Testimony of LeRoy T. Carlson, Jr.

Chairman of the Board, United States Cellular Corporation

Before the

House Subcommittee on Communications,

Technology and the Internet

March 12, 2009

Chairman Boucher, Ranking Member Stearns, members of the Committee, my name is LeRoy T. Carlson, Jr., and I am Chairman of the Board of United States Cellular Corporation. Thank you for the opportunity to present this testimony in connection with your hearing on the future of universal service and to offer my thoughts on the Boucher-Terry legislation introduced in the last session of Congress.

Introduction

U.S. Cellular provides wireless service in nearly 200 markets located in regional clusters across the country, including many of the states represented on this Committee such as Virginia, Nebraska, Missouri, Illinois, Oregon, California, North Carolina, Tennessee, Washington. The overwhelming majority of the geography we serve is rural in character. You should also know that our opinions and perspectives on the Universal Service Fund are based on our experience as an eligible telecommunications carrier in many of these states.

Let me start by saying that we support reform of the universal service program in a comprehensive, constructive manner that promotes both the universal service and competition mandates of the

Telecommunications Act of 1996, while holding the industry accountable for the funds it receives. The Boucher-Terry bill goes a long way toward accomplishing these objectives.

As you continue your review of the universal service program, I have observed from my decades of experience in the business that there are several core principles that should guide review of this important program. First, we must recognize that the money involved is not the government's nor the telecommunications providers'; it belongs to consumers. Second, collectively, government and the affected carriers must be superb stewards of those precious funds. Third, while progress has been made, there are still areas that are expensive to reach and serve with quality service without assistance and, thus, the program continues to be needed. And finally, that the core principle of competitive telecommunications for every American remains an important and worthy goal.

With regard to broadband, Congress declared in 1996 that universal service is an evolving level of service.[1] Broadband falls squarely within the natural evolution of services that Americans depend on to thrive in the modern world. The Boucher-Terry bill's recognition that universal service funds must be used to modernize telecommunications networks in rural areas and that such modernization should include providing broadband is especially encouraging – incorporating broadband is long overdue.

My testimony is divided into two parts. In Part I, I discuss the key issues we know the Committee will need to address as it considers universal service reform. In Part II, I provide additional information that I hope the Committee will find useful as it considers appropriate universal service reform.

[1] 47 U.S.C. Section 254.

Part I: Key Reform Questions

In evaluating reforms to the universal service programs, there are three questions for this Committee to address. First, what is the proper role of a universal service program? Second, what investments should be made? And finally, how should the program be structured so as to maximize effectiveness, efficiency and consumer benefits?

a. The Proper Role of a Universal Service Program.

As to the first question, we agree with the current law, that the proper role of this program must be to ensure that high-cost areas have modern, high-quality telecommunications infrastructure that is reasonably comparable to that which is present in our urban and suburban centers, and at reasonably comparable prices.[2] For if universal service were limited, for example, to a phone tethered to a kitchen wall, rural Americans would be denied access to the tools they need to compete with urban citizens here in the United States, and with people working abroad. We commend your bill in this regard.

Countless jobs that are today outsourced to other countries that have broadband access could be done tomorrow by Americans living in rural areas, if high-quality broadband networks are made available. Companies considering locating in rural areas, or considering moving away, want to know whether their workers will have access to high-quality mobile wireless networks for improved efficiency. For example, we know of a business seeking to locate in rural Maine. When an executive drove out of the Portland metro area and realized that his cell phone would not get service in the target community, he told his hosts that the town was out of the running.

[2] 47 U.S.C. Section 254(b)(3).

With respect to broadband, we note that one study commissioned by Connected Nation, Inc. estimated that the total economic gains to be made from improving broadband in the United States would be $134 billion per year in direct economic impact.[3] Connected Nation asserts that just a seven percentage point increase in broadband adoption could result in financial gains to the nation in the form of:

- $92 billion through 2.4 million jobs created or saved annually;
- $662 million saved per year in reduced healthcare costs;
- $6.4 billion per year in mileage saving from unnecessary driving;
- $18 million in carbon credits associated with 3.2 billion fewer lbs of CO2 emissions per year in the United States; and
- $35.2 billion in value from 3.8 billion more hours saved per year from accessing broadband at home.

