 Act"), Congress recognized that the future of rural America depends largely on deployment of wireless telecommunications infrastructure that allows consumers to have choices in advanced services that are similar to those available in urban areas. By permitting wireless carriers to access universal service funding to construct network infrastructure in areas that would not otherwise support the investment, Congress has opened the door to rural consumers having the health, safety, and economic development opportunities that are critical to bridge the technology gap between urban and rural America.

As a member of CTIA and Rural Cellular Association, we welcome the opportunity to provide comments on the draft bill by Congressmen Lee Terry and Rick Boucher. This testimony will also examine the current USF system and explore ways in which it can be improved. In particular, Nex-Tech Wireless' ability to participate in the USF high-cost program will bring overwhelming benefits to the rural residents we serve. This document will highlight some of those benefits, dispel some of the outstanding myths concerning the USF high-cost fund and make policy recommendations about universal service we believe will best benefit rural communities.

OVERVIEW

1. **Under the current system, rural wireless consumers who contribute to the fund are not seeing the benefits that they want and deserve.**

   - Wireless consumers now contribute roughly **$2.5 BILLON per year** to the federal universal service system or **34% of the total fund**.
   - Wireless carriers that are designated as Competitive Eligible Telecommunications Carriers ("CETCs") have drawn just over **$1 BILLION IN THE AGGREGATE SINCE 1996**.
   - Incumbent Local Exchange Carriers ("ILECs") draw roughly **$3 BILLION** per year, or roughly **50% of the total fund,** to maintain networks that are not growing. In the aggregate, we believe that consumers have spent roughly **$19 BILLION** since 1996 to subsidize high cost support to wireline networks.
   - Consumers served by rural wireline carriers pay in only **3.8% of the total fund.**

Bottom line: Congress must make it a priority to provide federal high-cost support to fund wireless infrastructure development for rural consumers who desperately want high-quality wireless networks. The health, safety and economic development benefits that flow from investing in mobile wireless communications infrastructure **ARE PRECISELY WHAT UNIVERSAL SERVICE SHOULD BE FUNDING IN RURAL AMERICA.**

2. **CETCs are demonstrating to the states that support is being used to build infrastructure in areas that would not otherwise see investment.**

   - Anybody who uses a wireless phone in rural America understands the huge difference in service availability and service quality compared to urban areas.
   - CTIA members understand how important it is for consumers to have access to mobile wireless services.
   - CTIA members have constructed new cell sites serving unserved and underserved communities in their ETC service areas that would not have been constructed without support.
   - The vast majority of states now require CETCs to report how support is being used. Vermont, West Virginia and now Minnesota provide good examples of states that have gotten the reporting requirement right.

Bottom line: Wireless carriers are demonstrating that their support is being used to drive infrastructure investment in rural areas that would not otherwise receive such investment.

3. **The current system of providing support requires wireless carriers to make efficient investments.**

   - Wireless carriers can only get support after, (1) we build facilities, and (2) we get a customer.
   - Wireless carriers are not guaranteed a return, so if we make a poor investment and only get a few customers, we are punished.
   - Support to wireless carriers in all areas is currently capped by the number of available customers in a particular area.
   - In states like Washington, that have targeted support to rural areas, several wireless carriers are fighting for a limited pool of support dollars in rural wire centers, but receive no support for serving urban wire centers.

Bottom line: Wireless carriers are concerned that ALL carriers be accountable. **Moreover, consumers should only subsidize efficient investments.**

4. **Consumers are increasingly demanding wireless services and deserve access to the services they have paid for.**

   - In 2006, businesses will spend more on wireless services than on wireline according to a study released in January by In-Stat. It is estimated that the demand for wireless data will grow an average of 18% per year, through 2009.

Bottom line: Congress should consider policies that guarantee rural communities keep pace with urban areas in the technology race.

TESTIMONY

Recently, the Consumer Electronics Association released a study that 17% of consumers who purchased their wireless phone within the past 90 days are relying solely on their wireless phones for voice service.[1] This is a significant jump from earlier reports that wireless substitution was roughly 9%. We believe that wireless is the future for voice communications and that sound public policy will encourage infrastructure development of wireless networks in rural areas that need support.

There is no sound public interest reason to deny rural consumers the technology they prefer. In reality, I can't think of anything that will widen the gap between rural and urban areas, and accelerate the brain drain out of rural areas more than attempting to control growth of the fund by limiting wireless carrier access to universal service funds.

It is a simple fact that wireless carriers cannot effectively compete in high-cost areas if only the wireline carrier is subsidized. Wireline carriers have the customers, the support, and a mature network. Wireless carriers need the same system of support to construct networks in areas that would not otherwise receive the level of investment needed to deliver high-quality services. Every time we construct a new cell site in an underserved area, consumers in roughly 144 square miles of land area have access to 911, E-911, and all of the service offerings that mobile wireless can provide.

Universal service must grow with the reality that consumers are best served by competition. The best thing Congress can do is insist that the FCC adopt rules for distributing federal universal service support that are competitively and technologically neutral. In addition, the FCC must develop mechanisms for verifying that carriers are using support for building and maintaining networks. Finally, carriers who gain customers must gain support and those who lose customers must lose support. The "cost-plus" mechanism that allows wireline carriers to invest inefficiently must end.

With respect to legislation being proffered by Congressmen Boucher and Terry, we applaud the inclusion of broadband as a supported service. We encourage the Congress to ensure that the FCC and the states enact competitively neutral rules for contributing to and drawing from the fund to provide broadband services. Today, we are seeing the proliferation of uses for mobile broadband services and rural consumers need these tools to compete with their counterparts in urban areas.

We are concerned about the proposal to provide support to each class of carrier, based on its own costs. After much careful consideration, the FCC rejected this proposal years ago, and for good reason. After a transition period, support must be provided on the forward-looking costs of operating an efficient network, similar to the system in place today for the large "non-rural" carriers. We support this because it does not reward inefficiency and because urban consumers should not be subsidizing basic services in an amount that exceeds that of an efficient provider.

We also understand that the bill proposes to require carriers use their own facilities to make universal services available throughout a service area. The 1996 Act requires carriers to use their own facilities, or a combination of facilities and resale. This new requirement would be one that wireline carriers could not meet in that their facilities only

1 "The Wireless Purchasing Study: Measuring Satisfaction and Loyalty", Steve Koenig, Senior Manager, CEA.

provide service at very small points at the end of their networks. We think the better course is for Congress to continue current policy, which prohibits carriers from receiving high-cost support when they serve a consumer solely via resale. As a result, each carrier has an incentive to serve high-cost consumers with its own facilities in order to capture both consumer and support dollars.

A proposed requirement for competitors to offer free minutes of local exchange service comparable to that offered by other communications service providers in the service area is also problematic. Regulating in this area is fraught with complications, in no small part because competitive voice offerings from wireless carriers already exceed the value proposition offered by wireline carriers by a significant margin for most consumers. We offer mobility and wide local calling areas that ILECs do not.

We think the better course is to permit consumers to choose the service they value most and focus on making each carrier accountable for the funds they get – to drive the infrastructure needed to provide benefits and eventually minimize the amount of support needed to serve rural consumers.

In order to clear the record, we review below several myths that have been proffered to date, and our response to each.

MYTH: WIRELESS CARRIERS THAT ARE CETCs ARE RESPONSIBLE FOR "BALLOONING" OR "EXPLODING" THE HIGH-COST FUND.

FACT: A close examination of the facts about the high-cost fund shows nothing could be further from the truth.

We have heard that universal service and in particular, the "high-cost fund" is going bankrupt because of the increase in the number of CETCs. More alarming perhaps is the allegation that soon there will be no money left in the fund to sustain telephone services in rural areas, again as a result of CETC designations.

The most recent figures available show the high-cost fund provided $3.4 billion in 2004. Of the roughly $3.4 billion in federal high-cost support distributed in 2004, wireless CETCs received approximately $333 million, or around 10 percent of the total.[2] Final figures for support provided in 2005 are not yet available, however we estimate the amount of support to CETCs to be approximately $700 million. Without a doubt, support to new entrants has risen significantly on a percentage basis, notably because it began at zero.

Since 1999, support to ILECs, which operate mature networks that typically are not growing, has gone from approximately $1.7 billion per year to approximately $3.15 billion per year, a total increase of roughly $1.4 billion per year.[3] Of that increase, roughly $620 million per year represents a real dollar increase in funding. The rest represents support that the FCC has transferred from carrier rates into the universal service program.

