

**One Page Summary of Testimony of Matthew M. Polka,  
President and CEO of the American Cable Association,  
Before the Subcommittee on Communications and Technology  
Closing the Digital Divide: Broadband Infrastructure Solutions**

Over the past decade, because of the many hundreds of billions of dollars of private investment by broadband providers and the FCC's universal service reforms, we are much closer to bringing broadband service to all Americans. Today, more than 100M homes have access to 100+ Mbps broadband service, and only 5.3 million remain with speeds less than 10 Mbps. We should recognize and build upon these successes. ACA believes that we can offer Americans even higher speed broadband and close the remaining digital divide by following four principles:

**First, encourage private investment.** Fixed and mobile broadband providers are spending, and will spend, \$75B+ annually to upgrade and expand broadband networks. Above all, you should not undermine these investments, such as by permitting government funds to be used to overbuild providers or adopting measures that are not competitively and technology neutral.

**Second, remove barriers to deployment.** Building high-performance broadband networks is costly, and you will get the most bang, without spending a buck, by taking measures that lower those costs. Here are just some steps you should take –

- Remove impediments for utility pole attachers to overlash, install customer connections, and undertake short-run extensions.
- Ensure pole owners employ a transparent and timely application approval process.
- Provide for joint surveys among pole owners and new and existing attachers.
- Prohibit pole owners from imposing costs unrelated to new attachments when undertaking make-ready, and implement an effective self-help remedy to deal with existing attachers who fail to undertake make-ready.
- Subject electric cooperatives to the federal Pole Attachment law.
- Improve the process for accessing and sharing of conduit.
- Prohibit government agencies from charging right-of-way fees that are discriminatory or non-cost-based, or based on each service provided.

**Third, account for additional deployments in unserved areas resulting from the removal of barriers, the new tax law, and existing federal support programs before determining where to spend new funds and how much is needed.** ACA calculates that – by removing barriers, providers' costs to deploy will be reduced such that 1.2M homes would become served with fiber infrastructure through private investment alone; the new tax law will likewise result in more than 400k unserved homes; and the Connect America programs will reduce homes receiving less than 10 Mbps speeds by 2M by 2020. We should account for these gains and those that are to be achieved by Congress and the FCC when determining where to spend new funds and how much is needed.

**Fourth, provide broadband subsidies efficiently.** Through its Connect America programs, the FCC has shown us how to award government support more efficiently and effectively. Where we need to provide additional support, we should build upon the FCC's work by: providing subsidies for broadband only in unserved, high cost areas; limiting the amount of federal support to account for subsidies provided by states, unless any additional broadband performance is required; and using reverse auctions to distribute support.

**Written Statement of Matthew M. Polka  
President and CEO, American Cable Association**

**Before the House Energy and Commerce Committee  
Subcommittee on Communications and Technology**

**Closing the Digital Divide: Broadband Infrastructure Solutions**

**January 30, 2018**

Chairman Blackburn, Ranking Member Doyle, and Members of the Subcommittee, I am Matthew Polka, President and CEO of the American Cable Association (ACA), and I want to thank you for inviting me to testify today on Closing the Digital Divide: Broadband Infrastructure Solutions.

ACA's more than 700 broadband and video service provider members, who pass more than 18 million homes in all areas of the country and provide service to approximately 7 million broadband subscribers, have great experience in deploying broadband networks. Over the past five years, ACA members have invested more than \$10 billion to upgrade and expand their networks, in both rural areas and as overbuilders bringing competition in urban areas,<sup>1</sup> and they plan to continue to spend billions each year to meet the ever growing demands of their subscribers for real-time, high-speed access to the Internet and other IP services. Many ACA members, including WOW!, Cable One, and WAVE Broadband (RCN), have recently deployed Gigabit broadband throughout their service territories, and many more intend to do so this year and beyond.

ACA members are not just upgrading and expanding their networks in "served" areas, but they are using their capital to bring service to unserved areas. To date, our members have invested private funds to build out to more than 840,000 homes that the Federal Communications Commission (FCC) would consider as high-cost areas and otherwise be eligible for federal universal service support.

