

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

In the Matter of:	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	WC Docket No. 07-135
	)	
High Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Developing an Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link-Up	)	WC Docket No. 03-109

COMMENTS OF CENTURYLINK

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## EXECUTIVE SUMMARY

The *NPRM* proposes fundamental reforms to the Commission's Universal Service Fund (USF) and intercarrier compensation (ICC) frameworks that would transition current high-cost USF support to targeted support for broadband and voice services in high-cost areas, and stabilize ICC by harmonizing rates, reducing arbitrage and reducing rate levels over a reasonable transition with offsetting revenue opportunities and support flows.

CenturyLink is pleased the Commission is focused on these issues, and particularly on ending the Rural/Rural divide. Despite the availability of broadband service in most areas, significant pockets of rural customers do not have access to broadband today, because there is neither a business case to deploy it nor the explicit support needed to make that deployment possible. CenturyLink has particular interest in USF and ICC and the support they have long provided for universal carrier-of-last-resort (COLR) service in high-cost areas. Based on current census data, 84% of CenturyLink's territory has fewer than 30 people per square mile.

As the Commission works to reform USF and ICC, it should focus on rural consumers and their broadband needs, rather than the size or nature of their providers. Any reforms also must appropriately balance the objectives of preserving continued private investment with the desire and need for expeditious transition to long-term USF and ICC reform while also not undermining affordability, ubiquitous coverage and other critical consumer interests. Substantial private investment will be required to build new broadband, upgrade existing broadband, and maintain and operate all of it. The Commission therefore must take great care to maintain stability and predictability in its rules and the support flows enabling universal service in high-cost areas that are otherwise uneconomic to serve. At the same time, the Commission should identify the areas where it is not economically feasible to deploy and operate broadband networks today, given current levels of federal support.

*Universal service.* When it comes to USF, targeting is the primary solution, and the proposal for the long-term Connect America Fund (CAF) is helpful in this regard, particularly if it targets support to small geographic areas, such as wire centers, rather than averaging costs over study areas or states. There are several key areas, however, where the Commission needs to modify its proposed rules if it is to achieve the stated objectives.

*USF Public Interest Obligations.* CAF support should be tied to reasonable public interest obligations. In particular, the Commission should require an upload speed of 768 kbps, rather than 1 mbps, and should adopt a service requirement, but not a coverage requirement, as a condition for CAF funding.

*Near-Term USF Reform.* The Commission should not let its near-term reform proposals distract it from the critical reform efforts of designing and implementing the long-term CAF. It is the design of that mechanism that will be most critical to ensuring access to broadband and voice services to all Americans. In particular, the Commission should not transition interstate access support (IAS) to Phase I CAF support, as proposed, but rather to long-term CAF support. IAS remains necessary for affordable, quality voice services – as well as broadband investment – in the high-cost areas to which it is targeted. Rapidly eliminating IAS without enabling a replacement mechanism for that support will undermine the network investments (both for voice and broadband) that have been made and those planned in those areas if support is continued.

Under no circumstances should the Commission implement its proposed first phase of the CAF, but fail to implement the long-term CAF. This would likely strand Phase I CAF broadband investments and not only fail to advance universal service policy for broadband services, but would actually defeat those purposes. The Commission also should provide an opportunity early in the auction process for a provider to challenge a bid area's eligibility for

Phase I CAF support, where that company intends to deploy broadband through private investment. Demonstration that a company plans to deploy broadband to the selected bid area should render the area ineligible for Phase I CAF support.

The Commission should not rely on the Phase I CAF mechanism as a model for the longer-term CAF mechanism. The long-term mechanism will need to provide critical on-going support for broadband services in high-cost areas, while the primary purpose of the Phase I CAF mechanism is to quickly fund deployment of broadband networks in unserved areas. Finally, any high-cost funding recovered from implementation of the Commission's proposed near-term reforms should not be diverted to other USF programs but should continue to be available for supporting broadband and voice services in high-cost areas.

*Long-Term CAF.* The long-term CAF should support one wireline broadband provider in each support area, using the same computation and distribution methodology across all qualifying high-cost areas and providers. Such support should be targeted to high-cost wire centers through a "right of first refusal" offer to the ILEC in each support area. This approach would enable the Commission to capitalize on the significant investments that have been made or are planned in wireline networks in rural areas, thereby promoting the efficient use of limited USF support. Any cap on the CAF should be program-specific and indexed for inflation. The Commission should employ an open and transparent, yet efficient, process to adopt a wireline cost model for the CAF. CAF support should not be available for customers with access to high quality broadband and voice service from an unsubsidized provider.

***Intercarrier compensation.*** The Commission should also act to bring about sensible, comprehensive reform of ICC following a reasonable glide path and without causing unintended

rate shock for consumers or negatively impacting the industry's ability to attract private investment capital for network build-out and operation.

To accomplish this, any ICC reform must focus on potential consumer impacts and emphasize preservation of private investment – in addition to the *NPRM's* other stated goals. There are, effectively, only three primary policy levers the Commission can work in reforming the existing ICC framework while balancing its underlying policy goals in fostering broadband deployment – ICC rates, retail end-user rates and USF funding. If ICC rate reform is not accompanied with adequate recovery of any lost ICC revenue, it will undermine the critical policy goals of affordability and ubiquitous coverage. Relatedly, the Commission cannot ignore the critical role of ICC revenue and USF funding as an essential capital investment resource for building-out tomorrow's broadband networks.

While incenting transition to all-IP networks is also properly a key focus of ICC reform, the Commission must be careful not to pre-judge what an all-IP network end-state should look like. Rather, it should let the market determine the best end-state compensation and interconnection mechanisms for the all-IP networks of the future. Additionally, any ICC reform must account for the continuing legitimate function of the PSTN during the longer transition to the all-IP end-state. Thus, the Commission should focus first on getting TDM ICC right.

To accomplish these worthy goals, the Commission's must first take immediate action to address the ICC treatment of IP-on-the-PSTN traffic, phantom traffic, and traffic pumping.

Beyond those interim measures, the ideal transitional ICC rate reform at this time to accomplish the desired goals is to move intrastate access and TELRIC rates currently above interstate access to the level of current interstate access rates on a per-carrier basis in each state or study area over a two-to-four-year period. This approach strikes an ideal balance for the

multi-faceted policy factors impacting on transitional ICC rate reform. It minimizes any harm to consumer interests and private investment, while making significant strides toward addressing the arbitrage and marketplace distortions identified in the *NPRM*. At the same time, it avoids numerous pitfalls of more drastic transitional ICC reform plans – *e.g.*, bill and keep or \$0.0007.

With any ICC rate reform that the Commission adopts, carriers must also have the opportunity to recover ICC revenue lost as a result of ICC rate reform and funding cannot be borne solely by consumers. This is not only good policy, but a legal requirement. CenturyLink’s proposed recovery mechanism would permit recovery first from end users via a reasonable local rate benchmark, then via an explicit subsidy fund as necessary.

Finally, regardless of the ICC rate reform approach taken, it is essential that the Commission clarify the rules for POIs, network edges, and transiting services and clarify how any transitional ICC reform will impact ICAs, tariffs, and commercial agreements.

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**COMMENTS OF CENTURYLINK**

CenturyLink submits the following comments in response to the Commission's recent *Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking* regarding potential reform of its existing universal service fund (USF) and intercarrier compensation (ICC) frameworks.<sup>1</sup>

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<sup>11</sup> *In the Matter of Connect America Fund*, WC Docket No. 10-90, *A National Broadband Plan for Our Future*, GN Docket No. 09-51, *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Docket No. 07-135, *High-Cost Universal Service Support*, WC Docket No. 05-337, *Developing an Unified Intercarrier Compensation Regime*, CC Docket No. 01-92, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, *Lifeline and Link-Up*, WC Docket No. 03-109, *Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking*, FCC 11-13 (rel. Feb. 9, 2011) (*NPRM*). See Public Notice, 76 Fed. Reg. 11,632 (Mar. 2, 2011).

## I. INTRODUCTION

CenturyLink is pleased the Commission is focused on ending the Rural/Rural divide.<sup>2</sup> The current universal service system has worked well for some rural consumers, including some who live in areas served by CenturyLink. But, far more rural consumers, including the vast majority of those that live in rural areas served by CenturyLink, have not benefited in the same way. Indeed, as described in the National Broadband Plan (or NBP), there remain significant pockets of rural customers that do not have access to broadband because there is neither a business case to deploy the broadband nor the explicit support needed to make deployment possible.

Extending broadband to those Americans who lack it today is vital both to those individual citizens and the nation as a whole. Broadband has become a near necessity in almost every aspect of modern life, from looking for a job to obtaining access to government services. In short, “[n]ot having access to broadband availability limits an individual’s ability to participate in 21<sup>st</sup> Century American life.”<sup>3</sup> At a broader level, ubiquitous access to infrastructure networks such as broadband has continually driven American innovation, progress, prosperity and global leadership.<sup>4</sup> It is the classic network effect: “The value of the network to *each* user increases or decreases, respectively, with each addition or subtraction of *other* users to the network.”<sup>5</sup> That includes residents and businesses already on the network. USF support (and ICC revenue) may, for example, enable an urban resident to have a video chat with a family

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<sup>2</sup> See *Prepared Remarks of Julius Genachowski, Internet Without Borders* (Mar. 8, 2011), <http://beta.fcc.gov/document/genachowski-remarks-internet-without-borders>.

<sup>3</sup> National Broadband Plan at 1.

<sup>4</sup> *Id.*

<sup>5</sup> Nuechterlein, Jonathan E., and Weiser, Philip J., *Digital Crossroads: American Telecommunications Policy in the Internet Age* at 5 (2d ed. 2007).

member living in a rural area. Urban business, healthcare and educational institutions can extend the availability of their products and services. Transitioning existing USF support (and maintaining the support provided currently by ICC charges) so as to maximize the reach of broadband networks therefore honors the core historical objective of making the network available in areas where market forces are not likely to do so. Conversely, failure to address the current gap in broadband availability would contravene the very reasons the USF and ICC systems were established. As the Commission has found, ubiquitous broadband coverage will also further other wider objectives, such as improving civic engagement.<sup>6</sup> Similarly, ubiquitous availability of high quality, affordable broadband services will facilitate local, regional and national responses to emergencies, including natural disasters.