The following two tables illustrate ILEC and CETC draws:

2 Source: Universal Service Administrative Company Annual Report, 2004. Available at http://www.univeralservice.org/_res/documents/about/pdf/2004-annual-report.pdf

3 See *id.*

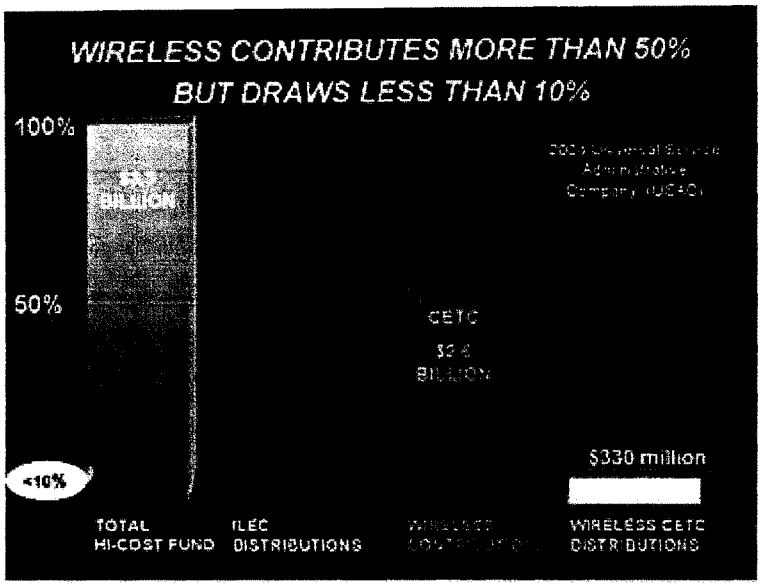


Table 19.5
High-Cost Support Received by ILECs and CETCs
(In Millions of Dollars)

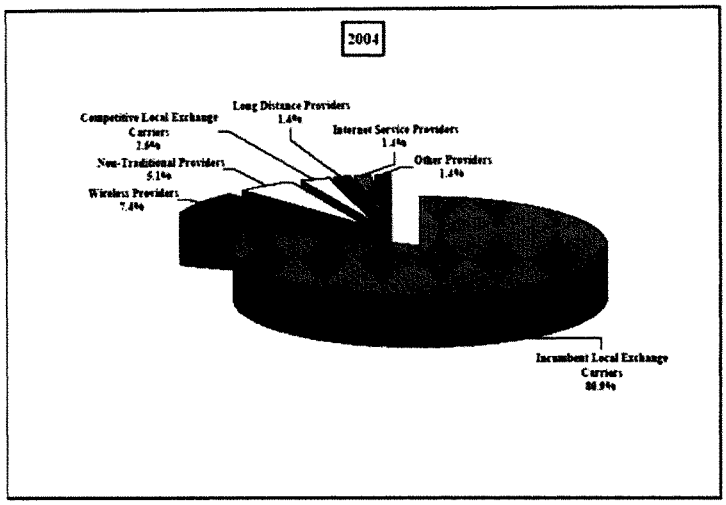
	ILECs	CETCs	Total	Percent CETCs
1996	$1,188	$0	$1,188	0.0 %
1997	1,263	0	1,263	0.0
1998	1,690	0	1,690	0.0
1999	1,717	1	1,718	0.0
2000	2,233	1	2,235	0.1
2001	2,575	17	2,592	0.7
2002	2,889	46	2,935	1.6
2003	3,142	131	3,273	4.0
2004	3,155	333	3,488	9.5

Note: ILECs is an abbreviation for incumbent local exchange carriers. CETCs is an abbreviation for competitive eligible telecommunications carriers. CETCs include both wireless and wireline carriers.

Source: National Exchange Carrier Association (1996-1997).
Universal Service Administrative Company (1998-2004).

While CETCs have collected a total of approximately $529 million in high cost support through 2004, ILECs have received roughly $19 billion in federal universal service subsidy during the same time period. In many states, rural ILECs receive substantial support from state universal service programs as well.

Chart 19.2
Universal Service Support Received by Service Provider Type



Source: *Trends in Telephone Service*. Industry Analysis and Technology Division, Wireline Competition Bureau, Federal Communications Commission. 2005. Available at www.fcc.gov/wcb/iatd/trends.html

Growth In Support To Competitive Carriers Is The Predictable Result Of Sensible USF Disbursements

Funding to new competitors has increased – it is a predictable outcome of sensible universal service policy. Congress must continue to permit competitive entry into rural areas and get beyond short-run "growing pains" in order to achieve the maximum benefits to rural consumers. By continuing to provide appropriate incentives for new telecommunications providers to invest in high-cost areas, rural customers will receive increased quality and quantity of services at lower prices.

MYTH: WIRELESS CARRIERS DON'T PAY THEIR FAIR SHARE INTO THE HIGH COST FUND.

FACT: <u>WIRELESS CONSUMERS, who draw just over 10% of the total fund (approximately $330 million) now contribute over 34% of the total fund, or roughly $2.6 BILLION per year.</u>

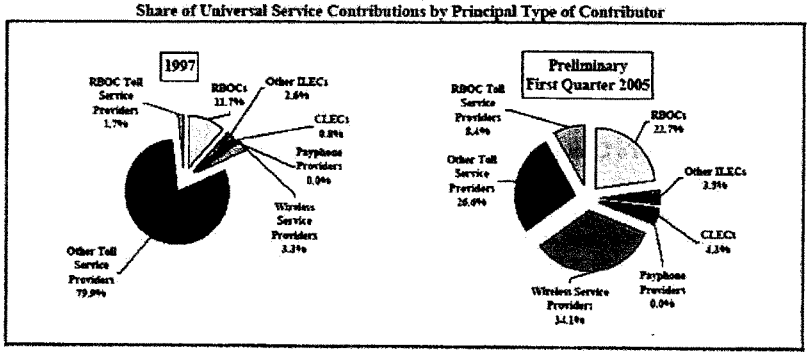
RURAL WIRELINE carriers, who draw 50% of the total fund (approx. $3 Billion) contribute only 3.8% of the total fund.

Make no mistake – the current system is unfair to wireless consumers who want to receive service quality and service choices that are reasonably comparable to those that are available in urban areas – *as promised by Section 254 of the 1996 Act.*

With over 200 million wireless consumers, each of whom pays in roughly $1.00 per month, wireless now contributes roughly $2.5 billion each year and that number is rising steadily. Yet, wireless CETCs only draw approximately 10% of those funds to assist with deploying and expanding wireless service in rural areas.

While the large wireline carriers such as Verizon, BellSouth, and AT&T contribute 22.7% of the total funding, other ILECs, which include rural wireline carriers, contribute only 3.8%. The table below illustrates each class of carriers' contributions to universal service:

Chart 19.8
Share of Universal Service Contributions by Principal Type of Contributor



We can think of no better use for federal high-cost support than the investment in new infrastructure by carriers willing to demonstrate that support is being properly invested, to provide rural consumers with high-quality service and service choices that are comparable to those in urban areas. **Any legislation must accelerate wireless infrastructure development in rural areas – not impede it.**

MYTH: SUPPORTING WIRELINE AND WIRELESS CARRIERS ON THEIR OWN SEPARATE COSTS WILL CURB FUND GROWTH.

FACT: Supporting each class of carrier on its own costs will retard or prevent competitive entry, will be extraordinarily expensive to implement, will require regulators to pick winners, and will ultimately cost the fund more than the current system.

While supporting carriers on their own costs is a catchy mantra, the FCC rejected it after years of rulemaking proceedings. The FCC's files contain testimony of reputable economists who have also rejected this approach. If, in fact, wireless technology is more efficient, then it is not fair to require urban consumers to contribute more than is needed to fund an efficient provider of services.

Under the bill's proposal to fund each carrier on its own costs, wireless competitors, in the short term, are going to draw substantially more from the universal service fund than they do today. A "build it and we'll pay for it" approach was fine when simply connecting houses to the network was the goal, but if the goal of providing rural consumers with modern technology is to be realized, we have to find ways to support efficient providers of services.

We think the better approach is the one the FCC selected. Pay competitors only the same "per line" support as the incumbent, and only pay after they first build facilities and get a customer. Under this mechanism, support to all competitors is capped by the number of available customers and competitors must fight for customers and support dollars. The market punishes imprudent investments by not providing enough support and customer dollars to justify the risk capital invested. My discussion on disaggregation below explains how newcomers can be rewarded while at the same time incumbents can be protected.

We also note the administrative costs of paying each carrier on its own costs. As new technologies such as satellite, Wi-Max, and unlicensed spectrum providers line up to enter rural areas, presumably the FCC would have to develop a cost model for each to determine the appropriate level of support. The cost of doing so would be enormous and would not deliver the benefits that the current system does.

MYTH: YOU CAN CONTROL GROWTH IN THE FUND BY LIMITING THE NUMBER OF COMPETITORS IN A SERVICE AREA

FACT: Limiting the number of carriers in a service area robs rural communities of the benefits of competition.

Multiple carriers in a service area competing for customers results in cheaper, higher quality voice and broadband services.

Policies that limit the number of carriers who may receive USF support in a given area are contrary to the goal of allowing Americans to receive wireless voice and broadband services in rural areas. The universal service program already has protections in place to cap growth and expenditures in a service area:

- The current distribution system caps the amount of federal support available to wireless carriers serving an area, while NOT capping support to rural incumbent landline carriers.
- The amount of funds available in any high-cost area is capped by the number of customers. In other words, wireless competitors can only receive support if they are successful in getting a customer. When more than one wireless competitor is designated in an area, they must fight for consumer revenue and support.
- Moreover, since the FCC's rules prohibit support to be paid when a customer is served via resale, wireless CETCs must first construct facilities in high-cost areas before getting any support.