Without knowing whether these estimates are fully achievable, we submit that if Connected Nation's estimates are only close to being right, these numbers are so large as to compel policymakers to find ways to use every available program, including universal service, to increase broadband availability and affordability for our citizens.

We are seeing countries that the United States competes with deciding that broadband is a basic necessity for their citizens. We must likewise have a national policy that ensures rural communities obtain broadband and that they are not abjectly disadvantaged in the competition to attract and retain business. Universal service was founded on the notion that all citizens benefit when all have access to high-quality service. Fifty years ago, that service was limited to wireline voice – today broadband and mobile wireless services are equally vital and should be embraced in the same manner.

---

[3] The Economic Impact of Stimulating Broadband Nationally, A Report from Connected Nation, Inc. (Feb. 21, 2008). See, http://connectednation.com/research/economic_impact_study/index.php .

b. What Investments Should be Made?

Mr. Chairman, I believe there are two things this committee should understand when considering how to invest program funds and whether they are needed: First, broadband and mobile wireless services are two "must have" functionalities consumers expect and demand for home and business. Therefore, the program must be expanded to make broadband eligible for USF support. Second, significant additional investment must be made to bring high-quality mobile services to all Americans. Doing so will bring economic development and public safety benefits to these areas and, through the network effect, to all Americans.

As a carrier serving vast rural areas, we know that many Americans do not have sufficient access to high-quality mobile wireless services. We have used universal service funds to help literally hundreds of communities receive wireless service for the first time, or receive dramatically improved wireless service. We have made some huge coverage gains in places where we have been, and are eligible for funds, such as Oregon, Washington and Maine. There is much work still to be done, extending and improving service, including in states like Virginia, Illinois, North Carolina, Tennessee, Missouri and West Virginia – states where we have just recently been designated as an eligible telecommunications carrier.

Recently, we rolled out 3G broadband service in a significant portion of our CDMA network in the more urban and suburban areas, offering consumers and businesses the ability to access the Internet at speeds ten times faster than traditional dial up service. If universal service support were available for broadband investments today, we would accelerate our investment in rural mobile broadband to a degree that is not currently feasible.

For those of you who represent rural districts, or anyone who visits rural America, you know full well how your smart phone stops working and how dropped calls and dead zones increase when you leave heavily traveled roads. I believe a reformed program can effectively and efficiently address those problems and, if tailored correctly, can even be complimented by leveraging the broadband funds authorized by the American Recovery and Reinvestment Act. To be clear, we now serve many rural areas that do not generate sufficient revenues to meet ongoing operations expenses - or maintain high quality service – indeed there are cell sites we might be forced to decommission without ongoing long term support. There is no escaping the reality that the USF program is critically important to the viability of mobile service for millions of Americans, including access to broadband. Accordingly, if the Committee takes away from my testimony only one thing, it should be this:

A central goal of this program must be to provide rural citizens with access to high quality mobile voice and broadband services, everywhere that people live, work and travel.

Let me be clear, this program is about citizens having access to mobile service quality that is reasonably comparable to that which we take for granted in urban areas. Providing rural areas with high quality service in some areas, while other areas have spotty service with limited functionality, is not enough. In practical terms, we're talking about the difference between a wireless phone that only works sometimes and stays in your glove box and carrying one that always works well in your pocket or purse. It is the difference between a phone working when you drive out to the highway and having it work at home ***and*** on the highway. It is the difference between having basic voice functionality and having high-speed mobile data services that enable farms and other businesses to compete. Lack of competitive opportunities

in rural areas can be a reason talented young people, who make full use of mobile applications, move to urban centers.