With this backdrop, the *NPRM* picks up from the NBP and, like it, proposes reforms that could create a helpful framework for a successful transition to supporting broadband networks and Internet Protocol-based services. At the highest level, the *NPRM* is about two fundamental transitions:

1. transitioning current high-cost USF support flows toward a new Connect America Fund (CAF) designed to target support for broadband and voice networks in most high-cost areas, including many areas that lack support today; and
2. stabilizing ICC by harmonizing rates, reducing arbitrage, and reducing rate levels over a reasonable transition while creating offsetting revenue opportunities and support flows.

CenturyLink has supported and will continue to support these two core objectives if they are implemented in a manner that is helpful for rural consumers rather than simply expedient for companies serving predominately higher-density, lower-cost parts of the country.

CenturyLink has particular interest in USF and ICC reform and the support it has long provided for universal carrier-of-last-resort (COLR) service in high-cost areas. Among the

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<sup>6</sup> National Broadband Plan at 10.

nation's voice and broadband providers, CenturyLink's service to rural America is vast. CenturyLink's local operations now cover a combined service territory of roughly 600,000 square miles. Yet based on current census data, 84% of that territory has fewer than 30 people per square mile. CenturyLink's average line densities are very low – averaging just 29 lines per square mile,<sup>7</sup> and only 6% of the company's footprint has a population of 100 or more people per square mile.<sup>8</sup> The costs of fulfilling mandates to provide service to high-cost low-density areas are real and must be funded. When these obligations are not adequately supported, it conflicts with the need to maintain and upgrade the network, which will be vital to any terrestrial broadband solution in those areas.

As the Commission works to reform USF and ICC, it should focus on rural consumers and their broadband needs. The emphasis should not be on the size or nature of the provider that serves an area. Policy decisions based on size of carriers unfairly discriminate against the high-cost customers of larger providers, a major deficiency of current policy. Specifically, the days of relying on internal cross subsidy from urban to rural areas are long past, due to pervasive competition in lower-cost areas. Similarly, competitive areas and services cannot be relied upon to fund uneconomic services in high-cost areas.

Substantial private investment is required to build new broadband, upgrade existing broadband, and maintain and operate all of it. This cannot be achieved through unfunded mandates. Rather, sufficient explicit support will be required to overcome the high costs that make it uneconomic to deploy and operate broadband networks in areas with low population densities. In addition, the Commission must take great care to maintain stability and

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<sup>7</sup> In comparison, AT&T has a line density of 101 per square mile. Verizon's is 155.

<sup>8</sup> CenturyLink's overall population density average is about 82 people per square mile. AT&T's is about 217. Verizon's is about 525.

predictability in its rules and the support flows for providing universal service in high-cost areas that are uneconomic to serve.

The NBP was a good start at the development of policy and rules for broadband deployment and transition to IP networks, with some appreciation of the challenges in rural areas with low-density areas. When it comes to ending the Rural/Rural divide, targeting is the primary USF solution, and the proposal for the long-term CAF is helpful in this regard, although care must be taken to choose the most efficient geographic unit. Wire centers are likely to be just as competitively neutral as any other unit, and will be easier to implement than a mechanism based on census blocks, given the smaller number of wire centers and long history of basing cost models on wire centers.

The *NPRM* follows through on many of the NBP recommendations, and can be a foundation for positive reform that achieves the Commission's objectives. First, the Commission must take great care to avoid the all-too-common occurrence of short-term, supposedly interim measures being left in place for many years in the absence of the intended permanent rules. The *NPRM* focuses too much on the short-term, interim measures and too little on the ultimate solution that is essential to achieving the Commission's stated objectives.

A big concern with the Commission's USF proposal is that it moves too quickly on diverting existing support away from networks that are deploying broadband while taking too long to develop and begin distributing the long-run CAF support that has the potential to promote the construction and operation of robust broadband networks that meet the Commission's objectives. In particular, the USF reforms need to delay reductions in current support – specifically Interstate Access Support (IAS), which provides targeted support to rural networks essential to the Commission's broadband plans – until the long-term CAF is in place.

Otherwise, the Commission risks taking a step backward on broadband deployment in some areas, contrary to the objectives in the NBP. The Commission's reforms must not harm broadband deployment in the name of promoting broadband deployment. Instead, the Commission should allow IAS recipients to keep receiving IAS until the long-term CAF is fully operational.

There are several other important considerations the Commission must take into account when implementing a long-term USF solution for broadband. First, the build-out requirements must be implemented and evaluated in terms of the recipient's demonstrated success in responding to requests for services, and future ability to respond as well. It would not make sense to require recipients to build out networks fully within the chosen geographic units even where there are no people who are interested in subscribing to broadband service. Second, there should be only one recipient of CAF support in any given area, and support should not be provided where an unsubsidized provider is offering high quality broadband and voice service. Finally, the Commission should offer a right of first refusal to existing providers that have deployed networks in the areas that are to receive CAF support. This will allow the Commission to promote efficient use of limited USF support, by taking advantage of network investments that have been made or are planned. The Commission should use a model to calculate the support that will be provided.

Turning to ICC reform, the *NPRM*, again, is broadly positive for rural consumers, but there must be some significant changes in its proposals if the Commission is to achieve its objectives. Here the main problem is not with the interim measures (*i.e.*, the proper ICC treatment for IP-on-the-PSTN traffic, phantom traffic and traffic pumping), which should be adopted without delay, but rather with the long-term proposal. And, the *NPRM* also correctly

identifies the importance of addressing existing arbitrage and marketplace distortions that arise under the current ICC regime and the importance of incenting transition to all-IP networks – as guiding concepts for any ICC reform it undertakes. But, the Commission must also take a more balanced approach to ensure that any ICC reform: (a) does not undermine the critical policy goals of affordability and ubiquitous coverage and other consumer interests; and (b) emphasizes preservation of private investment.

Additionally, while the *NPRM* focuses, properly, on the need to create incentives for the transition to all-IP networks, it appears at times to signal that the Commission believes that the best overall approach is to simply determine the best compensation treatment for an all-IP end-state and then simply impose that as soon as possible by regulatory mandate. That would be a mistake. The Commission cannot and should not assume that the ideal reform for ICC treatment and interconnection for networks where legacy TDM functionality remains is necessarily the ideal reform for compensation and interconnection for the all-IP network of the future or vice versa. For example, the *NPRM* suggests two specific potential compensation methodologies for all-IP networks – bill and keep and flat-rate charges. But, neither reflects the current compensation schemes that govern interexchange of all-IP traffic, which is typically subject to peering arrangements today. And, regardless of what may be the industry practice today, the Commission, if it takes this approach, risks harming the natural evolution of arrangements for handling IP traffic and mandating outcomes that will reduce competition and deter investment. For this reason, the Commission should also not force LECs to accept traffic in IP. In short, the Commission should not attempt today to determine the appropriate rate for terminating voice traffic over all-IP networks in the future or to determine the appropriate interconnection arrangements for such networks. Rather, the Commission should strive first to get TDM ICC

right – then move on to addressing the regulatory implications of an all-IP network at a later date.

When it comes to transitional reform of the current ICC regime, CenturyLink does believe that ICC must be reformed to reduce arbitrage, stabilize intercarrier relationships, and facilitate broadband deployment. But, the transitions must be stable and measured – ideally two to four years to move intrastate rates to interstate levels.

The Commission should not determine today that the ultimate outcome should be a zero, or near-zero rate. Indeed, CenturyLink is skeptical that a mandated bill and keep solution would ever make sense. It is true that parties often do negotiate bill and keep arrangements for exchange of certain *local* traffic, and should always be free to do so. But, they do so only when it makes sense for both parties. This fact does not suggest that the Commission should adopt bill and keep for traffic (*e.g.*, access traffic) which is inherently out of balance and involves as many as three carriers with each performing a different function. The rate may not matter when traffic is in balance between two carriers and network edges and related obligations (*e.g.*, transport) are well-defined, and appropriately adaptable. However, it must be economically rational and cover economic costs (including a reasonable profit) where these conditions do not exist. When things of value are given away for free, it creates incentives to engage in gaming, which in this case likely would involve free riding on transport and transit networks. Terminating carriers must pay for transport just like any other user of the local transport network for transit services. Mandated bill and keep for access termination would likely drive inefficient network configurations as carriers would seek to avoid paying for dedicated trunks even where it would be more efficient, choosing instead to route all traffic through tandem switches. Indeed, bill and keep likely would also destroy competitive markets for transit services. Similarly, the \$0.0007 rate for reciprocal

compensation should not be allowed to be the “tail wagging the dog” – it was created to deal with a specific arbitrage problem, and it should not drive overall ICC policy.

In short, bill and keep/\$0.0007 reform plans, while having surface appeal, have proven to give rise to countless underlying complexities. In addition to those described above, such plans amplify the Commission’s challenge in moderating the impact of ICC reform on consumers and controlling the size of a USF while giving carriers adequate recovery of any displaced ICC revenue. Likewise, such plans threaten to deprive carriers of a critical source of capital for build-out of the all-IP networks of the future that the Commission seeks to incent. These challenges, and the inability of industry and the Commission to solve them in a rational and cohesive manner, have repeatedly doomed the Commission’s past ICC rate reform efforts to failure. A more modest reform should be pursued in this round.