The current system, when combined with disaggregation of support, discussed below, are key elements in achieving the dual goals of advancing universal service and promoting competition in rural areas.

MYTH: WIRELESS PROVIDERS "CREAM SKIM" AREAS WHERE IT IS FINANCIALLY BENEFICIAL TO OPERATE

FACT: Current high-cost fund regulations prevent cream skimming.

We have heard this concern expressed in many forms. The most common is the "pole in the tent" analogy, that is, if wireless carriers are allowed to skim off the most lucrative customers, who represent the tent pole, then incumbent wireline carriers could go out of business having to serve the remaining low-margin customers, and the tent will collapse.

My personal experience teaches that a wireless carrier, indeed any newcomer, is going to chase the cream – the high-end customers, the low-cost areas, and the most lucrative markets ***irrespective whether they are designated as ETCs.*** In fact, without ETC designation, a newcomer is free to do just that without any obligation to extend service to low margin or high-cost areas. The only reasonable conclusion that can be drawn is that cream skimming can only be minimized by placing newcomers on a level playing field with incumbents and adopting rules

to stop newcomers from getting universal service support in those areas that are low-cost for incumbents, such as population centers in rural areas.

Fortunately, the FCC set up rules five years ago to protect ILECs from subsidized competition in their most lucrative areas. Wireline carriers participated in and approved of such rules, which permit them to redirect support outward to their highest-cost areas and remove it from their "cream" areas. That process, known as disaggregation, is working in many areas.

We recommend Congress consider Washington state as an example of how to reform USF. Along with the cooperation of rural ILECs, all carriers have targeted or "disaggregated" universal service funds to the highest-cost areas within the state. As a result, those designated in low-cost areas receive no support and those designated in high-cost areas receive a predictable amount of support. Targeting funds in this manner has kept growth in the fund down while delivering services where they are needed most.

In Washington, wireless competitors draw only 32% of the total support in the state, compared with 68% drawn by wireline carriers. Wireless carriers are drawing less despite the fact their networks require significant capital expenditures to serve throughout the state. They are only rewarded when they get a customer in high-cost areas, which means they have to build facilities in the outlying area in order to get their first dollar of support.

Disaggregation also solves the problem of defining service area boundaries for newcomers. When an area is disaggregated, regulators have more flexibility, because if a newcomer serves predominantly low-cost areas, it will receive a lesser subsidy. If it serves higher cost areas, it will receive higher levels commensurate with the type of area being served.

Finally, it is important to note that under the current system, when more than one wireless competitor is designated in an area, they must fight for consumer revenue and support and sparsely populated areas will not yield enough "per line" support to allow multiple carriers to construct facilities.

We urge Congress to recognize the very useful tools developed by the FCC to more accurately target support to high-cost areas so as to minimize harm to ILECs and properly reward competitors willing to invest in areas that need it most.

BENEFITS OF USF TO RURAL AMERICA

High-Cost Support for Wireless Consumers Provides Vital Health and Safety Benefits to Rural Areas

In closing, we must note that in urban areas, it is taken for granted that one can complete a wireless call in an emergency. In a very short time, urban consumers' expectations for wireless have risen enormously, to the point where the failure to complete an important health or safety call is newsworthy.

In many rural areas, expectations are often very different. Consumers living in these areas understand that wireless phones work in larger towns and on major roads, but might not work as well in rural terrain. Although things are changing, many rural consumers have traditionally seen mobile phones more as ancillary communications tools, rather than devices that can be counted on to provide primary telephone service.

The best thing the FCC and Congress can do to protect the health and safety of rural Americans is to ensure that critical wireless infrastructure continues to be built out in rural communities. **The high-cost fund has provided the incentive to invest in better technologies and services that ultimately result in improved emergency communications.** Nevertheless, as more people come to rely on the versatility and convenience of wireless technology, the expectation for improved wireless services will grow in these communities.

We can think of few achievable goals more important than driving investment into rural areas that will improve the infrastructure needed to complete emergency calls. Encouraging wireless carriers to become CETCs and ensuring that funds are spent on network construction is critical to delivering this vital benefit to rural America.

High-Cost Support in Rural Areas Drives Economic Development

As a rule, our nation's rural areas have long trailed cities in terms of economic development. **Use of high-cost support to improve infrastructure has a significant economic impact on small communities** and is a key to closing that gap. Today, many companies and people consider rural areas as more attractive places to locate and to live and one of the major factors involved in selecting a community is the quality of its telecommunications infrastructure.

Wireless service is a very important factor in the equation. More and more companies and people today rely on wireless phones to improve efficiencies and manage their businesses. The examples we've cited above are just the tip of a much larger story. As economies around the world become more interdependent, our rural areas have to compete not only with American business, but with foreign business as well. Universal service funds, used properly to improve our infrastructure, will enable America to compete better on the world stage, with countries like Japan and South Korea, who today are far ahead of us in both broadband and mobile wireless service development. We can think of no better use for federal high-cost support than to provide the tools necessary for our rural areas to compete.

Statement of Edward Merlis
Senior Vice President, Government and Regulatory Affairs
United States Telecom Association
Before the House Small Business Committee
Subcommittee on Rural Enterprises, Agriculture & Technology Policy hearing
The Future of Rural Telecommunications: Is Universal Service Reform Needed?

May 3, 2006

Mr. Chairman and members of the Subcommittee, I am Edward Merlis, Senior Vice President, Government and Regulatory Affairs of the United States Telecom Association (USTelecom). On behalf of our more than 1,200 innovative member companies ranging from the smallest rural telecoms to some of the largest corporations in the U.S. economy, I want to thank you for this opportunity to discuss the need for universal service reform.

Our member companies offer a wide range of services across the communications landscape, including voice, video and data over local exchange, long distance, Internet and cable networks. We are united in our belief that it is time to update the nation's communications laws to reflect the dramatic technological and marketplace changes all consumers have witnessed in recent years.

In late 2004, our board unanimously adopted twin principles that we believe should serve as the foundation for updating our nation's telecom laws:

- Ensuring a strong and sustainable Universal Service system to provide affordable, reliable telecommunications for all Americans in the 21st century;
- Establishing consumer-controlled, market-based competition by eliminating government-managed competition.

The current universal service funding system is eroding at a rapid pace and must be reformed. These key steps will help strengthen and preserve universal service:

- Broaden the base of contributors;
- Target recipients carefully; and,
- Provide universal service support to networks in order to speed broadband deployment, without placing an undue burden on fund contributors.

We appreciate the Subcommittee's interest in this important issue. We would also like to commend the House Rural Caucus for its work over the past 16 months to ensure that all Americans have access to affordable and reliable communications services.

In your letter of invitation, you asked that we comment on several questions addressed in legislation recently introduced by Representatives Terry and Boucher. I am pleased to do so.

First let me say that USTelecom applauds the comprehensive approach to universal service taken in H.R. 5072.

On the contributions side of the ledger, the bill has sound policies that should improve the stability of universal service funds by:

- Assessing intrastate revenues;
- Allowing the FCC flexibility to assess numbers, revenues or both ;
- Assessing VoIP; and
- Assessing broadband.

Broadening the base of contributors to include intrastate services, cable modem, and VoIP will help to ensure that universal service funds are available to meet the important goal of making voice service available to all Americans.

On the distribution side of the ledger, the bill takes a number of prudent steps to ensure universal service support is better targeted. These include:

- Utilizing actual costs as the basis for universal service support;
- Increasing support for high cost areas for non-rural companies;
- Imposing greater accountability for use of funds;
- Making broadband eligible for USF; and
- Requiring communications providers that originate traffic to provide sufficient identification in order to stop phantom traffic.

The bill also fixes a problem with the application of the Anti-Deficiency Act. Another provision that should be of particular interest to this committee would prohibit the FCC from restricting Universal Service support to a single, primary connection to the public telephone network. Our companies construct and maintain networks in some of the most expensive service areas in the country, characterized by low population densities and difficult terrain. A primary-line restriction would undermine their ability to sustain and to modernize these communication networks. And the cost of doing business in those areas would skyrocket, particularly among small businesses.

On the other side of the Capitol there are a number of universal service proposals that show some promise in helping to foster the development of rural areas. For example, Senator Conrad Burns has recently introduced comprehensive USF legislation – S. 2556. His bill would broaden the contribution base to include intrastate revenues, broadband and broadband voice, as well as allow distribution of support universal service funds for broadband. Senators Smith, Dorgan and Pryor have introduced legislation that would broaden the revenue base, address intercarrier compensation and create a $500 million broadband account. Lastly, I would note that there is another bill in the Senate (S. 2113) that would reduce and cap the universal service fund and abdicate responsibility for this program to the states.

Mr. Chairman, we believe offering video over our broadband networks will be a key driver for broadband deployment across the nation. As local telecom companies deploy video services, broadband penetration rates will grow and thus provide the benefits of broadband deployment to ever increasing numbers of citizens and small businesses across the country.

That is why USTelecom is committed to establishing a consumer-controlled, competitive marketplace for video, and eliminating unnecessary and burdensome government barriers to advanced services.