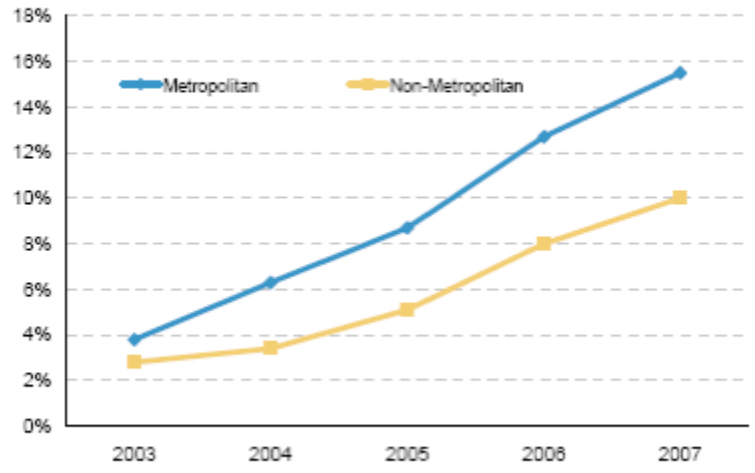
I have attached to this testimony as Exhibit A an illustrative list of communities that have received new or improved service as a result of our use of federal universal service support. We are using support to respond to requests for service from rural communities and fill in dead zones in ways that would not otherwise be possible. Our initial investments in the basic building blocks of voice communications, including towers, transmitters, backhaul links, switching capacity, and battery and generator backups, all set the stage and make possible our investments in the next generation of advanced services, including mobile broadband.

A recent Morgan Stanley report illustrates the need for universal service funding to bring rural wireless networks up to their urban counterparts. Morgan Stanley sees wireless substitution reaching between 33% and 44% in just three to four years.[4] Most important for the Committee's purposes, the chart below demonstrates how substitution in rural areas lags behind urban areas, a problem identified in the report to be primarily the result of "dead zones in rural areas," that is, a lack of high-quality service that could permit cord-cutting. This situation is one reason why the high-cost fund is so important to mobile services. Over twenty years after the first commercial mobile wireless services were licensed in rural areas, there remain significant capital and operating expense challenges to building and maintaining cell sites in rural high-cost areas, leading to an inevitable conclusion that universal service support is the necessary bridge from limited service to comprehensive and high-quality service.

[4] Telecom Services, Cutting the Cord: Voice First, Broadband Close Behind. Morgan Stanley Research North America, October 1, 2008.

Exhibit 17

Rural Wireless Only HH Growing; Still Lags Urban



Source: NHIS, 2003 -2007, American Community Survey 2003-2006: US Census Bureau, Morgan Stanley Research.

The recently enacted American Recovery and Reinvestment Act ("ARRA") provides $7 billion for broadband infrastructure projects, many of which we believe should and will be located in rural America. In our experience, there are some areas that will not generate sufficient customer revenues to cover all capital and operating costs, or even the 20% matching capital amount required by the ARRA. The universal service mechanism is a perfect complement to the ARRA, to ensure that facilities constructed with stimulus funds remain fully operational, maintained at a high standard, and modernized.

Last year, working with Connecting Rural America, we commissioned a poll in a number of rural states and learned that most rural citizens value a mobile phone as much as a wired broadband connection. I have attached an example of this polling data at Exhibit B. Overall, the overwhelming majority of people polled believed that federal universal service funding should be used to fix dead spots in rural areas for health and safety reasons. There is no more valuable tool for an individual to have in an emergency than a mobile phone, especially in a rural area. First responders increasingly depend on mobile wireless phones, as amply illustrated by letters written by a Missouri firefighter and a Wisconsin law enforcement officer, attached as Exhibit C.

Moreover, wireless technology is now capable of delivering broadband speed that is faster than many initial wireline DSL service offerings. In the near future, peak speed levels of as much as 60 megabits per second may be possible, a tremendous leap forward for personal and business users. Your efforts must ensure that rural high-cost areas receive access to evolving high quality wireless broadband services.

To be clear: ***Broadband and mobility represent the two "must have" functionalities for consumers and businesses.*** Consumers contribute significantly to this fund and therefore the program must drive investment in these two functionalities, otherwise rural consumers and citizens will be shortchanged.

c. How to Distribute Support Efficiently So As to Maximize Consumer Benefits.

There is no disagreement that funds contributed by citizens must be invested efficiently and that carrier recipients must be accountable. Exactly how the program should be structured is a complicated, detailed and technical project that should be undertaken by the FCC, the expert agency assigned to this task. That said, this Committee can provide significant guidance to ensure that the FCC develops effective, efficient and accountable universal service mechanisms. We offer here a few high-level comments on how to ensure effective and efficient distribution of funds.

1. Ensure that All Program Participants are Accountable. We support the basic principle that all participants must be accountable for funds distributed through the program. Carriers should be prepared to demonstrate how support is being invested to benefit rural consumers. We think that compliance would improve if the FCC were directed to develop one set of accountability standards to be enforced by the states. This is especially true for carriers operating in multiple states. We note that several states' public utility commissions, including Oregon and Maine, present good examples of regulatory structures that provide accountability and transparency with respect to how funds are being invested.