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<sup>1</sup> This investment would be greater if not for the regulatory barriers, including those discussed herein and in ACA's 2015 study on how rapidly rising video programming fees act as a drag on investment. *See* American Cable Association, High and Increasing Video Programming Fees Threatens Broadband Deployment, April 2015, *available at* <https://drive.google.com/file/d/0BxUDdYFi5gnEa2xJdnhwSThWUUE/view?usp=sharing>.

## ACA: By the Numbers

ACA members are investing in broadband networks, including in small cities and rural areas.



**18.2M**  
Homes passed

ACA's more than 750 members pass 18.2M homes with high-speed broadband services. ACA's members include cable operators as well as municipal providers and rural telephone companies receiving USF support.



**\$10B+**  
Network capex

ACA's members have spent more than \$10B on building out their networks and continue to invest approximately \$1B annually.



**300K+**  
Plant miles

ACA members' networks have more than 300,000 miles of transmission lines, including more than 40,000 fiber miles.



**42%**  
In small cities and rural areas

Nearly half of ACA's homes passed are in America's small cities and rural areas.



**840K**  
Homes not requiring federal subsidies

ACA members offer broadband to 840,000 homes that would otherwise be eligible for government broadband subsidies—saving taxpayers tens of millions of dollars a year.

These investments not only reduced the areas where federal universal support is needed, but also they “freed-up” federal support going into these areas, which could be used to bring broadband to unserved areas that were not receiving any support.

The FCC too has taken significant steps, by reforming its universal service programs, to close the digital divide. As I will detail later in my testimony, these programs have already brought broadband service to many millions of homes in unserved areas, and they are certain to close the gap even further in the near future.

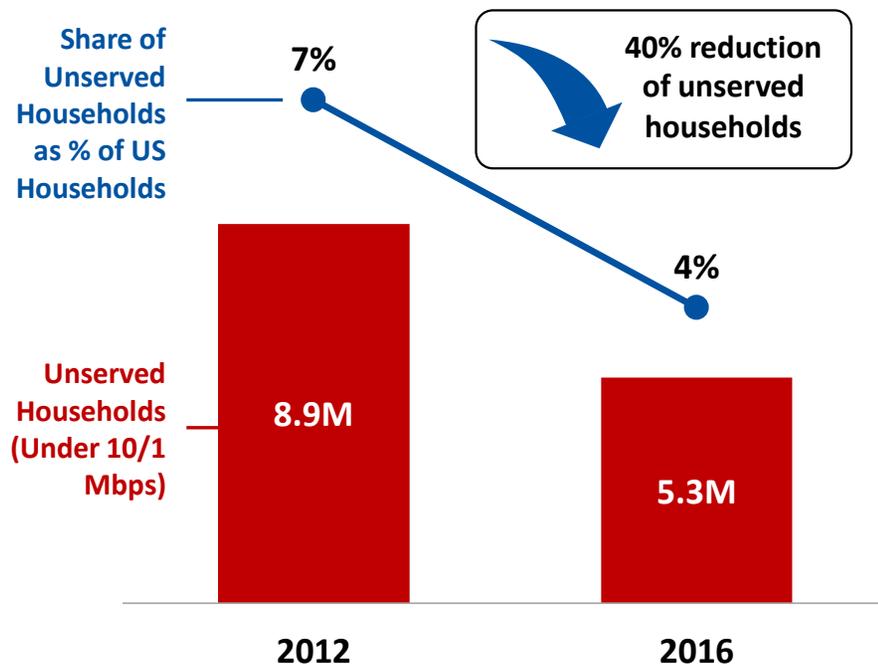
So, in brief, because of the enormous amount of capital investment by providers and the FCC’s reforms to its universal service programs, over the past decade, we have made tremendous progress in bringing wireline broadband service to all Americans. Notwithstanding the size and rural footprint of the country, today 123 million homes have access to speeds greater than 25 Mbps, and within that group, 103 million have speeds greater than 100 Mbps, an increase from 118 million and 90 million homes, respectively, over the last four years. More importantly, 96% of American households, or 128 million homes in total, have access to wireline broadband service with speeds of 10 Mbps or greater and so would not be deemed unserved by the FCC. That is a 40% reduction in unserved households in just the past 4 years.