I am certain most in this room have heard about how some of our member companies have begun to offer video services after working for months to obtain a franchise. Once they have entered a market, prices have dropped on average 20% for consumers. Telecom companies of all sizes, small and large, are struggling to overcome these obstacles to bringing consumers more choice.

One example is the story of Ben Lomand Telephone, in McMinnville, Tennessee, which has been the focus of a major advertising initiative by USTelecom. This locally owned coop has the capability to offer video service to 60% of its approximately 42,000 customers right now; and expects to be able to offer it to 100% of its customers sometime next year. But before the company can bring much-needed video competition to those consumers, it must apply for and receive 25 different franchises – some to serve as few as 100-200 telephone customers. After 18 months, Ben Lomand has received only 15 franchises. This cumbersome, archaic franchising process is a significant barrier to competitive entry into the local video market, both urban and rural. And as I said before, video is a major, if not the major, driving force behind broadband penetration.

As Congress moves toward updating our nation's telecom laws, no segment of our country has more to gain and more at stake in this debate than rural America. It is critical that we have policies that encourage investment and head-to-head competition throughout the country...policies that speed new services, choices and value to consumers...while upholding vital social objectives that remain important to the nation—chief among them, our commitment to ensuring affordable, reliable access to a dial tone for all Americans; an objective that is met through a sustainable universal service program.

Again, Mr. Chairman, thank you for this opportunity to appear today.

Statement by
Raymond Henagan
CEO/Manager
Rock Port Telephone Company
Rock Port, Missouri

On behalf of the
National Telecommunications Cooperative Association

Before the
U.S. House of Representatives Committee on Small Business
Subcommittee on Rural Enterprise, Agriculture and Technology
May 3, 2006

Good morning. I am Raymond Henagan, CEO and Manager of Rock Port Telephone Company in Rock Port, Missouri. I am here today to testify on behalf of the National Telecommunications Cooperative Association. We thank you for the opportunity to testify before you today.

Rock Port Telephone serves three exchanges in 189 square miles and 1,823 access lines, or about 9.6 customers per square mile. In contrast, here in Washington, DC there are approximately 16,000 telephone subscribers per square mile.

Rock Port Telephone is a full service telecommunications provider offering local, long distance, dial-up and broadband internet access via DSL. I am proud to say that we provide broadband access to 72% of our service territory.

Mr. Chairman, to answer your question directly, we do believe that universal service needs to be reformed and we believe that many elements contained in H.R. 5072, the Universal Service Reform Act of 2006, are exactly the right steps to take to ensure the sustainability of this critical fund.

Let me take a moment to mention some of the most critical elements that policymakers must keep in mind when reforming universal service.

Universal service support must be used to construct, maintain and upgrade networks to benefit all consumers.

In the infancy of the telephone industry large monopoly companies realized it was not economically feasible to serve much of rural America due to low population density, relatively isolated and often rugged terrain. Thus, they did not build networks serving rural America. As a nation, we quickly realized the economic burdens of serving rural and high cost areas with vital telecommunications services.

As a result, the nation stood behind the idea of universal service bringing comparable services and comparable rates to all Americans no matter where they live. Due to this highly successful policy, over 1,200 small, community-based telecom providers prospered in rural America to serve the telecommunications needs of their communities. Without the national commitment to universal service, these networks would not have been built.

Policymakers must understand that universal service support is for the deployment, maintenance and upgrading of communication networks. Communications providers do not build networks one connection at a time. Rather, networks require substantial financial investment and are built to be scaleable and expandable to meet future consumer demands for new technologies and services.

The Universal Service Reform Act of 2006 recognizes this important fact.

The base of contributors must be expanded to include all providers who benefit from the network.

Broadening the base of contributors to include all communications providers is vitally important to the sustainability of the universal service fund. The universal service fund is wholly funded through the telecommunications industry. No federal appropriated money is used.

All service providers and consumers benefit from a robust national network infrastructure. The current structure of the universal service fund enabled us to achieve our impressive 94% telephone penetration rate. In order to achieve those same penetration rates with broadband and for whatever new technology will be offered after broadband we need to modify the existing regime to broaden the base

and expand the fund to include broadband services. The Terry/Boucher bill seeks to accomplish this goal.

Support must be based upon a provider's actual cost and must not be used to artificially incite competition.

Requiring all universal service fund recipients to receive support based on their own costs will increase program accountability as well as reduce demand for funds. Currently, a competitive carrier entering an ILEC territory receives support based on the incumbents cost. Requiring each universal service competitive entrant to document its cost will greatly improve program accountability and ensure that funds are being used for their intended purpose. Basing universal service support going to competitive entrants on their cost instead of that of the incumbent will also ensure competitive neutrality of the fund.

Additionally, many rural areas in our nation can't support more than one gas station, grocery store or other commodity service let alone multiple communications providers. While rural carriers welcome competition in areas that can support it, universal service should not be used to artificially encourage competition in areas it would otherwise not occur. Tightening of the ETC requirements will help ensure that universal service monies support the intended goal of guaranteeing all Americans have access to comparable services at rates comparable to those in urban areas.

The Universal Service Reform Act of 2006 takes appropriate steps to alleviate these problems.

The Universal Service Fund must not be capped.

Unfortunately, this is something that the Terry/Boucher bill does do. Policymakers must realize that they can't have it both ways. A capped fund will impede the efforts of communications companies building out broadband services to the hardest to reach and most expensive places in this country. Communications is a very capital intensive industry and a capped fund will make it very difficult to reach every corner of this country with broadband in the near future.

Conclusion

Again, I would like to restate my support and NTCA's support for the Terry/Boucher bill. We feel it is an excellent start to reform our nation's universal service policy. We very much agree with many of the provisions in the bill such as: expanding the scope of universal service to include broadband, broadening the base of contributors to the fund, tightening up the ETC designation process, eliminating the identical support rule, permanently exempting the fund from the Anti-Deficiency Act, and eliminating the parent trap rule. We would however, like to work with Representatives Terry and Boucher and members of this committee to remove the cap on the fund.

Thank you again for inviting me to testify before you today. I look forward to your questions.

TESTIMONY OF DON SCHULTE
SOCIAL STUDIES TEACHER AT PATTONVILLE HIGH SCHOOL
MARYLAND HEIGHTS, MISSOURI

U.S. HOUSE OF REPRESENTATIVES SMALL BUSINESS COMMITTEE
SUBCOMMITTEE ON RURAL ENTERPRISES, AGRICULTURE AND TECHNOLOGY
MAY 3, 2006

Good Morning, Chairman Graves. Thank you and the other members of the subcommittee for allowing me to testify today about the benefits of the E-Rate program and the need to ensure that it remains vital and stable. My name is Don Schulte, and I am currently a high school social studies teacher at Pattonville High School in Maryland Heights, Missouri. I have been a teacher for 19 years, and in that time I've seen enormous changes in the technology infrastructure of our schools and the way in which we use technology to teach, enhance curriculum offerings, strengthen parental involvement, and improve administrative efficiency.

When I began teaching, there was not a single computer lab in the school. In 1992, we established our first lab with 12 computers. The students had to sit two students per computer. There was one AOL account that we could use to show students what the Internet looked like. Now, every classroom has at least one computer in it, and every computer is wired to the Internet. We have 5 computer labs for technology-related courses. More and more content is web-based these days, which makes the maintenance of connectivity not a luxury but a necessity in today's schools. Thankfully, we are beginning to see more textbooks placed online. This helps combat a significant trend of back and hip injuries in our young people caused by carrying overweight backpacks full of books. We incorporate Internet-based research skills into our lesson plans and homework assignments.

My school district is a sub-urban district with many course offerings; however, there are places in our states that can only offer a rich, well-rounded curriculum by using distance learning and Internet connectivity. In fact, one of the first distance learning courses I can remember was a Japanese course being offered online. Currently, four school districts in [southeastern?] Missouri can only offer Physics via distance learning. With the recent push in the business community and by the Administration to place more emphasis on math and science, this simply will not be possible in many rural areas without Internet connectivity. And I know that this is typical of rural areas across the country.

Parents have more ways to be involved in their children's education due to the E-Rate program and what it has allowed our school district to do. Parents can log into a secure database to check their children's grades on assignments, whether they attended school, whether they turned in their homework, and what the current class assignments are.

Routine, administrative functions are also made more efficient by the power of the E-Rate program. Library cards are now all electronic, as is the inventory of the library. So I can sit in my classroom and find out whether a particular book or resource material is currently in the library or whether it's been checked out.

Our school district receives roughly $71,000 per year in E-Rate funds. These funds help us pay for our T-1 lines, our emergency and alarm lines, and our long distance. Our superintendent's office

indicates that without E-Rate funds, we would also likely loose access to library and media services offered through a company called MoreNet.

Given the importance of this funding, I am concerned, however, about the viability of the Universal Service Fund which funds the E-Rate program. As you know, the Telecommunications Act of 1996 requires traditional long-distance carriers to pay into the Fund. But as other types of service increases, such as wireless and VOIP, the stability and long-term viability of the Fund is jeopardized. That's why I, along with other 2.8 million members of the National Education Association, support the Terry-Boucher bill—H.R. 5072—to ensure that E-Rate funding continues to flow to schools and libraries across the country. As I've indicated, Internet connectivity is no longer a luxury, it is an absolute necessity if we're going to adequately prepare our young people to compete in the 21st Century workforce.