2. Retain Competitive and Technological Neutrality. The FCC has adopted a "core principle" that all universal service rules, and their effects, must be competitively and technologically neutral. Competitive Neutrality opens the door to innovation and competition. Moreover, the American Recovery and Reinvestment Act of 2009, requires NTIA and RUS to distribute funds on a technologically neutral basis. We think there should be no further debate that agencies administering programs such as universal service must not discriminate among technologies or classes of carriers when making rules for distributing funds. Accordingly, we strongly support the bill's inclusion of anti-discrimination provisions.

3. Examine Technological Advances in Modeling. We point to some of the work the FCC did between 1996 and 2001 to ensure that universal service mechanisms function in increasingly competitive markets. That body of work has not been updated since 2001 and it is fair to say that some aspects of it have not been examined over the past eight years. While we do not strongly oppose the use of actual costs to determine support levels, we believe that the FCC's use of a cost model to determine support is worth re-examining. Let me explain why.

I am advised that the vast expansion of computing power as well as new mapping database programs enable models to be constructed for far less cost and with far greater accuracy than was possible ten years ago. We know of private companies that are believed capable of building models to determine effective and efficient amounts of support needed to provide consumers with the supported services. The advantage of a model is that once an effective and efficient level of support is established, carriers would not receive additional support simply by incurring higher costs. Such a model process would be an improvement on the ill-conceived structure that the FCC at one point proposed last year. That proposal would have required wireless carriers to increase their costs above the wireline benchmark before they

could receive any support. We don't believe any class of carrier should be encouraged to increase inefficiency. Accordingly, we think that Congress should allow and encourage the FCC to examine whether models can improve effectiveness and efficiency in how support is distributed, so that the value of program funds is maximized.

4. Target Support to the High-Cost Areas. We have been urging the FCC for years to target support more accurately to high-cost areas – those areas that that need it most. It is sometimes difficult for urban-based policymakers here in Washington to understand how important a single new cell site can be to a small community. We are always humbled by the responses we get from small rural communities which, in some cases, literally petition us to bring them service. For example, Fred Nelson, a Village of LaFarge, Wisconsin board member wrote, "We are grateful for the construction of a new cell tower in our community. Without reliable cellular service, many companies in the area would be out of business. And its comforting knowing our residents can contact help in the event of an emergency without the risk of a dropped call or dead zone." Without this program, most of these small communities would not support new quality infrastructure investment.

In the ARRA, Congress commissioned a broadband mapping project, which will assist in properly targeting broadband support, help properly limit fund size, and ensure that carriers invest in high-cost areas. The FCC has had rules in place to target voice support more accurately since 2001, but it has yet to fully embrace the need to implement. The Committee may wish to direct the FCC to ensure that support only goes to high-cost areas.

5. Portability of Support Benefits Consumers and Controls Fund Growth. We also support the idea that support should be "portable," that is, support goes to the wireless carrier the customer chooses. True portability operates as a cap on support within an area and requires market participants to compete for customers and support. Moreover, portability is the key to allowing new technologies to enter. If a new carrier develops better services, it may build a business plan, construct facilities, win customers, and also win the support that comes with them.

One area where we have difficulty with the FCC's current mechanism is that support is currently portable among carriers providing significantly different services - fixed and mobile voice. One possible solution is to redefine the supported services to be fixed broadband and voice on the one hand, and mobile broadband and voice on the other hand. Within each supported service, funds would be portable to the wired or wireless carrier that gets the customer.

6. Avoid Single Winner Solutions. We opposed an ill-conceived reverse auction proposal made by the FCC last year and we urge the Committee to reject any such proposal that would result in picking a single carrier winner. Whether it be an auction or other government-directed single winner approach, the nation's consumers and citizens will ultimately lose, for at least four reasons:

- Selecting one auction winner distorts the marketplace by erecting a barrier to entry by newcomers. Once an auction closes, newcomers that could better serve consumers will face potentially insuperable barriers to entry.
- Designating a single dominant carrier in rural areas would recreate precisely the problem that the 1996 Act intended to resolve – regulatory structures that prevent or discourage competitors from investing in facilities-based competition.