By 2020, the FCC’s current Connect America programs, which provide about \$4 billion of support annually, should reduce these 5.3 million unserved households even further, such that about 3 million homes will be without high-speed wireline broadband service. And, when the FCC launches the Remote Areas Fund, we should get much closer to bringing broadband to everyone.

## The Final Five Million Unserved Households

Private investment and government subsidies have reduced the number of unserved households by nearly half since 2012.

### Unserved U.S. Households 2012 vs. 2016



### Trends <sup>(1)</sup>

#### Near-Elimination of Unserved Locations:

- The number of U.S. households with 10 Mbps or greater wireline broadband service has increased from 123M to 128M.
- This is largely due to private investment, including from ACA's members.
- More than 2 million of the 5.3M remaining unserved households will receive service by 2020 due to the CAF.

(1) The number of U.S. households with speeds greater than 25 Mbps increased from 118M to 123M. Within that group, the number of U.S. households with speeds greater than 100 Mbps increased from 90M to 103M.

Source: FCC Form 477, US Census, American Community Survey, Experian

This success should be heralded, but more can, and should, be done. And, we should do so based on all that we have learned about what it takes to build in unserved areas and what policies have worked.

Over the past several years, I have traveled around the country meeting with ACA members and have heard from them about their substantial investments to upgrade their existing plants to offer even higher speed services and to edge out into new areas, many of which are unserved. I also have heard how often they are frustrated from undertaking these investments because of barriers imposed by governments and pole owners, and by counterproductive government policies. These providers want you to know that they are ready to meet your broadband objectives and serve the nation's challenging corners, and they ask that you and the FCC take steps through sensible policies that will allow them to achieve these goals.

To that end, I appreciate the chance to speak to the Subcommittee today and share the principles for closing the digital divide that ACA and its members have been discussing with Members on both sides of the aisle, both sides of the Hill, the Administration, and at the FCC. ACA is aligned with the aim of the Subcommittee and its Members to fully close the digital divide, as well as to continue to drive investment in higher-performance broadband networks in all areas of the country so all consumers have the option to subscribe to comparable services. The question is then how to achieve these goals most effectively and efficiently. ACA and its members submit that policymakers should follow these fundamental principles:

**Principal #1: Encourage private investment.** We estimate that overall broadband providers, both fixed and mobile, are spending some \$75 billion annually on infrastructure, and there is every indication this level of spending will continue...absent actions by the government that would discourage it. We, therefore, urge you to follow the Hippocratic Oath and do no harm, especially by

permitting any new government support to be used in areas where private investment has already been used to deploy infrastructure.<sup>2</sup> Further, Congress should ensure that any legislation is both competitively and technology neutral, such that it does not favor any providers and any industry-sector. Nothing will undermine our broadband future more than signaling to private investors that their returns on investment are uncertain, or even in jeopardy, or singling out one set of providers or one sector alone for favorable treatment.”

**Principal #2: Removing barriers to deployment.** Building high-performance broadband networks is costly, and ACA members tell us that there are a series of problems they face and actions that you can take, without spending a penny, that will “move the deployment needle.” The chart below, which breaks down the total cost of deploying and operating fiber-to-the-home networks, indicates the most critical costs and should help you target your solutions. For instance, network costs related to pole attachments account for approximately 13% of total cost of ownership. That is a big number, and providers have told us that pole owners charge excessive application and make-ready fees and delay permitting attachments for far too long, and that the FCC’s enforcement process is ineffective. Conduit and duct installation fees and construction costs are also substantial, potentially several times greater than pole access fees, and there are numerous factors that make conduit and duct access unreasonable, including lack of information about location and availability, and fees for installation and access.