Thank you very much for allowing me to provide an educator's viewpoint today.

WRITTEN STATEMENT

of

EDWARD BLACK

President and CEO

Computer & Communications Industry Association

on

Universal Service Reform

Before the
Subcommittee on Rural Enterprises, Agriculture and Technology of the
Committee on Small Business

2600 Rayburn House Office Building

Wednesday, May 3, 2006
10 a.m.

Good Morning, Mr. Chairman and distinguished members of the Subcommittee. It is my pleasure to come before you today and discuss the pressing issue of Universal Service reform and Reps. Terry's and Boucher's "Universal Service Reform Act of 2006."

1. INTRODUCTION

The concept of "Universal Service" dates back to the early 1900s and reflects the altruistic, economically legitimate goal of promoting ubiquitous access to affordable and dependable telephone services for all Americans, regardless of geographic location. Over the years, however, Universal Service has morphed into a series of overlapping subsidy programs of Byzantine complexity and gross inefficiency. Today, the cumulative effect of the various Universal Service funds requires payments by telecommunications carriers that amount to a *de facto* tax of 12% of gross retail revenues — and is projected to increase to 17% by 2007.

This figure is illustrative of a subsidy program that has spun wildly out of control while failing to accomplish its intended goals, but like Social Security nonetheless remains the "third rail" of American technology policy; too important to ignore in the long run but too politically charged to confront in the short run. It is also fairly well known that the United States lags considerably behind other developed nations, from South Korea to Japan to Iceland, in the deployment and penetration of high-speed digital communications infrastructure. Far less understood is that current Universal Service policy is at cross-purposes to the rapid deployment of broadband services in our geographically dispersed, economically diverse nation.

The Telecommunications Act of 1996, which first codified Universal Service in statute, sought to preserve and expand Universal Service. However, "Technological Convergence" has shattered the underlying assumptions on which the 1996 Act was premised. With cable companies now offering voice services and traditional telephone companies set to roll out video services nationwide, the telecommunications landscape has dramatically altered. Unfortunately, the Universal Service Fund has not. Instead of adapting to encourage more efficient, higher quality technologies, it remains focused on promoting old copper wire telephone networks.

According to former FCC chairman Michael Powell, we are in the throes of "a great Digital Migration" where "[t]raditional telecommunications services are migrating from old circuit-switched networks to new and advanced Internet protocol networks." This new technology can reduce the costs of providing supported services—especially in high cost areas—and provide more advanced services, such as high-speed Internet access. This is especially important for rural America. Access to advanced information services is essential for economic development. A small company in rural Missouri, Georgia, Oklahoma, or Alaska with access to a reliable high-speed internet connection can market and distribute their product globally as easily as their competitors in Los Angeles and New York. Where the industrial revolution concentrated economic growth and

expansion in large urban areas, the dawning of the information revolution has made one's physical location much less relevant. A correctly targeted Universal Service program can usher in a new age of prosperity and growth for rural America.

CCIA cares deeply about the important issues of communications ubiquity and economic competitiveness—both among different regions of the U.S. and internationally —that remain key to Universal Service. But unless restructured in the new context of today's rapidly evolving telecommunications and technology markets, Universal Service in America threatens to defeat the very objectives it has traditionally served.

The disconnect between universal service policy and the economic imperative to create a ubiquitous American broadband infrastructure is one of the greatest challenges facing legislators and policy makers in the first decade of the 21st century. But abolishing Universal Service is not the answer. Reform designed to update universal service policy to current needs, to correct the perverse consequences of a system that discourages broadband deployment and continues ever-increasing subsidies of obsolete technologies, is both possible and preferable. Reforming the system will certainly not be easy: Universal Service is an arcane, intricate and exceedingly complex scheme in which some stakeholders have financially enormous vested interests, and in which the sheer volume of information can be overwhelming. And Universal Service certainly will not be solved without the broad, bipartisan support of a wide array of companies from different segments of the telecommunications and technology industries: from ILECs and CLECs to circuit switch and packet router vendors, from ISPs and Voice Over Internet Protocal ("VoIP") providers to cable companies, Internet backbone carriers and others.

2. BACKGROUND

Until the Bell System divestiture in the early 1980s, Universal Service was essentially administered through internal AT&T cost averaging, with the assumption being that long-distance and local business revenues "subsidized" residential local services, held below cost by state regulators. In 1983-84, the FCC established a system of access charges (fees paid by long-distance carriers for origination and termination of their traffic by local phone companies) to govern the post-divestiture industry and to prevent what it feared would be "bypass" of the public switched telephone network if the full costs of network connection were, as economic theory suggests, assigned directly to end users. Access charges were consciously set considerably above cost in order to maintain revenue neutrality for local exchange carriers (LECs), comprising an estimated $700 million in subsidies.

The purpose of these subsidies was to counter the ordinary results of a competitive market, where providers shun high-cost (and typically less profitable) areas and users — pejoratively termed "cream-skimming" — and thus to maintain (and increase) telephone penetration. These objectives were especially significant in rural geographic areas, where lower population densities tend to require more capital expenditures (*i.e.*, "long loops") and higher costs. Thus, the twin purposes of Universal

Service, intimated in the 1934 Communications Act's preamble about "making available . . . to all people of the United States" a nationwide telephone system "at reasonable charges," are thus: (a) to ensure high penetration of telephone services, especially in high-cost regions, and (b) to maintain reasonable rates for end users who otherwise could not afford to subscribe to telephone services.

Congress expressly reiterated the policy objectives of Universal Service in the Telecommunications Act of 1996. Section 254 for the first time charged the FCC with ensuring that all Americans have access to "an evolving level of telecommunications services . . . taking into account advances in telecommunications and information technologies," with promoting "affordable rates" everywhere and the availability of "reasonably comparable" services in rural and high-cost areas, and with establishing a system funded by a "specific, predictable and efficient mechanism" to which "every telecommunications carrier" must contribute. The FCC was also directed to support schools, libraries and hospitals and to "complete" its work on a revised Universal Service program within 15 months.

These rather general commands for a more rational Universal Service program were, in part, a legislative device intended to temper the marketplace impact of the large-scale telecommunications deregulation initiated by the 1996 Act. They were also designed to *expand* Universal Service to meet specific social policy needs (*e.g.*, the provision of discounted telecom service and Internet access to schools and libraries) and to prevent universal service policy from supporting only traditional telecommunications services. Unfortunately, other than expansion — which has occurred far in excess of any expectations at the time — none of these objectives is being satisfied under the current system. Indeed, telephone penetration has remained relatively stable (at about 94%) in the United States for decades and has in the past few years actually begun to drop as users abandon second lines and increasingly substitute wireless for landline services. Particularly troublesome is the "rural and high-cost support" mechanism, which focuses not on individual needs but rather average telco carrier costs and receives the lion's share of Universal Service funding.

In order to heed Congress's mandate to make Universal Service support mechanisms "explicit" and "nondiscriminatory," decades of implicit LEC subsidies must be identified, culled out and recalculated in an equitable manner. Likewise, the resulting funds must be apportioned in an equally fair way suitable to a competitive marketplace in which the game and the players change substantially from year to year. The challenge of universal service policy in a competitive telecommunications environment is a bit like unscrambling an egg while serving omelets.

Regulators have not met this challenge with success. With administrative resources stretched thin by the rulemaking requirements of the 1996 Act, the FCC focused less on reshaping universal service policies and mechanisms than on simply preserving them. As a result, the funds needed to support "affordable" services and the degree to which rural LECs actually incur "high costs" in providing basic telephone services remain unknown. The FCC reacted to the 1996 Act by adopting a "cost model" to estimate universal service needs, pointedly described by one dissenting commissioner

as begging the question of "determining an absolute cost of providing service to [rural] areas and basing federal support on some percentage of that amount." Even then-FCC Chairman Reed Hundt acknowledged that "a proxy-based universal service support system that was adequate to determine support for a large telephone company may not be well-suited to address the needs of small telephone companies."

The courts sustained the FCC's approach as a "transition" measure, but even today the FCC has not yet begun an empirical assessment of how much subsidies are actually required. Since contributions to the Universal Service Fund are pass-throughs for carriers, the size of the fund has ballooned — nearly doubling in five years. In addition, the criteria by which carriers are deemed "eligible" for receiving subsidy funds continue to target aggregated need based solely on carriers' historical costs and technologies, rather than current costs and more advanced services. Finally, oversight of the USF by the Universal Service Administrative Company (USAC), a private corporation with uncertain authority, has been almost continually under attack for its methods of collecting contribution and apportioning funds. These problems, if not corrected, will eventually threaten the viability of universal service itself.