- In an auction, the largest carriers will have an incentive to bid near zero to drive out competitors. Such winners will do the absolute minimum to remain qualified, to the detriment of consumers.

- A single winner will mean that monopoly-era regulatory structures will be needed to protect consumers from dominant carrier pricing and business practices. The healthy ability of competition to drive improved services and lower prices would be muted and even eliminated.

7. Provide the FCC With Maximum Flexibility to Reform the Contribution Mechanism. Last year's proposed bill provided the FCC with broad flexibility to use a revenue or telephone numbers-based contribution methodology. Like many of the issues set forth above, determining how best to adjust contributions and ensure fairness are the kinds of detailed technical issues best resolved by the expert agency. We agree with the Committee's decision to give the FCC clear principles and broad flexibility to enact an optimum contribution methodology.

In sum, the success of this Committee's work will depend largely on guiding a forward-looking and thoughtful FCC to fully understand and implement these much-needed reforms. It is fair to say that the Commission has been unable to enact any substantive reform of the universal service mechanism since 2001. Some of the ill-fated FCC proposals of last year, which we opposed, would have harmed rural citizens and greatly reduced investment in modern infrastructure, precisely at a time when the nation should be accelerating such investments. We support this Committee's willingness to address these difficult questions and provide the FCC with a clear blueprint for universal service reform.

Part II: Secondary Considerations.

We offer the following additional information that the Committee may wish to consider in its deliberations.

a. The FCC Still Does Not Have Accurate Data on Wireless Service Availability.

Some have argued to the FCC that support to wireless carriers is not delivering the intended benefits. We disagree. In every one of the rural states we serve, we continue to actively construct wireless networks to improve service to consumers. The universal service mechanism allows us to make investments that we would not otherwise make. We urge the Committee to ensure that the FCC has sufficient resources and appropriate direction needed to develop independent data that is fact-based and reliable.

For example, today the FCC does not have accurate data on mobile wireless service availability, because measuring availability at the county or zip code level provides policymakers with data that is of limited usefulness. When one small part of a zip code has coverage by three wireless carriers, that does not tell policymakers anything about whether the consumers throughout that zip code have high-quality mobile wireless coverage. While the Commission has recently improved the granularity of wireless service availability, we urge the Committee to ensure that data used to make policy is independent, accurate and comprehensive.

b. The Interim Cap Harms Rural Americans.

The FCC's interim cap on high-cost support to competitive carriers has been enormously harmful to rural Americans. Court papers filed by one trade association, the Rural Cellular Association, call into

serious question the FCC's basis for a cap, which Interim Chairman Copps and Commissioner Adelstein both voted against. In 2009, the cap will prevent roughly $250 million in wireless investments being made in rural communities, at a time when the President and Congress have made clear how important rural infrastructure projects are to the nation's progress. As a carrier, we order equipment, build towers, and provide services with every dollar of support we receive, and would significantly accelerate our investment and broaden it to more rural areas if the cap were lifted.

Raising the amount of support provided to carriers still in the process of constructing networks is a benefit to consumers in the areas they plan to serve. Additional funds received as a result of lifting the interim cap would go straight into networks across the country. Moreover, if the policy is reformed to open the program to using support for broadband investments, we would immediately adjust our construction budgets to include broadband wireless builds in rural areas where our cell sites are "3G ready".

I thank you for providing me with the opportunity to present this testimony and I look forward to answering any questions you may have.

Exhibit A

U.S. Cellular USF Investment Summary - 2008

In 2008, U.S. Cellular invested $127 million in USF support to fund, in whole or in part, construction of over 200 towers in rural communities across the country. In addition, USF funds were used to construct backhaul, system backups, switching upgrades, capacity upgrades, and for operating and maintenance expenses associated with its construction of facilities in rural high-cost areas. Examples of small communities that received new or improved service:

Wisconsin - Wyocena, Pilsen, Genoa City

Nebraska - Imperial, Fullerton, Ainsworth

Iowa -Bonaparte, Panora West, North English

Maine - Milford, Edgecomb, Limerick

Kansas - Clyde, Greenleaf, Arlington

Missouri - Lucern, Downing, Livonia

Oklahoma - Broken Bow, Calvin, Millerton

Oregon - Powell Butte, Moro, Jacksonville

Illinois - Heyworth, Victoria, Payson

West Virginia - Alderson, Liberty, Lumberport

Exhibit B

OREGONIANS WANT BETTER RURAL CELL PHONE SERVICE FOR PUBLIC SAFETY

Statewide Poll Shows Support for Universal Service Fund…

- **89%** of Oregon residents feel it is important to have reliable and consistent cellular phone coverage in rural areas for **public health and safety**.
- **74%** support using federal Universal Service Fund (USF) dollars to **fix dead spots** and bring consistently reliable service to rural parts of the state if it costs all telephone customers two dollars ($2) per year [an amount equal to the average consumer bill reduction if USF support for wireless is cut].
- **77%** support federal policy that funds projects that ensure consumers in rural areas have access to **choices** in communications services, such as cell phones and other wireless communication services that are comparable in quality and price to those available in urban areas.
- The citizens of Oregon feel access to a **wireless phone** on a high-quality, reliable network is **as important** as access to a quality **land line broadband** Internet Connection.
- **51% would choose a cell phone over a traditional land line phone** (42%) if they could only choose one type of service

…Concern about Proposed FCC Cuts

- After capping the USF for wireless in March, the Federal Communications Commission (FCC) is now considering proposals to **cut USF funding for wireless by 58% in Oregon**.
- If the FCC cuts USF support for wireless carriers, Oregon will lose roughly **$13 million** per year in USF funding, and at least **58% of Oregon's future rural cell phone towers would be in jeopardy**.
- Cutting the fund as the FCC proposes would save consumers just **17 cents a month**.
- When presented with balanced arguments for and against the proposed FCC cuts, nearly half **(46%)** of Oregonians **oppose** cuts that would limit support for rural wireless development.

Exhibit C

MISSOURIAN

LETTER: Cutting rural wireless networks could hinder emergency response

September 16, 2008
BY Steve Paulsell, chief, Boone County Fire Protection District

For many of us, cell phones have become a necessary component of everyday life, helping us do business, stay in touch with the people who matter most to us and call for help in emergencies.

Across Missouri, firefighters like myself depend on wireless service to respond quickly to emergency situations. We rely on cell phones to assist in search and rescue operations and communicate in areas where our radio system is insecure or unavailable.

That's why a recent proposal by the Federal Communications Commission is so troubling to me — and potentially dangerous for rural Missouri.

In smaller communities, wireless carriers cannot always justify the costs of building new cell towers. However, there is a federal program called the Universal Service Fund that helps build reliable communications networks in rural areas.

Unfortunately, the FCC placed a cap on the wireless portion of the fund earlier this year and now proposes drastic cuts that could nearly halve the support we now receive in Missouri. Statewide, we could lose up to $7 million in annual support, and dozens of new cell sites would be canceled or delayed every year.

We are fast becoming a wireless nation, but there is much work to be done in Missouri to bring reliable cell phone networks to our rural areas. Cutting the fund for wireless is not a solution. Visit ConnectingRuralAmerica.org to learn more and take action.

Letters: Rural America deserves quality wireless communication service

February 7, 2008

I am writing to alert you to a critical public safety issue affecting residents of Wisconsin — the lack of high-quality wireless coverage in rural areas.

As our community deals with severe, unpredictable and oftentimes dangerous winter weather, it is critical that we are able to count on a strong, reliable wireless signal as it is often a primary means of communication during emergency situations.

As a law enforcement official in Wisconsin, I can testify that the lack of high-quality wireless coverage in rural areas is a critical public safety concern – in Wisconsin and in states around the country. First responders, firefighters and police officers all depend on reliable coverage to handle emergency situations ranging from natural disasters and car accidents to reports of domestic violence.

In many cases, reliable wireless service can literally mean the difference between life and death, especially at this time of year when severe weather can cause hazardous road conditions and widespread power outages.

Despite this, the Federal Communications Commission recently signaled its intent to cap the Universal Service Fund "very soon" — and could do so any day. Wisconsin's rural wireless carriers estimate that a cap would cost the state about $7 million per year, jeopardizing the construction of dozens of new sites. This would compromise public safety resources and further put us at a disadvantage during winter storms.

To this end, I support Connecting Rural America, an effort aimed to ensure that rural residents across the country have equal access to a strong, reliable wireless network. I urge you to visit www.connectingruralamerica.org to learn more and to take a stand for rural America.