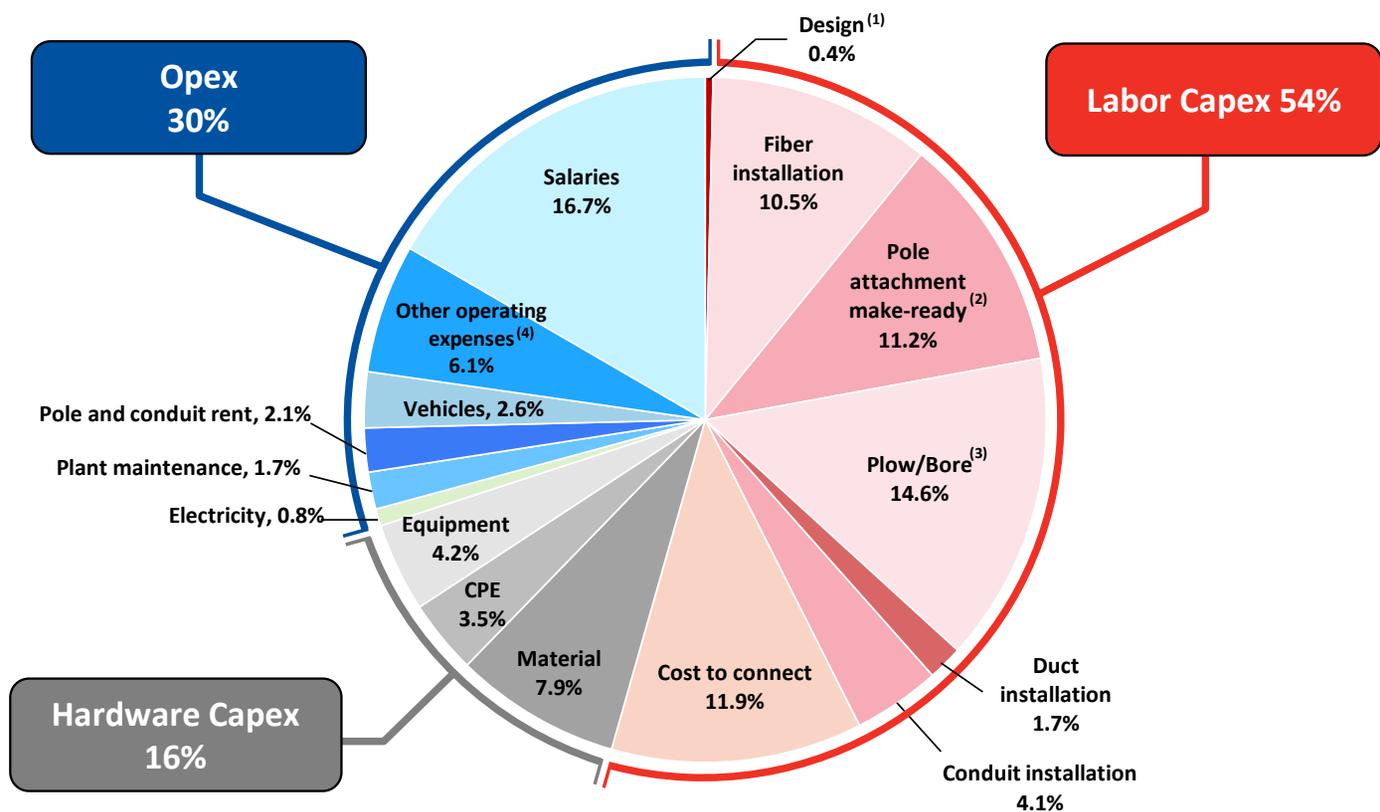
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<sup>2</sup> ACA notes that smaller local telephone companies have demonstrated, for the most part, competence in providing telecommunications service in high-cost, rural areas. They operate in fewer and much smaller service territories and also tend to be less diversified than the major telephone providers. Any action by Congress or the FCC to implement these principles should account for their value.

## Building High-Performance Broadband is Costly

Policymakers can make a difference by focusing on activities that “move the cost needle.”

### Breakdown of Total Cost of Ownership of Fiber-to-the-Home Networks



Notes:

- (1) Design includes: route survey, engineering costs and additional studies required by authorities (i.e. environmental studies).
- (2) Pole attachment make-ready includes pole attachment application fees, pole owner survey and engineering cost, and pre-attachment works by utilities and existing attachers.
- (3) Plow/bore includes right-of-way application fees and the cost of excavation permit.
- (4) Other operating expenses includes franchise fees paid on recurring basis as a percentage of revenues

Source: Cartesian, NBN (Australia), CTC



Accordingly, ACA urges you to make sure your legislative efforts include bills that remove barriers related to accessing poles, ducts/conduits, and rights-of-way by adopting the following measures:

- First, facilitate access to poles by removing impediments for existing attachers to overlash, install customer connections, and undertake short-run extensions.
- Second, reduce potential disputes between attachers and pole owners by creating a more transparent and timely application process, where requesting attachers would be more certain that they are supplying information pole owners need to begin a survey, and that their applications would be deemed complete in a reasonable timeframe.
- Third, for standard pole attachments, enable closer coordination among pole owners, existing attachers, and new attachers earlier in the process, including by providing for joint surveys where new and existing attachers would have the right to accompany a pole owner's survey of the proposed attachments.
- Fourth, lower the cost of and increase the transparency surrounding make-ready by: prohibiting pole owners from imposing costs unrelated to new attachments when undertaking make-ready, including unnecessary pole engineering design and loading analyses; requiring pole owners to itemize make-ready costs on a per-pole basis; and implementing an effective self-help remedy to deal with existing attachers who fail to undertake make-ready.
- Fifth, subject electric cooperatives to the federal Pole Attachment law, which would ensure their attachment rates are reasonable and that providers that compete with them have a level playing field.
- Sixth, improve the process for accessing and sharing of conduit.

- Seventh, governments should charge right-of-way fees on a non-discriminatory basis, such that no provider or technology is favored, and all fees should be related to the actual costs governments incur for providing access to that right-of-way.
- Eighth, because any use on rights-of-way is linked to network facilities and not the provision of services over those facilities, prohibit governments from charging rights-of-way fees on a per-service basis.

**Principal #3: Account for additional deployments in unserved areas resulting from the removal of barriers, the new tax law, and existing federal support programs before determining where to spend new funds and how much is needed.**

ACA has calculated that by removing the barriers described above, the cost of network deployment will be lowered sufficiently such that 1.2 million unserved homes would become suitable for broadband providers to spend private money to deploy cable or fiber-to-the-home broadband services<sup>3</sup> — all without spending additional government funds. Removal of these barriers also will encourage providers using other technologies, including fixed wireless and DSL, to upgrade their networks and expand them into additional unserved areas.

In addition, because network investment will be propelled by the just-enacted tax statute, it is a key factor for which you need to account. ACA members have told us that because the new law permits them to “expense” their network investments immediately and cuts the corporate tax rate to 21%, they have substantially greater incentives and ability to increase their capital spending significantly in the coming years. We estimate that the new tax law will turn more than 400,000 homes in unserved areas into economically viable areas ripe for private investors to build high-speed