The FCC has been unwilling to assess carriers' needs based on what an improved, efficient network requires or to fashion funding mechanisms that reward rural and other carriers for investing in new technologies. Astonishingly, when a rural LEC, for instance, deploys broadband networks, it may qualify for ***less*** Universal Service support than it would had it continued to deploy only twisted-pair facilities. And because the FCC's cost models are averaged statewide, they yield the odd result that some heavily rural states, such as Nevada, receive essentially no federal USF support (because of Las Vegas and Reno), while other states, such as Mississippi, receive huge subsidy flows. Finally, the FCC has retained the historic targeting of USF payments to basic local telephone loops, neglecting the Section 254 requirement that its Universal Service system must reflect "advances in telecommunications and information technologies."

All of this has led to a system under which the size of USF revenues collected and distributed continues to expand exponentially, while the funds are used for little else than the same rural and high-cost support of existing networks as has been the case for decades. The FCC's schools and libraries program (known as "E-Rate"), however well intended, is mired in a fraud and accounting scandal. At the same time, the FCC has reacted to the increasing USF revenue requirements by considering expansion of the "contribution base." Currently, only providers of retail telecom services pay into the USF funds. But, in the context of several different pending proceedings, the FCC is actively considering expanding this base of contributors. Proposals under consideration by the Commission include imposing USF contribution obligations on providers of cutting-edge VoIP services, expanding the payments made by cellular service providers, and requiring contribution by Internet service providers and other providers of packet-switched Internet services. Moreover, in addition to these proposals pending before the FCC, a number of bills have been proposed in Congress that would similarly expand the base of parties that must pay into the USF programs.

In short, rather than confronting the obvious problems that plague the various USF programs, the FCC – and possibly the U.S. Congress – apparently will continue throwing money at the existing USF funds, and will require the service providers that have invested in advanced and efficient technologies to foot the bill. This approach will feed a broken subsidy system that continues to grow out of control, will fail to address the market distortions and perverse incentives that characterize the current USF programs, will continue to penalize those companies that are deploying new technologies and offering advanced services, and will do nothing to prevent America from falling farther behind other countries in broadband Internet access. It is hard to imagine a more ill-advised set of social policies, and a greater waste of valuable resources.

But recent events have provided an example that the USF subsidy programs can be turned to accomplishing worthwhile policy goals. In the wake of the unprecedented devastation caused in the Gulf or Mexico region by hurricanes Katrina and Rita, the FCC announced that it would divert $211 million in Universal Service Fund support to that area. Senator Stevens of Alaska commented that such a targeted application of USF dollars "is what USF is for." While this amount is only a small percentage of the almost $7 billion in USF funds currently collected, it nevertheless demonstrates that USF funding can be targeted to meet the critical infrastructure needs of the country. We propose a comprehensive re-evaluation of our national telecom policy priorities, with a view toward managing the USF funds responsibly and efficiently, and using them to target effective development of the telecommunications infrastructure necessary to keep the U.S. a world technology leader in the 21st century.

3. SUMMARY OF HIGH-COST FUND

Spending in the High-Cost Fund is determined differently for each of the High-Cost Fund's five (5) programs. Generally, for all incumbent rural local exchange carriers, support is determined by a complex combination of historical costs economic models and provided on a per-line basis. For larger, non-rural providers' line support, the FCC uses a forward-looking cost model to determine the per-line costs. In addition to the local line support portion of the High-Cost Fund, there are other, smaller elements of the High-Cost Fund mechanism that are determined by different combinations of formulas and embedded costs, all of which are occasionally subject to caps.

High-Cost Loop Support provides support for the "last mile" of connection for rural companies in service areas where the cost to provide this service exceeds 115 percent of the national average cost per line. High-Cost loop support for rural carriers is calculated and distributed at the study area level. "Interim hold harmless support," or support for non rural carriers, is calculated and distributed at the wire center level.

Local Switching Support provides interstate assistance that is designed to reduce the high fixed switching costs for companies serving fewer than 50,000 lines. Prior to 1998, this support was known as Dial Equipment Minute, or DEM, weighting, and was recovered from interstate switched access charges. DEM weighting was removed from

local switching rates, established as local switching support, and made an explicit part of the high cost universal service support mechanism

Long Term Support helps to offset interstate access charges for rate-of-return regulated carriers. It was initially established in 1989 when mandatory pooling of interstate common line expenses and revenues was no longer required. It is now an explicit USF program. Long Term support is available only for carriers participating in the NECA pooling process. NECA pool participants receive a per-line monthly support amount from the High-Cost Fund support mechanism.

Interstate Access Support helps to offset interstate access charges for price cap companies. Only price cap carriers, or competitive carriers serving in the service area of a price cap carrier, are eligible to receive interstate access support.

Forward-Looking Support for Non-Rural Carriers is High-Cost Fund support for non-rural carriers based on a forward-looking economic cost model. It also known as the High-Cost Model. The model generates the statewide average cost per line then compares it to the national average cost to determine eligibility for forward-looking support. If the statewide average cost per line exceeds 2 standard deviations of the national average cost per-line, the state qualifies for support. Currently ten (10) states are eligible to receive forward-looking support: Alabama, Kentucky, Maine, Mississippi, Montana, Nebraska, South Dakota, Vermont, West Virginia, and Wyoming.

The per-line costs that are used in most of the High-Cost Fund programs for rural carriers are generated by a report from the National Exchange Carriers Association ("NECA"). All incumbent local exchange carriers are required to annually submit certain investment and expense data, including line count information, to NECA. Based on this information, NECA then submits a filing to the FCC that details the costs to rural telephone service providers of providing local telephone lines. The NECA filing is used by the FCC to determine per-line costs. For each eligible carrier, the FCC then determines a certain amount of per-line costs that depends on the size of the carrier and the extent to which costs in a given area exceed the national average for local line costs. That amount of per-line costs is then multiplied by the number of lines each carrier serves. That final figure becomes the carrier's subsidy for the first quarter of the next calendar year. Payments for the subsequent quarter are adjusted according to the line count reported to USAC by each provider. The annual growth of subsidies to these providers is capped by a formula.

In the forward-looking cost model that is used to determine support for non-rural carriers, support is provided for all intrastate costs per-line in eligible states. Forward-looking intrastate costs per-line equal 76 percent of the forward-looking costs generated by the cost model. The remaining 24 percent is recovered through the interstate jurisdiction. These funds are distributed at the wire center level. The total support in a state is targeted so that support is only available to carriers serving those wire centers with forward looking costs that exceed the benchmark. This support is also portable, so that when a competitive carrier files subscriber lines in an ILEC's High-Cost Model

eligible wire center, the competitive carrier receives the ILEC's wire center support on a per-line basis.

The High-Cost Fund has grown primarily due to the addition of programs to the High-Cost Fund that were formerly implicit subsidies to rural telephone companies. The Communications Act of 1934, as added by the Telecommunications Act of 1996, requires that subsidies that were formerly embedded in access charges paid by long-distance providers to local telephone companies be recognized as explicit USF payments. In response to that requirement, the FCC created the Interstate Access Support program within the High-Cost program. This added $650 million in outlays to the High-Cost program in that fiscal year. In 2002, the FCC created the Interstate Common Line Support program for rural carriers within the High-Cost program. Together, these two programs – which provide an alternative source of revenue that previously flowed between long-distance companies and local telephone companies in the form of interstate access charges – have added more than $1.1 billion in spending to the High-Cost Fund program.

In addition, a number of new networks have become eligible for USF payments. In 2001, competitor carriers, primarily cellular telephone networks, became eligible to receive USF payments. The FCC adopted an "identical support rule" in which per-line support for competitive carriers is based on the incumbents ETC's costs. Incumbents do not lose support when a competitive ETC captures lines. Instead, both carriers receive funding based on the ILEC's wire center support on a per-line basis. The development has lead to higher spending in all of the programs contained in the High-Cost Fund. Between 2002 and 2003, the funds going to rural local telephone companies grew by $190 million. Support for new cellular telephone networks accounted for $80 million of that growth. Not surprisingly, the rural carriers blame the funding of competitive ETCs and their ability to receive support based on incumbent ETC costs rather than their own costs for the sharp growth in the fund.

While support flowing to competitive ETCs has grown rapidly, it still remains a small fraction of what is spent on the High-Cost Fund programs. Of the 1400-plus ETCs that received high-cost support in the fourth quarter of 2002, 63 were competitive ETCs. Competitive ETCs received approximately $14 million that quarter, compared to more than $800 million for incumbent LECs. In the fourth quarter of 2002, support flowing to competitive carriers was seven times higher than the first quarter of 2001, although the share of high-cost support distributed to competitive ETCs was only 2% of the total. The cellular industry, however, notes that the vast majority of growth in the high-cost fund since its reformation in 1997 has flowed to incumbent LECs and that, in fact, from 2002 to 2003 incumbent LECs were responsible for 87% of the growth in the high-cost fund.

The rising support to the incumbent LECs can be attributable to rules that allow the fund the grow. On May 23, 2001, the FCC modified the existing High-Cost Fund mechanisms for rural local exchange companies by adopting reforms recommended by the rural task force. Specifically, the FCC adopted the embedded cost mechanism used to determine support for a five year period to provide predictable levels of support to rural carriers. It also adopted a "rural growth factor" that allows the high cost loop

support fund to grow based on annual changes in the Gross-Domestic Product-Chained Price Index (GDP-CPI). Further, the FCC raised the minimum cap in the revised corporate operations expense limitation formula from $300,000 to $600,000, permitting small rural carriers to receive support for corporate operations expenses of up to $600,000. The FCC also increased the size of the Fund by adopting the "safety net additive." This allows carriers to receive High-Cost Fund support for incremental expense adjustment that is associated with new investment. All these measures have added to the continued growth of the High-Cost Fund for rural carriers.