Displaced ICC revenues must be recoverable from retail rates and explicit USF. A retail rate benchmark can be established to ensure that the cost of universal service continues to be born by all customers of the ubiquitous public telephone network. It simply is not fair to ask one subset of customers – those that choose service from the ILEC – to pay the bulk of the cost of COLR mandates in areas that are uneconomic to serve. Any ICC revenue recovery mechanism should also reflect the reality that any ICC expense savings, be they access or reciprocal compensation expense savings, will be competed away quickly. Similarly, it does not make sense to attempt to offset access revenue reductions, which impact local networks, with access expense savings, which impact long distance and wireless networks. Rational businesses will respond to changing economic incentives and reduce investment in local networks if ICC replacement mechanisms are denied on the basis of long distance expense savings.

**II. THE COMMISSION SHOULD UNDERTAKE COMPREHENSIVE UNIVERSAL SERVICE REFORM THAT FACILITATES BROADBAND DEPLOYMENT IN ALL AREAS.**

There is widespread consensus that comprehensive universal service reform is needed, and that additional targeted support is necessary to make high-quality broadband services available to consumers that lack access to those services today. At the same time, the Commission should avoid actions that would undermine incentives for continuing private investment, which will continue to be a key component of fulfilling the Commission's goal of ubiquitous broadband deployment and adoption. It is also important that the Commission adopt balanced, reasonable public interest obligations on CAF recipients, while ensuring affordability for all consumers.

While the Commission should consider both interim and long-term reform of current high-cost programs, it should not let near-term reform proposals distract from the design and implementation of the long-term CAF. IAS for ILECs should not be rapidly transitioned and eliminated as part of the Commission's near-term reforms of high-cost support, but instead should be transitioned to the long-term CAF. With regard to the long-term CAF, the Commission should provide support to a single wireline provider in each wire center, based on a uniform and logical "right of first refusal" approach. Finally, in undertaking critical oversight measures for the CAF, the Commission should avoid duplicative or burdensome reporting requirements.

**A. Universal Service Reform Is Necessary To Guarantee Equitable Support And Facilitate Broadband Deployment.**

The current federal universal service system has great potential to be thoughtfully modernized to achieve long-term objectives for our nation in the telecommunications sector. High-cost funding levels in rural areas vary wildly, based on factors that have little, if any,

bearing on the cost of providing service in those areas: the size of the study area, the average cost of providing service in that study area or state and the size of the ILEC that provides service in that area. As a result, some rural consumers fare much better than others in terms of having access to affordable, high-quality broadband and voice services. These factors are the primary reason that consumers in the high-cost areas served by large carriers do not have access to broadband services at the levels offered to the similarly-situated customers of smaller carriers. Any reform of the Commission's universal service rules should address these inequities, in addition to targeting additional federal funding to areas where there is no private sector business case to provide broadband and high-quality voice service today. It also must ensure affordable rates and the availability of rates and services in rural areas that are reasonably comparable to those in urban areas.

- 1. The current universal service high-cost system shortchanges rural consumers – particularly those living in areas served by large and mid-sized ILECs.**

Today, vast swaths of rural America do not receive federal high-cost support despite the very high cost of providing service in those areas, due to study-area averaging of universal service funding, statewide averaging of non-rural high-cost support and inadequate model-based support for areas served by so-called non-rural carriers. This lack of support has at times resulted in rural rates that are not reasonably comparable to urban rates,<sup>9</sup> and, more frequently, in a lack of services – particularly broadband services – that are reasonably comparable to those

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<sup>9</sup> *In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service; Joint Petition of the Wyoming Public Service Commission and the Wyoming Office of Consumer Advocate for Supplemental Federal Universal Service Funds for Customers of Wyoming's Non-Rural Incumbent Local Exchange Carrier*, Order on Remand and Memorandum Opinion and Order, 25 FCC Rcd 4072, 4118-20 ¶¶ 88-91 (2010) (establishing mechanism to provide additional federal high-cost support in Wyoming, where rural rates had lacked reasonable comparability for a decade) (*Tenth Circuit Remand Order*).

provided in urban areas, and even in rural areas that are in smaller study areas or are served by small ILECs.

Historically, customers in lower-cost areas effectively subsidized the cost of serving adjacent rural high-cost areas by paying rates that are averaged across the study area. Most study areas contain wire centers that are much more costly to serve than others in the study area. Even within a wire center, there can be large differences in the cost of serving particular customers. Through study area averaging, these cost differences are ignored, and it is assumed that only those study areas with average costs above a particular threshold need federal support. Statewide averaging of non-rural high-cost support rests on a different, but similar, regulatory construct – that affordable and reasonably comparable rates in rural areas served by so-called “non-rural” carriers should be accomplished through a combination of federal and state action. Through this partnership, the federal high-cost mechanism would provide support to enable affordable and reasonably comparable rates across states, focusing particularly on states that “do not have the resources within their borders to support all of their high-cost lines.”<sup>10</sup> In turn, each state regulatory commission would ensure – through a state high-cost fund or rate design – that rates and services in rural areas of that state are affordable and reasonably comparable to those in urban areas.<sup>11</sup>

This system of implicit subsidies was rendered ineffective with the advent of competition and, accordingly, has long outlived its ability to ensure affordable high-quality services in rural areas. Fifteen years after the Telecommunications Act of 1996, extensive line loss to cable

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<sup>10</sup> *In the Matter of Federal-State Joint Board on Universal Service*, Order on Remand, Further Notice of Proposed Rulemaking, and Memorandum Opinion and Order, 18 FCC Rcd 22559, 22570-71 ¶ 21 (2003), *pet for rev. granted in part, denied in part, remanded*, *Qwest Corp. v. FCC*, 258 F.3d 1191 (Tenth Cir. 2001).

<sup>11</sup> *Id.* at 22570-75 ¶¶ 21-26.

companies, wireless providers and CLECs – particularly in lower-cost areas, as competitors have little economic incentive and are not compelled by law or regulation to compete in high-cost areas – have undermined the basis for this system. As the Joint Board has found, “[n]ew entrants often compete only in the densely populated areas that have relatively low costs. . . . None of the existing support mechanisms adequately recognizes this phenomenon, which generally occurs on a smaller scale than the typical telephone exchange.”<sup>12</sup> Even in some rural areas this is the case; residents living in town, near the central office may have a choice of providers, while those living outside the town do not, and also may lack the explicit support necessary to allow broadband availability. Thus, the competitive goals of the Act have been accomplished to the detriment of its universal service goals. Statewide averaging also does not function in the way the Commission may have originally intended (and essentially picks winners and losers by state). Only about half the states have established universal service high-cost funds,<sup>13</sup> and many of those are underfunded, or are being defunded.<sup>14</sup>

The continuing use of study area and statewide averaging also results in highly disparate funding between high-cost wire centers in small and large study areas. These differences are aggravated by the different funding mechanisms applied to “rural” and “non-rural” study areas. The ultimate result of these policies is that some rural consumers enjoy the benefits of high-cost funding – superior services and affordable pricing – while others do not, simply due to the vagaries of the current high-cost mechanism. It therefore is not surprising that 77 percent of the

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<sup>12</sup> *In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service*, Recommended Decision, 22 FCC Rcd 20477, 20483 ¶ 22 (2007) (*Recommended Decision*).

<sup>13</sup> National Broadband Plan at 140.

<sup>14</sup> *See, e.g., In the Matter of Proposed Rules Relating to the Colorado High Cost Support Mechanism Regulations 723-2*, Order Adopting Colorado High Cost Support Mechanism Rules, Decision No. C11-0232, Docket No. 10R-191T (Colo. PUC 2011).

households without access to broadband service today are in the highest-cost rural territories of large and mid-sized LECs,<sup>15</sup> as the policy mechanisms discriminate against them.

The reality of challenging demographics such as low population densities, rugged terrain, extreme distances and widely disbursed, mostly residential customer bases do not change because of reform or technology evolution. If the Commission is to accomplish affordable ubiquitous broadband availability, it must design uniform universal service policies for all rural consumers, regardless of the size of their study area or carrier. The Commission must end distinctions based on the type and size of carrier and, instead, determine the need for CAF support in a particular geographic area, such as a wire center, based on the cost of providing service in that area. Given that many rural areas have long been underfunded, the Commission should move quickly to a long-term CAF mechanism that provides sufficient federal support in all rural areas.

**2. Broadband deployment in many high-cost areas will require additional federal support.**

As the Commission recognized in the NBP, the government will play an important role in enabling ubiquitous broadband deployment – “*the great infrastructure challenge of the early 21<sup>st</sup> century.*”<sup>16</sup> Specifically, the Commission must direct explicit broadband funding to areas that currently lack a sufficient business case to deploy broadband.

Due to the factors noted in the last section, many high-cost areas served by CenturyLink frequently receive only limited, or no, federal high-cost support today. There are many high-cost rural areas where it simply is not economically feasible today to deploy a broadband network,

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<sup>15</sup> *The Broadband Availability Gap*, FCC Omnibus Broadband Initiative Technical Paper No. 1, at 21 (2010) <http://download.broadband.gov/plan/the-broadband-availability-gap-obi-technical-paper-no-1.pdf> (*Broadband Availability Gap*).

<sup>16</sup> National Broadband Plan at 19.

given the revenues that can reasonably be expected from services provided over that network. Public companies such as CenturyLink owe a fiduciary duty to their shareholders to commit their limited capital to projects where they can earn a return on their investment within a reasonable period of time, and potential lenders likewise expect no less. These providers owe an equally important obligation to their customers to provide high-quality services. Our competitors operate under similar constraints. For these high-cost areas in particular, the Commission should target additional high-cost support, with ongoing support to those areas that need it to maintain high-quality broadband and voice service.

**B. Achievement Of The Commission's Goal Of Ubiquitous Broadband Deployment Depends On Continuing Private Investment, Which Relies In Part On Existing High-Cost Support And Implicit Subsidies.**

As the Commission has recognized, ubiquitous broadband deployment will require an ongoing public-private partnership. Over the years, that partnership has resulted in near-universal voice service and increasing availability of broadband services. Particularly given its intent to limit the size of the CAF, the Commission should carefully consider changes to the current high-cost mechanism to ensure that it does not undermine private investment.