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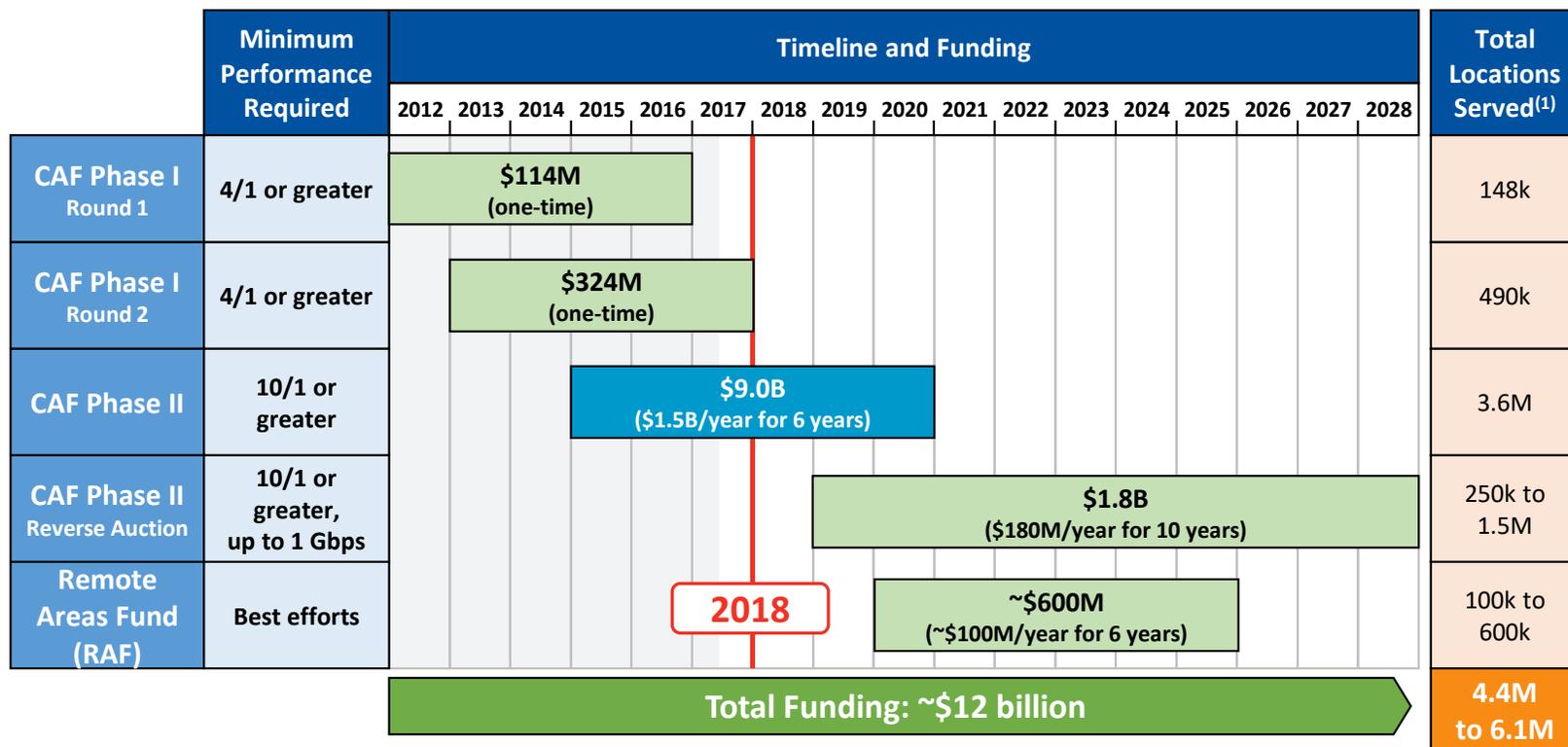
<sup>3</sup> ACA estimates that such deployments will create almost 20,000 new jobs.

broadband or fiber-to-the-home services. Additional areas would also become suitable for private investors using other technologies.

We also should recognize that, at the federal level, we are now providing more than \$4 billion annually to bring broadband to unserved and high-cost areas. States also are implementing their own support programs. By our calculations, the current federal Connect America programs alone, by 2020, should reduce the number of “unserved” homes by 2 million, and even more by later in the next decade, and state efforts will reduce them even further. In sum, the government is already well on its way to closing the digital divide, and it should take account of the gains that can be achieved by removing barriers to deployment, the recent tax cut, and existing support programs before determining how much and where to spend additional funds to bridge the digital divide.

## FCC's CAF Programs Will Deliver High-Speed Broadband to Many Unserved Areas

CAF Phase II provides ~\$1.5B/year to price cap incumbent carriers to deliver broadband in unserved areas; CAF Phase II Reverse Auction and the Remote Areas Fund, when implemented, will provide ~\$280M/year in additional unserved price cap carrier areas and in other areas, many of which are very high-cost.



**USF, which totals about \$10B annually for all programs, is funded through an assessment of about 17% on the amount customers' pay for interstate telecommunications services.**

(1) In 2016, some locations that receive subsidies already have performance greater than 10Mbps  
 Source: FCC, Cartesian



**Principal #4: Provide broadband subsidies efficiently.** The FCC has essentially provided the roadmap for this approach with the Connect America programs it initiated in its major reform in 2011. The FCC has reshaped these programs — and continues to refine its policies — so that its limited support is awarded much more efficiently. It has sought to target support only to unserved areas, and it is about to begin awarding support using a reverse auction. ACA believes you should adhere to the following guidelines with regard to distributing any new money to close the remaining digital divide.