4. THE IMPACT OF PACKETIZATION AND THE REGULATORY RESPONSE

The evolution of American and international communications from an analog, twisted-pair public switched network to a packet-based digital network is proceeding rapidly. Yet as two recent cases reveal, the rapid convergence of telecommunications and information technology is making the regulatory structures of the Telecommunications Act of 1996 anachronistic.

On June 27 of this year, the Supreme Court released its decision in *NCTA v. Brand X*. That decision upheld an FCC order finding that cable modem service provided by cable TV companies constituted "information service" and not "telecommunications service," and so are not subject to common carrier regulation under Title II of the Communications Act. The *Brand X* decision is the most disruptive event in telecom regulation since the passage of the 1996 Act. Essentially, it means that the FCC is empowered to eliminate traditional telecom regulation for broadband services that include access to the Internet. Moreover, the Supreme Court has upheld a broad interpretation of the FCC's "ancillary" jurisdiction under Title I of the Act, which could invest the FCC with broad discretion to invent a new regulatory structure for such services. Because most conventional telecom services will migrate to broadband and Internet-based technologies over the next 5-10 years, it is not overstating the case to say that telecom regulation will be substantially rewritten by the FCC and the courts, starting this year.

The implications for USF contributions and policies are equally profound. Currently, USF contributions are computed as a percentage of revenues from "telecommunications services" subject to common carrier regulation under Title II of the Communications Act. For this reason, USF contribution obligations attach to digital subscriber line (DSL) services provided by telecom companies (which, until very recently, have been classified as "telecommunications services"); by contrast, cable modem services provided by cable TV companies (which have consistently been classified as "information services"). In August of this year, the FCC used its authority under the *Brand X* decision to rule that DSL service will be reclassified as an "information service" in order to allow telecom companies to compete with cable companies on an equal regulatory footing. In making this decision, the FCC recognized that the reclassification of DSL as a Title I information service means that DSL revenues will not be subject to USF obligations under the current rules. The FCC has decided that

it will maintain the USF funding obligation for DSL services, at least temporarily for a nine-month period, despite the reclassification. However, its decision ultimately could result in a large, and increasing, set of revenues being exempt from USF obligations, resulting in a reduction in overall contributions to the existing USF funds.

The impact of the *Brand X* and DSL decisions will exacerbate trends that have already begun to erode contributions into USF subsidy funds. The increasing penetration of cellular phone service has had a negative impact on USF funding: a majority of cellular traffic is classified as "local" as opposed to "interstate" and so only a fraction of cellular revenues are subject to USF obligations. Many cellular customers use their cell phones to replace second and third telephone lines into their houses, and this substitution results in a net decrease in USF payments.

The introduction of VoIP is starting to have a similar effect: most VoIP providers classify themselves as non-Title II information service providers, and so do not pay USF contributions on their VoIP revenues. To the extent that their customers replace their primary or secondary telephone lines with VoIP service, this also leads to a reduction in USF contributions. Because the level of traditional "telecommunications service" revenues is shrinking, the amount of USF contribution as a percent of these revenues has grown dramatically — from 3% in 1996 to 11.8% today, and it is projected by the Congressional Budget Office to reach 17% by 2007. Simply put, USAC and the FCC are trying to squeeze an increasing amount of dollars from a steadily decreasing contribution base. The rate of decrease in the contribution base will expand dramatically as a result of the FCC's DSL ruling — unless the FCC or Congress changes the rules.

We anticipate that the FCC will attempt to avoid this outcome by using its "ancillary authority" to apply USF obligations to Title I information services. That decision would not only portend the permanent application of USF obligations on DSL service, but expanding USF obligations to cable modem services, and possibly to VoIP and other new services that have to date not been subject to USF. Moreover, some vocal politicians, such as Alaska's Senator Stevens, have proposed legislation to mandate such an expansion of the USF contribution base.

But these "solutions" would be ephemeral, because they both mask the underlying policy problem. That is, so long as Universal Service continues to be primarily targeted to support traditional telephone service provided over old analog technologies, it will prevent the efficient and effective support of "advanced" services. This, in turn, reinforces economic incentives for carriers receiving USF support to retain inefficient, old technologies, and penalizes those companies that are trying to bring broadband and other advanced services to their customers. Thus, not only is current USF policy distorting technology deployment decisions, but it is in fact acting at cross-purposes to the very principles Congress codified in the 1996 Act.

One final caveat: the FCC's authority under the ancillary jurisdiction provisions of Title I provides both challenges and opportunities. The very ancillary jurisdiction authority that the FCC likely will explore to expand USF obligations to new categories of Internet-based services also supports implementation of the Universal Service Reform

policies that we are espousing in this Paper. A number of specific reform proposals are discussed later in this paper.

4. BROADBAND DEPLOYMENT, INNOVATION, AND USF REFORM

The technological and regulatory developments discussed above all have serious consequences for broadband deployment and innovation. Without structural and administrative reform of Universal Service, there will continue to be ever-increasing revenue requirements for collecting subsidies and a steadily decreasing universe of companies required (and willing) to contribute. If everyone must pay and only a few old-time players can collect, why play the game at all? And if USF continues to exclude broadband as a subsidy target in favor of basic telephone service (which already enjoys 90%+ penetration levels), where will America find the communications infrastructure necessary for our collective futures?

We are already witnessing some of these consequences. There is no question that high-speed, broadband, packet-based communications services in the United States are far less available than needed for our nation's international competitiveness and economic growth and for the promises of the "information age" — from distance medicine to on-demand video — to become reality. According to the latest statistics from the International Telecommunications Union (ITU), released last year, there are few reasons for optimism and considerable grounds for concern. On the positive side, as of the end of third quarter 2004 the United States had deployed over 32 million broadband connections — more in absolute numbers than any other nation. While that is unquestionably a fine achievement, when the penetration of broadband as a percentage of population is measured, a truly alarming trend is exposed. The U.S. fell from #4 in the world in broadband deployment in 2001 to #16 as of year-end 2004. Moreover, the rate of growth in many countries — Japan and Israel, for instance — far outstrips the rate of broadband deployment in the United States. Finally, American policy makers define "broadband" connections as starting at 200 kbps. In contrast, countries such as South Korea (#1) and Japan provide multi-megabit and even gigabit Ethernet connections to their broadband users. Truly innovative services, including video applications, are only available at these higher speeds.

The sad reality is that the current Universal Service system is perpetuating this embarrassing imbalance instead of working to correct it. America is not like South Korea or Israel. We are a continental country with a geographically diverse citizenry and a private communications infrastructure. Unlike the telecommunications industries in many foreign countries, our telecommunications services are not taxpayer supported or nationalized (either partially or fully). The same penetration of broadband cannot reasonably be expected in a nation with a dispersed population base that makes 15,000-foot loops commonplace, as compared to countries where most residents live in compact, urban environments. Even American suburbs generally lack sufficient population density to support true broadband without significant infrastructure upgrades such as fiber-to-the-pedestal and fiber-to-the-curb.

In short, when it comes to broadband, rural, suburban and urban Americans all share a common desire and a common problem. Without a careful assessment of whether the marketplace is producing the ubiquitous, high-speed digital connectivity we all desire — which is plainly not the case — it is necessary to consider whether the Universal Service system should be reformed to spur more rapid deployment of broadband facilities and services. It is not radical to suggest that, given the importance of communications and information to America's service economy, broadband deployment could be made a national priority by restructuring and revising Universal Service policy.

5. SOME MODEST QUESTIONS FOR REFORM

As explained above, the three major federal programs for USF subsidies are the "High-Cost," "Low Income" and "Schools and Libraries" (E-Rate) funds. Currently, of the $7 billion total USF contributions collected by USAC, about $2 billion goes to E-Rate and the balance of about $5 billion goes to the High-Cost fund (which takes the majority of the funding) and the Low Income funds. (The latter is comprised of a "Lifeline" fund, which subsidizes the monthly charge for basic service, and a "Link-up" fund, which subsidizes the one-time cost of installing new phone lines.)

What services are we subsidizing? The bulk of USF subsidies are still used to support basic local telephone service. Ubiquitous access to basic service is, of course, a compelling policy goal. However, because, as noted previously, wireline penetration levels in the U.S. appear to have peaked, is the same level of support for basic local service still needed? While new technologies (such as wireless and fiber-ring networks) have dramatically reduced the cost of building telephone facilities, geographic subsidies are still based on a decades-old "115%" cost factor to classify "High-Cost" companies. Notwithstanding this drop in cost per loop for all carriers, and rural carriers in particular, the share of today's Universal Service Fund devoted to high-cost recipients continues to increase.