**1. Current high cost programs have enabled high-quality voice services in even the most remote rural areas, while facilitating broadband deployment in many areas.**

The need for reform of the Commission's high-cost mechanisms does not detract from the tremendous success and public interest benefits that have arisen from federal high-cost programs over the years. The availability of affordable, high-quality voice services has long been nearly ubiquitous, even in the most remote areas of the nation. At 96 percent, voice penetration rates are at an all-time high.<sup>17</sup> At the same time, wireline broadband providers have

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<sup>17</sup> *Telephone Subscribership in the United States*, Wireline Competition Bureau, Federal Communications Commission (rel. Aug. 2010).

steadily increased the availability and quality of broadband services in many areas, including some less densely populated areas.

This success in broadband deployment can be attributed largely to private investment, supplemented by public funding. Current federal regulation maintains interdependent systems of explicit and implicit USF and ICC mechanisms that provide substantial support for rural areas. The National Broadband Plan recognized that continuing to provide support for voice services in the highest-cost rural areas will be required for some time,<sup>18</sup> and in many of those areas, explicit broadband support will be required even where some form of broadband exists today. Many carriers are able to continue to serve consumers in remote areas only because of continued high-cost support. At the same time, the goal of ubiquitous broadband availability depends in large part on investment by private enterprise.<sup>19</sup>

**2. Any changes to the Commission's universal service rules must facilitate, rather than deter, investment in rural areas.**

It is critical that the Commission's policies and rules preserve and foster ongoing investment in rural broadband networks. According to the Commission's latest Broadband Deployment Report, 14 to 24 million Americans lack access to broadband services with actual upload and download speeds of 4 Mbps and 1 Mbps, respectively.<sup>20</sup> The report found that, on average, areas lacking such broadband services have a household density of less than half the

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<sup>18</sup> National Broadband Plan at 150.

<sup>19</sup> *See id.* at 20.

<sup>20</sup> *In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, Amended by the Broadband Data Improvement Act*, Sixth Broadband Deployment Report, 25 FCC Rcd 9556, 9557 ¶ 1, 9559-60 ¶ 5 (2010) (*Sixth Broadband Deployment Report*).

national average.<sup>21</sup> This is not surprising, as the correlation between per-customer cost and population density is high. Broadband deployment requires extensive upfront investment, particularly in sparsely populated areas, frequently making such deployment economically infeasible. Some providers have a higher percentage of these areas than others. For example, as reflected below, the vast majority of CenturyLink's serving territory has a population density of less than 30 people per square mile.

<b>Population Density of CenturyLink Service Territory</b>					
<b>Population per Square Mile</b>	<b>Census Blocks</b>	<b>Population</b>	<b>Area Sq Miles</b>	<b>% of Area</b>	<b>Cumulative</b>
<b>Less than 5</b>	612,118	261,267	355,510	61%	61%
<b>Greater than or equal to 5 and less than 10</b>	37,136	371,409	51,000	9%	70%
<b>Greater than or equal to 10 and less than 20</b>	49,794	782,334	54,460	9%	79%
<b>Greater than or equal to 20 and less than 30</b>	32,428	674,337	27,515	5%	84%
<b>Greater than or equal to 30 and less than 50</b>	41,162	1,100,511	28,424	5%	89%
<b>Greater than or equal to 50 and less than 100</b>	54,070	1,858,663	26,581	5%	94%
<b>Greater than or equal to 100</b>	<u>737,109</u>	<u>42,547,844</u>	<u>37,278</u>	6%	100%
<b>Total</b>	1,563,817	47,596,365	580,768		

These low-density areas often include households that are an extended distance from the nearest town. In Douglas and Gillette, Wyoming, for example, CenturyLink serves customers with local loops in excess of 75 miles.

<sup>21</sup> *Id.* at 9571-72 ¶ 24. On average, the Nation's unserved areas have a household density approximately 47 households per square mile, while in the U.S as a whole, the typical county has a household density of 108 households per square mile.

As the Commission has found, the cost of deployment on a per-line basis increases exponentially as household density falls.<sup>22</sup> In other words, the cost for a provider such as CenturyLink to increase broadband availability at a given speed in its territory from 85 to 90 percent will be significantly more than increasing from 80 to 85 percent. This fact is vividly illustrated by the results of a study estimating the per-line investment required to deploy broadband in legacy CenturyLink's service territory.

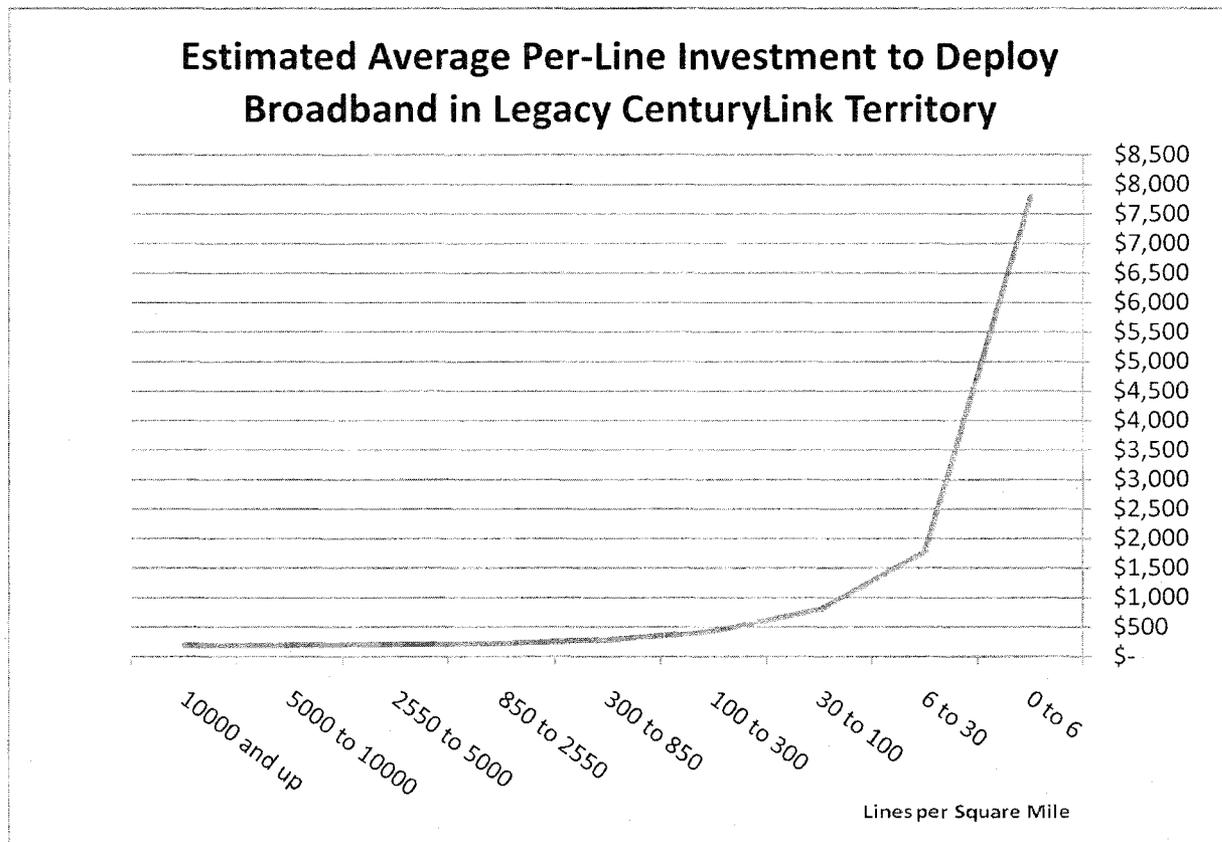


Chart based on CenturyLink's Economic Cost Model results for 33 pre merger states using 12,000 ft CSA design and December 31, 2008 customer data. Investment average does not include the cost of distribution copper, core network, or customer CPE.

As shown, investment costs climb steeply in areas of less than 30 people per square mile and can be five, six or even seven times as much as in more densely populated areas.

<sup>22</sup> Broadband Availability Gap at 5.

In the absence of explicit broadband support, consumers in rural areas lacking a viable business case are deprived of broadband services, given the sizable investment necessary to offer those services. The challenge of low population density is timeless and largely unchanged as universal service objectives transition from voice to broadband support. Extending service to these remaining customers will most likely depend on a combination of private and public funding. Any negative change to the Commission's regulatory structure – including significant reductions in CenturyLink's current federal high-cost support – will undermine the already dubious business case for broadband deployment in these areas. It will also jeopardize CenturyLink's ability to maintain and upgrade its existing network to keep up with burgeoning demand. Stability in current USF funding is therefore a critical component in ongoing broadband investment, in addition to reform of the policy mechanisms designed to make otherwise uneconomic investment economic.

Current support is also vital to maintain the quality of existing services in rural areas. Rural areas typically are characterized by long loop lengths and driving times, which increase maintenance and operations expenses relative to urban and suburban areas, particularly with rising fuel costs. With fewer customers to spread these costs across, providers in rural areas face significantly higher maintenance and operations expenses per line than carriers operating in more densely-populated areas.

Reasonable transition periods also are of utmost criticality. In some cases, elimination or significant reduction of existing high-cost support prior to the implementation of Phase II of the CAF could potentially create a funding gap in rural areas that currently rely on existing support for affordable high-quality services, a result contrary to the goals of universal service policy. To

the extent possible, therefore, the Commission should not reduce existing high-cost support to incumbents in rural areas, including IAS, until the long-term CAF mechanism is put in place.

**3. The Commission should also avoid unfunded mandates, and provide “specific, predictable and sufficient” high-cost support as section 254 requires.**

Section 254 requires that universal service support be specific, predictable and sufficient to ensure that all Americans, including those in insular, rural and high-cost areas of the country, have access to affordable, high-quality telecommunications and information services.<sup>23</sup> Such support must be “explicit,” rather than implicit, and “sufficient to achieve the purposes of [section 254].”<sup>24</sup> Thus, to the extent the Commission adopts rules to accomplish the purposes of section 254, the Act requires that it provide adequate support to do so, *i.e.*, no unfunded mandates.