- Provide subsidies for broadband only in unserved, high-cost areas. ACA supports the FCC's current definition providing that an area is unserved if no provider offers 10/1 Mbps broadband service. While ACA understands the urge to "bid-up" these speeds, ACA cautions that we should not divert our attention from bringing service to those areas currently deemed unserved. In addition, any change in the definition of unserved must not result in any overbuilding of providers that are investing private capital. That would be especially counterproductive. Finally, as the National Broadband Plan made clear, wireline deployments become much more expensive as the speed of service increases, because more copper plant needs to be replaced with fiber. Accordingly, assuming we do not have unlimited funds, as you increase the speed threshold for determining whether an area is unserved, you lower the number of unserved locations that will receive service.
- Limit the amount of federal support for broadband buildout in an area to account for subsidies provided by states, unless any additional broadband performance is required. It would be inefficient and a waste of scarce federal support to enable recipients of such support to also receive state funding if they are only required to meet the federal broadband public interest requirements. This is because the federal program already

contemplates these requirements would be met. To receive funding from state program on top of federal support, a recipient should do more, such as provide higher speeds or meet faster deployment deadlines. For instance, the FCC and New York State developed (and ACA supported) an approach where providers in that state could receive support from both the FCC's Connect America program and New York State's Empire State Development program to deploy broadband networks that are faster than those available under the FCC's Connect America program alone.<sup>4</sup> Such an approach is a potentially valuable model for propelling higher performance networks sooner in unserved areas. But, absent such enhanced obligations, a recipient of federal support should not receive state support to provide the same service.

- Use reverse auctions to distribute support to maximize cost-efficiency. Prior to 2011, the FCC provided high-cost universal support only to incumbent telephone companies and determined the proper level of support by using a complex array of factors as part of a cost model that were out of sync with how modern networks were built and operated. In its 2011 USF/ICC Transformation Order, the FCC recognized that bringing broadband to unserved areas would be very expensive and, to maximize use of its limited funding, it needed to award support much more efficiently. Conservative estimates suggest that using reverse auctions over cost models can lower the amount of subsidy needed to serve an area by 20%.<sup>5</sup> The FCC therefore decided to begin using reverse auctions that are open

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<sup>4</sup> Letter from Ross J. Lieberman, Sr. Vice President of Government Affairs, American Cable Association, to Marlene H. Dortch, Secretary, Federal Communications Commission, Jan. 13, 2017, available at <http://www.americancable.org/fcc-ex-parte-letter-re-caf-ii-competitive-bidding-process-and-ny-state-petition-for-expedited-waiver-of-caf-ii-rules-2/>.

<sup>5</sup> See Wallsten, Scott "Reverse Auctions and Universal Telecommunications Service: Lessons from Global Experience, Technology Paper," *Federal Communications Law Journal*: Vol. 61: Iss.2, Article 4, available at <https://www.repository.law.indiana.edu/cgi/viewcontent.cgi?article=1531&context=fclj>. Based on experiences in other

to all providers, irrespective of technology, to award support. The first such auction is scheduled to take place later this year. ACA urges that any new funding be given out using a reverse auction approach (as adjusted for the removal of barriers to deployment).

ACA has established its principles by learning from the experiences and expertise of its members and by seeing over the past decades policies that have – and have not – worked. From what we have seen of the measures introduced by Members of the Subcommittee, you too understand what it takes to bring broadband to all Americans. We support the resolutions introduced by Chairman Latta to ensure that all federal policy is technology neutral, Vice Chairman Lance to direct federal support to unserved areas, and Representative Bilirakis to ensure that federal, state, and local tax, permitting, and other requirements are coordinated. And we applaud Chairman Blackburn for seeking to reward private investment, remove barriers to deployments, and bridge the digital divide. At the end of the day, the principles in these measures will maximize consumer welfare, increase economic growth, and make communities throughout the country thrive. As for additional legislation, we urge the Subcommittee to examine the approach we have just set forth. We believe it will enable you to bridge the digital divide sooner and with more sustainable results.

In closing, I want to commend the Chairman, Ranking Members, and other Members of the Subcommittee for their intense and well-considered focus on accelerating high-performance broadband deployment to all Americans. ACA and its members stand ready to assist you in this endeavor.

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countries, the cost-savings may be even greater. The FCC has noted that Rural Broadband Experiment bids produced discounts off model-based subsidies of greater than 50%.