Moreover, the deployment of broadband in the U.S. has given rise to a new generation of VoIP and other packet-based providers that offer basic service (typically with a far larger package of advanced features) over digital connections. The operational efficiencies and cost savings that derive from the use of Internet Protocol (IP) technology, in part, allows these VoIP providers to offer basic local and long-distance services — and even some international services — at flat rates that are cheaper than basic local service offered over traditional analog, copper-based telephone networks. Some of this may be the result of regulatory arbitrage, in that VoIP is currently not classified as a "telecommunications" service subject to USF contributions. But could shifting the focus of the High-Cost and Low Income USF funds to supporting broadband and IP-based service deployment be an effective means of guaranteeing low-cost basic phone service, while also encouraging the deployment of infrastructure that can support other innovative services as well?

What users are we subsidizing? The purpose of the High-Cost Fund — subsidizing customers who live in rural and other high-cost areas — is clearly a laudable public policy goal. As a nation, we want to ensure that people living in rural America have access to the same quality telephone services, at the same affordable rates, as people who live in urban and suburban areas. As implemented, however, the High-Cost Fund generally provides subsidies to broad geographic areas, based on average population density.

This approach creates some notable distortions. We'll call the first the "Vail Effect." Vail, Colorado is a beautiful town and a wonderful tourist destination. It is also home to some of the most expensive real estate in the nation, and one of the country's wealthiest populations in terms of per capita income. It is also located in a rural area, and so is subsidized by the High-Cost fund. Is it really appropriate public policy to have middle-income consumers from urban and suburban areas across the country subsidize telephone service to wealthy vacation homeowners in Vail? Is this the intended purpose of the High-Cost fund? Is there a better use for our subsidy dollars?

We'll call the second distortion the "Nevada Effect." High-Cost Fund monies are distributed according to average population density. For states such as North Dakota, which have a population that is broadly dispersed across the state, application of the population density standard makes sense, and has the desired effect of subsidizing telephone service to rural areas. In Nevada, however, it does not work as planned. Nevada unquestionably has vast stretches of very low-density, high-cost territory. However, it also has two urban centers — Las Vegas and Reno — that are very high-density, and that house most of the state's population. When measured statewide, Nevada's population is much denser than North Dakota's. As a result, Nevada gets little or no support from the High-Cost fund. Is this an intended policy? Should the USF High-Cost Fund subsidize farmers who live in rural areas in North Dakota, but not ranchers who live in equally rural areas in Nevada?

Are we subsidizing users efficiently? The Lifeline and LinkUp funds are the only element of USF targeted to specific end users. Some have advocated that, given that telecom is a declining-cost industry, due to reductions in technology costs, the FCC should move away from a system focused on subsidizing telephone *companies* to one focused on subsidizing telephone *users*. This sort of "means testing" would avoid the Vail and Nevada Effects discussed above and resolve the FCC's inability, nine years after the 1996 Act, to move beyond cost models to a real estimation of the amount of subsidies actually necessary to ensure "affordable" service rates. Is such a "coupon" system preferable to continued support of High-Cost rural telephone companies? Can one be established without tremendous financial dislocations for rural LECs whose revenue streams are dominated by USF funds? In an era with near-global wireless coverage, should universal service policy be concerned at all with preservation of landline telephone companies in any event?

What type of facilities are we encouraging carriers to deploy? When looking at the impact of how USF subsidies provide incentives to carriers to deploy specific types of network facilities, it is useful to examine the High-Cost and E-Rate funds separately.

First the High-Cost Fund: is the implementation of Universal Service policy providing the right incentives for telecom carriers?

Plainly the answer is "no." Take, for instance, one rural incumbent local telephone company which, for present purposes, will remain unnamed. Like many rural LECs, it provides basic telephone service over a traditional twisted pair telephone networks. Unlike many other telcos, however, it is also one of the most aggressive carriers in the country in deploying broadband services: it has achieved a penetration rate of over 30% among its customer base, the highest broadband penetration in the country. This clearly is a commendable performance, but what is the impact on USF eligibility for this and other rural LECs that are serious about deploying broadband?

First, rural LECs' deployment of broadband DSL is not directly subsidized by USF High-Cost support, because those funds were designed only to subsidize basic telephone service. *Second*, the aggressive DSL rollout may actually reduce the amount of direct USF subsidies that the rural LEC in our example receives. Many DSL customers previously used dial-up modems to reach the Internet, and because they did not want to lose phone service when they surfed the net, they purchased a second basic phone line. As the rural ILEC deploys DSL, these customers give up their old dial-up modem line when they to the new DSL line. In addition, many customers that used a third fax line also give up that line when they switch to DSL. The result? The part of the DSL line that is used for Internet access is not eligible for High-Cost funding, but the second phone line used for the dial-up modem – and perhaps the third fax line as well – was. As a result, the rural LEC loses the High-Cost funding that it formerly received for the second (and third) line, and cannot recover High-Cost funding for the new DSL line. This can result in a net decrease of USF funding for carriers that deploy advanced technologies and actively deter the penetration of broadband Internet access.

We note that some High-Cost Fund monies find their way to carriers that deploy fiber and other advanced technologies, as a result of their overall increased investment in their networks. Network spending increases the carriers' "revenue requirement" and USF levels are adjusted to compensate the carriers for the increased level of spending. However, USF funding based on overall revenue requirements is not targeted to promoting broadband deployment directly. Indeed, carriers receive the same increased USF funding for any increases in network spending: including purchases of corporate jets or limousines, purchases of TDM-based circuit switches, the repair and maintenance of outmoded copper loops, and even the payment of dividends. Does this result reflect an efficient policy? Are we really subsidizing the retention of old technology, and even discouraging the deployment of broadband facilities?

Finally, regarding the E-Rate fund, the pending inquiries by the Office of Inspector General, Congress, the FCC and others will reach their conclusions later this year. However, from the analyses conducted so far, it is clear that the grant of E-Rate funds has been marred by a lack of standards and a lack of specificity regarding what services and facilities are eligible for such funding, which has resulted in gross waste, fraud and abuse. These inquiries all point to a need for greater clarity in setting policy goals and in ensuring that the E-Rate funding is accomplishing its intended results. One

question for serious consideration is whether a primary focus of E-Rate should remain, as it historically has been, on funding computer and Ethernet networking for schools (since compared to 1996, virtually all elementary and secondary schools now have computers in the classroom), or whether it should be re-prioritized to encourage purchase of higher-capacity data facilities and WANs by school boards.

6. MODEST PROPOSALS FOR REFORM

The ideas outlined here are a general overview of a thorny but crucial public policy problem. Above, we have highlighted our concerns with the current USF. Some general ideas for reform include:

- Consolidate and simplify the existing USF programs, and cap them to stop their unchecked growth.
- Support the deployment of new broadband services, by re-directing some of the existing USF funds and/or creating new subsidies targeted to new services.
- Taper funding to legacy technologies in an effort to stimulate innovation and efficiency.
- Apply a "means test" for all broadband USF subsidies; focus on underserved areas.
- Subsidize services to target end user customers, not carriers.
- Fund USF out of general tax revenues or through the Federal Excise Tax; or as an alternative, expand the base of parties paying into the USF.

7. TERRY-BOUCHER BILL

CCIA applauds Reps. Terry and Boucher for introducing the "Universal Service Reform Act of 2006." It is the most comprehensive bill designed at reforming the USF currently circulating. Specifically, it updates the fund to promote broadband services, attempts to cap the fund to at least limit unchecked growth, and imposes greater accountability for the use of fund monies. As the House moves forward in crafting Universal Service reform legislation, this bill should serve as the framework for more extensive reform. However, CCIA has some specific concerns.

- The Universal Service program is currently running a $700 million surplus from 2004. Any metric used to cap the fund should employ the amount *used* in the previous year, not the amount *collected.*

- Since an Eligible Telecommunications Carrier (ETC) can only be a carrier that "uses its own facilities," the vast majority of support from the fund will still be directed at ILECs who control 80% of the network. States should be afforded some discretion to adopt ETC criteria not inconsistent with federal ones.

- The most important information we need in order to make Universal Service effective and efficient is a clear understanding of the costs of building and maintaining a network in this competitive environment. The bill, as written, does not appear to instruct or require the FCC to determine those costs. We fear that absent an explicit instruction, this legislation will not realize fully its goals of curbing the growth of the Universal Service Fund and targeting the funds toward the proper areas.

- Targeting funding by wire centers is a more precise and efficient manner of ensuring that every rural area can receive support, substantially ameliorating the "Nevada Effect." Resolving the "Vail Effect," however, requires a means testing approach. Targeting funds through income assessments will ensure that wealthy end users who choose to live in outlying areas do not avail themselves of Universal Service funds that would be better used for the truly needy. The wire center and means tests should be used in tandem to target Universal Service funds correctly, minimize fund expenditures, and correct the market distortions presently at work in the Universal Service regime.

8. CONCLUSION

Universal Service is an idea that retains its vibrancy and importance despite accelerating technological change in the telecommunications and information technology industries. But USF policy is stuck in the past, focusing on the wrong entities and the wrong services, while its implementation saddles telecom with the largest overhead of any industry in the nation, except alcohol. As a country devoted to information literacy and one that competes internationally increasingly based on our production and distribution of information and knowledge, we can and should do better than this.

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