In particular, the Commission should not mandate a certain level of broadband speed in a given area unless it makes sufficient CAF support available to make that deployment economically feasible. Where broadband deployment is justified through expected subscriber revenues, then such deployment can generally be funded through private investment. But remote areas of the country that cannot economically sustain broadband service should receive sufficient CAF support to make it economically sustainable. Providing such an opportunity is also essential to create a financial environment that will attract the billions of dollars in private investment capital necessary to construct networks capable of providing the broadband services the Commission seeks.<sup>25</sup> Regulatory uncertainty, or suggestions of inadequate support, could signal to investors that additional broadband deployments – particularly in remote rural areas –

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<sup>23</sup> 47 U.S.C. § 254(b)(5).

<sup>24</sup> 47 U.S.C. § 254(e).

<sup>25</sup> See National Broadband Plan at 19.

are not worth the risk of investment. For the same reasons, if the Commission adopts a new, higher performance standard for broadband service, it should apply the new standard only going forward and in areas where it provides sufficient support to enable compliance with that standard. Overall, the Commission must ensure that its broadband support programs facilitate, rather than inhibit, incentives for continued investment.

**C. The Commission Should Adopt Reasonable Public Interest Obligations.**

In fashioning public interest obligations for CAF recipients, the Commission must balance the competing objectives of increasing broadband speeds in rural areas and constraining the size of the new mechanism. Consistent with this balance, as well as the terms of the Act, the Commission should adopt performance requirements that reflect technologies that are currently being deployed in wireline networks. Likewise, the Commission should not require CAF recipients to retrofit their networks to meet evolving performance standards, or to provide broadband service to customer locations where service has not been requested.

**1. A 1 Mbps upload requirement will impose unnecessary costs on the CAF.**

In the *NPRM*, the Commission proposes to require broadband providers to offer *actual* download and upload speeds of 4 Mbps and 1 Mbps, respectively. However, an upload speed of 1 Mbps is not technically feasible in many areas today and would impose a financial burden on the CAF. Most broadband networks are not configured today to deliver 1 Mbps upstream for residential services because consumers largely have not demanded such capabilities to-date. There may be technological solutions that could deliver 1 Mbps upstream, but with reduced downstream service performance, increased deployment costs, and higher per-line costs in lower-density areas.

Even those DSL-based technologies that can provide an actual download speed of 4 Mbps cannot necessarily provide a stable upload speed of 1 Mbps. This particularly is a concern for ADSL2+, which the Commission has correctly recognized is widely deployed in telephone company networks, and tends to be less expensive to deploy in low-density areas than wireless service, “particularly where terrain drives the need for smaller cell sites that drive up the cost of wireless.”<sup>26</sup> If the Commission requires an actual minimum upload speed of 1 Mbps for CAF support, it therefore may inadvertently eliminate use of a DSL technology that could help accomplish broadband deployment in rural areas at a reasonable cost.

Moreover, the costs of deploying 1 Mbps upstream service in areas that are already served with broadband service would be substantial because networks would have to be reconfigured. In light of these costs, current limited customer demand for 1 Mbps upstream and the Commission’s goal of limiting the size of the CAF, the Commission should adopt an initial upload speed performance standard of 768 Kbps.<sup>27</sup>

**2. The Commission should not require CAF recipients to retrofit existing networks to meet evolving performance standards, without providing CAF support necessary to do so.**

Broadband networks will of course continue to evolve over time, resulting in increased broadband speeds and performance. As this occurs, the Commission may reasonably consider

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<sup>26</sup> *In the Matter of Connect America Fund; A National Broadband Plan for Our Future; High-Cost Universal Service Support*, Notice of Inquiry and Notice of Proposed Rulemaking, WC Docket Nos. 10-90 and 05-337, GN Docket No. 09-51, FCC 10-58, rel. Apr. 21, 2010, Exhibit 4-AH, Downstream Speed of a Single ADSL2+ Line as a function of Loop Length (24 AWG) at 8686866724.

<sup>27</sup> In the alternative, the Commission could consider adopting a 768 Kbps upload standard for existing broadband networks, but requiring that a particular percentage of new deployments of broadband in a particular geographic area meet a 1 Mbps upload standard. *See CenturyLink-Qwest Merger Order*, Appendix C at 2, Section I (reflecting CenturyLink’s commitment that at least 75% of the living units satisfying its broadband commitments would have actual upstream throughput of at least 1 Mbps).

modifying the performance requirements that broadband providers must meet to qualify for CAF support. When it does so, however, the Commission should not apply these new performance standards to existing networks as a condition for continuing CAF support, unless it is going to provide the support necessary for these upgrades. As noted, the expected revenues in rural high-cost areas typically will not be sufficient to cover the cost of such upgrades, and certainty in required performance criteria is critical for continued investment.

**3. The Commission should adopt a service requirement, but not a coverage requirement, as a condition for CAF funding.**

The *NPRM* seeks comment on whether the Commission should adopt a service requirement, or a service requirement *and* a coverage requirement, as a condition of CAF funding.<sup>28</sup> The Commission should follow the approach in place today for supported services and adopt a service requirement, but not a coverage requirement.

As acknowledged in the *NPRM*, the Commission currently imposes a service requirement on the ETCs it designates, requiring those carriers to certify that they will satisfy reasonable and timely requests for voice service where facilities are already available or can be provided at a reasonable cost, where facilities are not available.<sup>29</sup> In CenturyLink's experience, states often impose similar obligations on COLRs. By tariff, CenturyLink typically commits to provide supported voice services throughout the area in which it is designated an ETC to all customers making a reasonable request for service, assuming necessary facilities are available.

There is no reason to depart from this general approach for broadband and voice services supported by the CAF. As a condition on CAF support, the Commission could require CAF recipients to provide service upon request, in a reasonable period of time, throughout the area

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<sup>28</sup> *NPRM* ¶ 124.

<sup>29</sup> *Id.* ¶ 125 (citing 47 C.F.R. § 54.202(a)).

where they receive CAF support. If a customer requests broadband service in a location where the provider lacks broadband facilities, the provider would bear the cost of construction up to a predefined threshold that approximates the limits of market-based economic investment, with the customer sharing the cost above the threshold. In practice, such an approach has resulted in the availability of phone service in virtually all areas, as reflected in the 96 percent voice penetration rate.

In contrast, as the Commission recognizes, a coverage requirement could impose higher costs on the CAF because providers would be required to extend broadband service to a certain percentage of households in the geographic support area, regardless of how many households have requested service. Particularly in Phase II of the CAF, a coverage requirement could also result in inadequate funding if a provider receives CAF support only for those households to which it actually provides service. While a coverage requirement would ensure the availability of broadband and voice services in a service area, it would do so at a much steeper cost than a properly calibrated service requirement.

The Commission should permit wireline providers to partner with a broadband satellite provider to serve areas or locations where the cost of service would exceed a reasonable threshold. This is particularly important if the Commission considers adopting a coverage requirement. Such an approach could ensure the availability of broadband services in all areas, while constraining the size of the CAF. For those locations, the Commission may have to waive its minimum performance metrics adopted for wireline and wireless mobile services, given the performance characteristics of satellite broadband service.

**D. The Commission Should Not Let Its Near-Term Reform Proposals Distract From Its Reform Efforts To Design And Implement The Long-Term CAF.**

For the most part, the Commission's proposed modifications to existing high-cost support mechanisms seem reasonably designed to curb certain distribution inefficiencies in those mechanisms. Most of the proposed modifications appear to be based on data that the existing mechanisms are no longer functioning efficiently in today's telecommunications market and should be modified to more effectively use universal service funding.

Even so, these proposed modifications are limited in the efficiencies they can accomplish given the structure of the current high-cost support mechanisms. The Commission should not let these proposed modifications distract it from the critical issue in high-cost support reform – reform must result in better targeting of high-cost support to high-cost areas. These modifications may be improvements, but they are not addressing the fundamental need to restructure the manner in which high-cost support is distributed.

In order for the Commission to ensure quality voice and broadband services at affordable rates throughout the nation, the Commission must implement a support program that targets support to those areas where no telecommunications provider would otherwise provide the desired services. This cannot be accomplished until the Commission fundamentally reforms the methodology used to distribute high-cost support.

**1. The Commission should take all reasonable steps to more narrowly target support to high-cost areas.**

Among other near-term modifications, the Commission proposes to require rural carriers to disaggregate high-cost loop support and ICLS within existing study areas beginning in 2012. While this may re-target high-cost support to a degree, overall it is another tweak to a broken system. These support mechanisms still rely on state-wide averaging which must be eliminated to effectively reform the high-cost mechanism. The Commission should press forward with

redesigning support areas to better target CAF support.<sup>30</sup> To do so, the Commission must also eliminate its reliance on study areas for distributing support. Study areas are remnants of monopoly-era universal service policy, and are no longer effective units for universal service support distribution purposes in today's competitive environment. Study areas have out-lived their usefulness for current high-cost support mechanisms for voice service and will be inadequate for developing effective universal service policy for 21<sup>st</sup> century broadband networks.

And, in re-designing universal service support areas the Commission should not move to high-cost support based on consolidated study areas under common ownership in a state. That would be directly contrary to the fundamental need to reform high-cost support to be more narrowly targeted to the areas with the highest costs. Consolidating study areas would continue to focus distribution of high-cost support on the size of the carrier providing the services. This would only serve to perpetuate one of the greatest problems of the current high-cost support mechanism: averaging costs over large study areas continues to require larger carriers to implicitly subsidize service to high-cost areas to the detriment of customers residing in the high-cost areas of those larger carriers. The Commission must target high-cost support more directly to high-cost areas without drawing distinctions based on the size of the carrier providing the supported services. For the CAF, the Commission must determine support areas by directly examining the differential costs to provide fixed broadband and voice services in wire centers triggered by the relevant characteristics of the area served (*e.g.*, household density).

**2. The Commission should only transition interstate access support to the long-term CAF.**

As another near-term modification to current high-cost support, the Commission proposes to transition amounts from IAS for price cap carriers to the CAF by capping the IAS

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<sup>30</sup> See discussion, Section II.E.3.d., *infra*.

funding level for incumbent carriers in 2012 at 50% of the 2011 IAS cap amount and then eliminating the support in 2013. Yet, the Commission proposes these immediate and drastic measures based only on its conclusion that IAS is no longer warranted. In fact, IAS remains necessary support to both sustain affordable, quality voice services and enable some broadband investment in the high-cost areas receiving that support.

**a. IAS remains necessary for affordable, quality voice services.**

Contrary to the Commission's conclusions, IAS is necessary to provide good-quality voice services at affordable and reasonably comparable rates in the vast majority of areas in which CenturyLink receives that support. CenturyLink continues to use IAS to offset the high costs to provide services in the wire centers for which it receives that support and to keep basic service rates in those wire centers affordable. Removing IAS will put further pressure on CenturyLink's ability to maintain quality service at affordable rates in these high-cost areas, and in turn hinder CenturyLink's efforts to aid the Commission in its goal of ubiquitous service.

Additionally, IAS recipients who are "non-rural" carriers serving large rural areas are already the most disadvantaged by the current high-cost mechanisms. To prematurely remove IAS from high-cost areas served by these carriers, only serves to widen – not narrow – the divide between the rural areas that "have" the benefits of universal service policy and those that "have not." Further undermining non-rural carriers' ability to provide quality, affordable voice and broadband services to these areas is contrary to universal service policy and the purposes behind the Commission's near-term reforms. IAS remains necessary until a long-term CAF is operational.

**b. Relative to other high-cost mechanisms, IAS is better targeted to high-cost areas.**

Due to the very manner in which the Commission's IAS distribution methodology was developed, IAS is targeted to higher-cost areas. Each state has created UNE zones that reflect gradations of loop costs.<sup>31</sup> IAS is targeted to high-cost UNE loop zones throughout the Nation. Carriers receiving IAS are required to certify annually that they are only using the support in the manner intended.<sup>32</sup> In this manner, IAS is distributed to higher-cost areas. Because of this targeting, IAS, unlike some of the other high-cost support mechanisms, does not need immediate reform to more effectively distribute that support to high-cost areas.

**c. IAS promotes broadband investment.**

Indirectly, IAS also promotes broadband deployment. In the quintessential public-private partnership, IAS supports quality voice services in high-cost areas and enables private investment to extend broadband service where a business case can be made. CenturyLink has made significant progress in deploying broadband service including in the wire centers for which it receives IAS. Even so, more remains to be done to extend broadband service in high-cost areas. But, rapidly eliminating IAS (the public side of the public-private partnership) will materially reduce the business case for deploying broadband anywhere.

**d. Rapidly eliminating IAS without enabling any replacement support will harm network investment.**

For additional reasons, any reduction and ultimate elimination of IAS should only be through transition to the CAF's long-term target support for broadband and voice services in high-cost areas. First, rapid elimination of IAS is contrary to one of the NBP's guiding

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<sup>31</sup> In 1996, under FCC rules implementing the Act, each state was required to geographically de-average UNE loops into at least three zones based on loop costs. *See* 47 C.F.R. § 51.507.

<sup>32</sup> *See* 47 C.F.R. § 54.809.

principles for comprehensive USF reform that there should be no flash cuts.<sup>33</sup> The Commission expressly recognized in the NBP that “[n]ew rules should be phased in over a reasonable time period. Policymakers must give service providers and investors time to adjust to a new regulatory regime.” While the end goal may be to fully repurpose IAS to support broadband networks, any such refocusing of IAS must be accomplished through a reasonable transition.

The Commission recognized this in the NBP when it stated that:

[R]efocusing IAS could have distributional consequences for existing recipients; individual companies would not necessarily receive the same amount of funding from the CAF as they might otherwise receive under the legacy programs. As the FCC considers this policy shift, it should take into account the impact of potential changes in free cash flows on providers’ ability to continue to provide voice service and on future broadband network deployment strategies.<sup>34</sup>

Second, the Commission should heed its own advice. The Commission is correct that refocusing IAS by reducing and eliminating it and transitioning that recovered funding to the Phase I CAF as currently proposed alters the USF support for these former IAS recipients. And, it does so without any certainty that explicit support will again be available to support these carriers’ investments in high-cost areas. Eliminating IAS for incumbent carriers in this manner will undermine those carriers’ ability to invest in their networks. It threatens the carriers’ ability to maintain quality, affordable voice service in high-cost areas, and virtually eliminates the amount that carriers can use to build out broadband in those same areas.

As the Commission itself stated, it must recognize the impact of these proposed changes. Absent long-term CAF support it is unlikely that either broadband deployment or broadband adoption will be spurred in the high-cost areas where the Commission eliminates IAS. Even if Phase I CAF support were to be awarded to some of these areas, which by design will be only

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<sup>33</sup> National Broadband Plan, Chapter 8.3 at 143.

<sup>34</sup> *Id.*, Recommendation 8.6 at 147.

certain selected areas throughout the country, that support will not sustain affordable, quality broadband and voice services in those areas over the long-term. Given that existing IAS is promoting broadband deployment, existing IAS recipients should be allowed to retain that funding to continue assisting that deployment in high-cost areas. Any transition from IAS for incumbent carriers needs to be prudently aligned with the longer-term CAF mechanisms for distributing broadband support, so that broadband service in high-cost areas is effectively and continuously advanced – not derailed – by near-term high-cost support reforms.

**e. The Commission should not phase out IAS for ILECs faster than it phases out CETC high-cost support.**

Still another concern with the Commission’s proposal to quickly phase out and eliminate IAS is that it could result in phasing out that support for ILECs more rapidly than phasing out CETC high-cost support. Any phase out of IAS for ILECs should not be faster than any phase out of CETC high-cost support. If anything, the opposite should occur, since the purposes for ILEC support generally do not apply – and thus do not justify – CETC support. IAS for CETCs should be addressed consistently with the Commission’s proposed elimination of the identical support rule. The purposes underlying IAS to ILECs are not served in providing this support to CETCs. Most of the CETCs never had the access charges that were reduced to create IAS in the first place. Given that there is little, if any, justification for sustaining CETC high-cost support, it would be irrational and perversely inequitable for the Commission to phase out ILEC IAS faster than it phases out CETC high-cost support.

For all of these reasons IAS should be continued for ILECs until high-cost support is fully-transitioned to the CAF’s long-term, better-targeted support for voice and broadband in high-cost areas.

**3. The Commission should focus its high-cost reform efforts on designing and implementing the long-term CAF.**

The Commission proposes rules for awarding, through reverse auctions, targeted non-recurring funding to support the deployment of fixed or mobile broadband in areas of the country that lack basic broadband. The Commission envisions conducting such an auction in 2012 and potentially again in 2014. As the Commission has itself recognized, this CAF Phase I structure is intended to provide funding to quickly stimulate broadband deployment to discrete unserved areas.<sup>35</sup> As proposed, however, it is not intended to sustain affordable, quality broadband and voice service in high-cost areas. That will be the focus of the long-term CAF. It is the design of that mechanism that will be critical to ensuring universal access to broadband and voice services to all Americans.

If the Commission fails to establish the long-term CAF, the Phase I CAF will also fail in all areas that will need on-going support to sustain quality broadband and voice services. To ensure truly ubiquitous quality broadband and voice services, the Commission must develop the phases in tandem. And, under no circumstances can the Commission implement Phase I and not implement the long-term CAF. This would only result in stranding the Phase I CAF investment in broadband which would not only fail to advance universal service policy for broadband services, but would actually defeat those purposes. Only by following through on the long-term mechanism can the Commission achieve universal availability of broadband and voice services.

Additionally, for the reasons discussed earlier, the Commission should not transition IAS to Phase I CAF support, but only to the long-term CAF. To the extent that this modification to the Commission's proposals would significantly alter the amounts available to fund the Phase I

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<sup>35</sup> *NPRM* ¶ 261.

CAF, the Commission may wish to revise its Phase I approach, or revisit the need for a phased approach at all.

**a. The proposed CAF Phase I mechanism is not a good model for the longer term CAF support mechanism.**

The design of the Phase I CAF mechanism is not likely to be a good model for distributing long-term CAF support. The Phase I mechanism is intended to support broadband deployment and provision of broadband services to unserved areas for a limited period of time. It does not attempt to address how to provide on-going support in high-cost areas. While a reverse auction structure may be an effective mechanism for the Phase I purposes being proposed, by itself a reverse auction is not an effective mechanism for distribution of on-going support in a high-cost area where broadband services have been deployed. Such a proposed use raises significant concerns surrounding the existing network in the event the existing provider is not the successful bidder in the auction. The potentially harmful impacts of a reverse auction on existing investment, future investment, and service quality, should discourage adopting this approach to distribution of high-cost support in existing service areas. Instead, a right-of-first-refusal approach with a model for determining how support is distributed is a better approach for allocating on-going support for broadband and voice services in high-cost areas.<sup>36</sup>

**b. CAF Phase I support should not fund broadband deployment in areas encompassed by existing broadband deployment plans.**

The Commission proposes to explicitly limit funding in CAF Phase I to “new,” or incremental, capacity or deployment to which a carrier has not already committed to deploy broadband. But, the Commission does not intend to preclude USF support for deploying

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<sup>36</sup> See discussion in Section II.E.3.b., *infra*.

broadband beyond those deployment plans.<sup>37</sup> CenturyLink agrees that CAF Phase I support should not be available to areas where an existing landline provider intends to provide service in the near future. Capital plans, constructions cycles and network deployment often occur over several years.

The Commission will want to exercise care to ensure that CAF Phase I support is not used to subsidize broadband deployment where another carrier intends to use private investment to accomplish the same goals. To achieve this the Commission should include an opportunity early in the bidding process for a carrier to intervene to demonstrate that it intends to deploy broadband without CAF support to the designated bidding area. If an area is identified as unserved for Phase I CAF purposes, a provider should be permitted to challenge the area's eligibility by demonstrating that it is planning to deploy broadband to that area such that the resulting deployment would preclude the area from being considered "unserved" for purposes of Phase I CAF support. This challenge should be part of the competitive award process prior to bidding, it should not be unduly burdensome, and should be resolved prior to continuing the bid process. Notice of the proposed bid area should be provided to all telecommunications providers serving the proposed area.

**4. The Commission should direct recovered high-cost funding to the CAF.**

As part of its near-term reform proposals, the Commission anticipates that it will reduce the USF amounts currently expended to support high-cost service areas under the high-cost funding mechanisms. Any high-cost funding amounts recovered should continue to be available for supporting broadband and voice services in high-cost areas. Those support amounts should not be diverted to other USF programs such as the Schools and Libraries Program or the Low-

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<sup>37</sup> *NPRM* ¶ 308.

Income Program. High-cost support needs to be reformed and re-targeted, but the support is still needed to enable reasonably comparable and affordable rates in high-cost areas for broadband and voice services.

**5. The Commission should not phase down frozen ICLS support for price cap carriers on the same schedule as IAS.**

Although the Commission is not proposing to transition frozen ICLS for price cap carriers to the CAF at this time, it has asked for comment on Verizon's suggestion that that support be transitioned to the CAF on the same schedule as IAS.<sup>38</sup> For the reasons expressed in the separate Comments of the Frozen ICLS Carriers responding to the *NPRM*, Verizon's suggestion is not good policy.<sup>39</sup>

**E. The Commission Should Adopt Long-Term Universal Service Reform That Maximizes The CAF's Effectiveness And Cost Efficiency.**

Adoption of a long-term CAF mechanism offers the promise of affordable, high-quality voice and broadband service for all Americans. This goal will not be realized, however, unless the Commission carefully calibrates the long-term mechanism to maximize its effectiveness and spend limited federal funds wisely. In particular, the Commission should distribute support through a "right-of-first-refusal" approach, with support provided on a wire-center basis to a single fixed provider in each support area. The same methodology for calculating and distributing CAF support, and the same cost model, should be used for all providers in all geographic areas. If the Commission adopts a cap on the CAF, that cap should be program-specific and indexed for inflation.

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<sup>38</sup> *NPRM* ¶ 393.

<sup>39</sup> See Comments of the Frozen ICLS Carriers filed separately in this docket. Those comments are being filed jointly by several price cap carriers receiving frozen ICLS, including CenturyLink, to respond to issues raised in the *NPRM* regarding frozen ICLS.

**1. The CAF should provide support to a single fixed provider in each support area.**

CenturyLink agrees that there should be at most one CAF-supported provider per geographic area to “maximize the reach of available funds to extend broadband service.”<sup>40</sup> But it disagrees that CAF funding should be available to both fixed and mobile providers. The CAF should be targeted to provide support to fixed providers, whether wireline or wireless.

Where it is currently uneconomic for one provider to serve a rural area absent federal high-cost support, it would be misguided to provide support to two or more providers. Both the Joint Board and the Commission have previously concluded that such support for duplicate networks is inefficient and wasteful.<sup>41</sup> Therefore, the Commission should phase out current funding for CETCs expeditiously, over a period of no more than five years.

Also, support for mobile providers should be distributed through other mechanisms. For example, the Commission’s proposed Mobility Fund would target support to geographic areas that currently lack access to mobile voice and broadband services,<sup>42</sup> and the Obama Administration has proposed to dedicate \$5 billion in spectrum auction proceeds to support mobile broadband services.<sup>43</sup> In light of these initiatives, allowing mobile wireless providers to get funding from both the CAF and a fund dedicated to mobile services risks duplicate funding, as well as difficulties of administering overlapping federal mechanisms.

In principle, CAF support should not be available to serve customers that have access to broadband and voice service that meet minimum performance requirements from a provider that

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<sup>40</sup> *NPRM* ¶¶ 402-03.

<sup>41</sup> *Recommended Decision*, 22 FCC Rcd at 20486 ¶ 35; National Broadband Plan at 145.

<sup>42</sup> *In the Matter of Universal Service Reform; Mobility Fund*, Notice of Proposed Rulemaking, 25 FCC Rcd 14716, 14719 ¶ 5 (2010).

<sup>43</sup> *Obama Unveils Wireless Expansion Plan*, NYT, <http://www.nytimes.com/2011/02/11/us/politics/11obama.html> (Feb. 10, 2011).

does not receive USF support for those services. However, sufficient CAF support must be provided for those customers who would not have access to high-quality voice and broadband services absent that support. For example, if a cable company offers affordable, high-quality broadband and voice service to 95 percent of the customers in a particular geographic area, the Commission must ensure that CAF support is provided, if necessary, to enable the availability of these services to the remaining five percent of customers in that area. In many rural towns, most households are found in or near the town, with a smaller percentage of households further out of town. For example, in a CenturyLink wire center in Laramie, Wyoming, over 87 percent of CenturyLink's lines are in the lower-cost in-town area of 11 square miles, while the remaining 13 percent of customers are in the higher-cost 2,075 square miles of out-of-town area. To bridge the current Rural-Rural divide, the Commission must ensure sufficient high-cost support is available for such out-of-town customers, even if in-town residents can obtain broadband service from an unsupported provider. In implementing this policy, the Commission would also need to work through difficult implementation issues, including identifying which consumers can obtain voice and broadband service from an unsupported provider.

**2. If the Commission caps the size of the CAF, the cap should be program-specific and indexed for inflation.**

With the contribution factor at 14.9 percent, it is reasonable for the Commission to consider measures to control the size of the CAF, while taking steps to expand the contribution base. At the same time, underfunding the CAF will deprive rural consumers of access to critical broadband service and threaten the statutory requirement of reasonably comparable rates and services in urban and rural areas.

Any cap on CAF funding should be program-specific (*i.e.*, applied only to federal high-cost programs) such that increases in funding demands for other programs, such as Lifeline,

would not decrease funding available for high-cost support. Under this approach, the Commission would cap support for existing high-cost programs at a certain amount (*e.g.*, 2012 levels) and then gradually transition that support to the CAF. Any cap on CAF funding should also be adjusted for inflation. Absent such an adjustment, CAF support would effectively be ratcheted down over time.

**3. The Commission should adopt a framework for long-term CAF support that will guarantee affordable broadband services in all rural areas, regardless of the types of providers who serve those areas.**

The most effective approach for the long-term CAF will capitalize on the strengths of existing wireline networks, provide sufficient support to tilt the business case in favor of broadband deployment in all high-cost rural areas, and utilize a cost model that provides an accurate estimate of the cost of providing wireline broadband service in rural areas.

**a. The Commission should use the same methodology to calculate and distribute support for all high-cost areas.**

The amount of CAF support provided in a particular area should be based solely on the characteristics of that area, rather than the type of carrier that serves the area. As noted, the Commission's current rules use starkly different methodologies for determining high-cost support in a given area, depending on the size of the ILEC that serves it. In many areas served by small ILECs, federal high-cost support based on embedded cost has been sufficient to justify construction of broadband networks. In contrast, the Commission's forward-looking methodology for "non-rural" LECs generally provides little, if any, support in even the most rural areas, and, in any case, is explicitly modeled on a voice-only network. As the Commission has found, customers in rural areas served by small ILECs are much more likely to have access to broadband services than those served by non-rural ILECs.<sup>44</sup> The problem is similar for large

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<sup>44</sup> See Broadband Availability Gap at 20-21.

rural price-cap carriers with diverse study areas. The funding mechanisms fail to supply necessary funding to the high-cost portions of the study area as those areas are effectively “averaged out” when combined with the lower-cost portions of the study area.

Given this history and present-day reality, it would be arbitrary and capricious, and contrary to the terms of section 254, for the Commission to adopt different methodologies for computing and distributing CAF support. The Commission should instead apply the same methodology for all providers to rural consumers, and provide all rural customers the benefits and opportunities of the Internet.

**b. The Commission should adopt a right of first refusal approach.**

The Commission can best and most efficiently accomplish the goals expressed in the *NPRM* by adopting a right-of-first-refusal approach, which would expand and enhance existing wireline networks to deliver rapidly evolving broadband services. This is particularly important given the Commission’s desire to limit the size of the CAF. In general, it will be more cost effective for the CAF to support an ILEC’s upgrade of its network to provide broadband services in a given geographic area than to fund the construction of a new network. Furthermore, CenturyLink has aggressive broadband deployment plans in its markets in the years ahead. Given such investments, it would be unnecessary and inefficient to fund the deployment of a new network through competitive bidding for long-term CAF support.

This approach is further supported by wireline providers’ long track record of serving rural customers, as well as the ongoing COLR obligations they bear. A right-of-first-refusal approach also carries the benefit of a robust wireline network, including superior service in disaster situations and necessary infrastructure for mobile broadband services. All providers – whether wireline, wireless, or public safety – benefit from the ability to interconnect with and

use a ubiquitous terrestrial network. The alternative proposal of “competitive bidding everywhere” could also result in stranded wireline networks and delayed deployment.

Inherent in a right-of-first-refusal approach, the incumbent provider should be free to decline to serve an area for the designated support amount. This could occur, for example, if the incumbent determines that the offered support amount is inadequate to provide broadband support in that area. In that case, the Commission should use a competitive bidding mechanism for that area, open to all providers including the incumbent.

**c. Funding should be provided at levels that are sufficient to make broadband deployment and ongoing maintenance economically feasible and affordable.**

As suggested in the *NPRM*, funding must be provided for long-term maintenance of existing and new network infrastructure to ensure reliable high-quality service, as well as to support the initial cost of broadband deployment in areas that lack broadband services. Just like capital expenditures, maintenance, repair and other operational expenses tend to be higher on a per-customer basis in rural areas than urban and suburban areas. High fixed costs are spread over a small group of customers in sparsely populated communities. Therefore, the relative amount of ongoing per-subscriber costs is simply much higher in rural areas than in urban and suburban areas. If prices of broadband services are not high enough to recoup these additional costs – which is often the case in areas that currently lack broadband availability – then additional support is necessary to ensure that broadband services are provided “in all regions of the Nation” that are reasonably comparable to those services provided in urban areas.<sup>45</sup> And, of course, if the price is too high, then adoption rates will remain low, retarding the goal of increased broadband adoption.

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<sup>45</sup> See 47 U.S.C. § 254(b)(2), (3).

**d. High-cost support should be targeted to wire centers.**

No matter which methodology the Commission uses to determine ongoing CAF support – particularly right-of-first-refusal or “competitive bidding everywhere” – the Commission will need to define the geographic order used to determine and distribute support. If the Commission adopts a right-of-first-refusal approach, it will need to define geographic areas for auction where the ILEC declines to provide supported broadband service. And even where the ILEC accepts the opportunity to provide broadband service, the Commission will need to determine the geographic area for calculating necessary support. A “competitive bidding everywhere” approach also would require the Commission to define the geographic area for carriers participating in the auction.

For any of these purposes, the Commission should use ILEC wire centers. Targeting support to wire centers makes sense for at least three reasons. First, current COLR obligations are defined at the wire center level, so that distributing support on a wire center basis will facilitate the potential handoff of COLR responsibilities to a competing provider. Second, existing wireline providers are the most likely providers of broadband services in areas that currently lack broadband. That is true even if the Commission adopts a “competitive bidding everywhere” approach, and it is obviously the case with a right-of-first-refusal approach. Finally, targeting support on the basis of wire centers should not be unduly burdensome for non-ILEC providers of broadband. Non-ILEC providers currently account for wire centers to some degree in their network design. For example, competing carriers generally build their networks to efficiently interconnect with ILEC networks in order to exchange traffic between networks,<sup>46</sup> and often rely on piece parts of an ILEC network to obtain second and middle-mile capacity to

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<sup>46</sup> For example, wireless providers use backhaul facilities to connect their cell sites to wireless switching centers, often routed through and aggregated at ILEC wire centers.

provide Internet services.<sup>47</sup> In short, wire centers are a known starting point that reflect the design of existing networks.

Alternatives to wire centers each suffer from serious drawbacks. The *Notice* seeks comment on defining areas for bidding that are aggregations of census blocks, and suggests that the Commission-defined bidding areas would not have to account for study area boundaries that intersect census block boundaries.<sup>48</sup> However, use of census blocks or aggregations of census blocks would be burdensome for all carriers and fail to account for differences in coverage areas using different technologies. Particularly in rural areas – which are those most likely to receive CAF support – census blocks are much larger than they are in urban and suburban areas and often do not correspond to the service area of any provider, nor typically wire center boundaries, such that a winning bidder would be required to extend its network outside of its existing service area. At the same time, the large number of census blocks, and changes that occur from census to census, could increase the complexity of the modeling exercise.<sup>49</sup> Use of wire centers as a basis of distribution is far more efficient than other methods and will greatly increase the value of the CAF. Calculating and distributing support on the basis of study areas, even in a right-of-first-refusal approach, would import the flaws of the current high-cost system into the CAF, including reliance on averaging and eroding implicit subsidies.

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<sup>47</sup> National Broadband Plan at 143.

<sup>48</sup> *NPRM* ¶ 423.

<sup>49</sup> For the 2010 census, the Census Bureau defined more than 11 million census blocks. This represented a 35 percent increase from the 2000 census. U.S. Census Bureau website. [http://www.census.gov/geo/www/2010census/changes\\_census\\_blocks\\_2000\\_2010.pdf](http://www.census.gov/geo/www/2010census/changes_census_blocks_2000_2010.pdf).

- e. **The Commission should adopt a model that provides an accurate estimate of the cost of providing fixed service in high-cost rural areas.**

Any model used for the CAF must provide an accurate estimate of the cost of providing fixed service in high-cost rural areas. If the Commission appropriately targets support at the wire center level, a well-designed forward-looking cost model could be an effective tool for determining and distributing ongoing high-cost support for broadband and voice services in high-cost areas. This model could be used for determining support amounts for a right-of-first-refusal approach, and could also be useful in setting reserve prices for competitive bidding, assuming the model is sufficiently accurate in estimating cost at the wire center level. Among other things, support must be based on real world network operations, rather than hypothetical cost models that theorize away the actual conditions a provider faces in extending and maintaining broadband and voice services in a particular rural area.<sup>50</sup>

As an initial step, we outline certain principles that should govern the development of a CAF model.

- *Uniform model.* The same model should be used for distributing support in all geographic areas, and to all carriers. In 1997, the Commission decided to use a forward-looking methodology to calculate high-cost support for areas served by “non-rural” carriers while it adjusted the methodology for “rural” carriers,<sup>51</sup> but it ultimately allowed rural carriers to continue to receive support based on their

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<sup>50</sup> See *In the Matter of Review of the Commission’s Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers*, Notice of Proposed Rulemaking, 18 FCC Rcd 18945, 18965 ¶ 52 (2003) (tentatively concluding that the Commission’s TELRIC rules “should more closely account for the real-world attributes of the routing and topography of an incumbent’s network”) (*TELRIC NPRM*).

<sup>51</sup> *In the Matter of Federal-State Joint Board on Universal Service*, Report and Order, 12 FCC Rcd 8776, 8792-93 ¶ 26 (1997) (subsequent history omitted) (*Universal Service First Report and Order*).

embedded cost.<sup>52</sup> As a result, consumers in rural areas served by small ILECs more often received subsidized service, often including broadband service, while rural customers in areas of similar household density that were served by large and mid-sized ILECs did not. This approach has never complied with the principles in section 254 and should not be replicated in the CAF.

- *Engineering Cost Model.* The *NPRM* seeks comment on whether the Commission could use a regression-based model, rather than an engineering cost model, similar to HCPM, to determine the amount of CAF support offered under a right-of-first-refusal.<sup>53</sup> A regression-based model will fail to produce accurate cost data that reflects the original source data. Normalizing and averaging data points to fit a regression equation to estimate costs at a discrete geographic level will necessarily contain an unacceptably large level of error because the regression equation cannot consider all of the variables that ultimately determine cost in a particular area.<sup>54</sup> If the regression produces inaccurate costs, the CAF will not be accurately targeted and could result in carriers not signing up to provide service in the truly high-cost areas, while areas with low cost could be shown to be high cost by the regression results. While a regression-based model, on the surface, appears more simple to implement, that is only the case if the Commission possesses an

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<sup>52</sup> *In the Matter of Federal-State Joint Board on Universal Service; Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, Fourteenth Report and Order, Twenty-Second Order on Reconsideration, and Further Notice of Proposed Rulemaking in CC Docket No. 96-45, and Report and Order in CC Docket No. 00-256, 16 FCC Rcd 11244, 11256 ¶ 25 (2001).

<sup>53</sup> *NPRM* ¶ 441.

<sup>54</sup> *Id.*

appropriate source data set, as the Commission acknowledges.<sup>55</sup> In order to determine the relative cost of providing broadband service in wire centers or census block groups of varying density, the Commission would need, at minimum, a statistically valid sample of costs of wire centers or census block groups. With such a data set, the Commission could regress the dependent cost variable based on the independent variables. The cost for each wire center or census block in the sample would have to be determined on a consistent basis. Uniform costs for larger geographic areas, such as a study area, would not be valid for wire centers or census blocks, because study areas are significantly larger, which masks the variability of costs in that area. If, as CenturyLink believes, such disaggregated data does not exist, the data would have to be developed in some manner, such as through an engineering cost model. Hence, it is unclear that use of a regression-based analysis would avoid the development of a more detailed model.

- *Scorched Node Approach.* If the Commission ultimately decides on two CAF approaches (one approach to fund the expansion of broadband to unserved areas and a second to fund high-cost areas with broadband already deployed), it will likely need two models: one to produce incremental cost results starting at the last known network point, and a second to produce the cost of the entire network with results for monthly recurring ongoing costs. The Commission should employ a “scorched node,” or brownfield, approach in the first model, which would assume existing infrastructure locations (*e.g.*, central offices, remote

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<sup>55</sup> *Id.*

nodes) and then estimate the incremental costs of brownfield build-outs, and only estimate greenfield deployments where there is no nearby infrastructure. In using the scorched node approach, the Commission should use as much actual data on existing infrastructure as it can. A modified scorched node approach is valid for the second model noted above, where existing central office locations are leveraged and an efficient forward-looking network design completes the entire network necessary to provision the required broadband and voice services to end-user customers.

- *Capacity for Second- and Middle-Mile Transport.* Any model used to estimate the cost of providing broadband service in a given area should include added capacity necessary for second- and middle-mile transport to carry the expanded broadband traffic to the Internet. One of the material impediments to providing broadband at significant speed levels today is the often insufficient capacity in many rural transport networks to handle the increased capacity needs of broadband services.
- *Open, Yet Efficient, Evaluation Process.* In adopting a model for the CAF, the Commission will need to provide the appropriate balance between two important competing objectives: (1) a robust, transparent process to evaluate and refine the model's algorithms and inputs, and (2) an efficient process that conserves the resources of the Commission and industry and is completed in a reasonable period of time. Subject to appropriate procedural protections, the Commission should establish an open process and provide access to documented model algorithms and model input data, and provide interested parties the ability to run the model

itself through a wide range of sensitivity exercises involving modifications to inputs and algorithms. The underlying geographic and customer location data must also be available for scrutiny. It is only when all interested parties have access to the model, its processes and underlying data that a substantive debate can take place to understand the critical features and data in the model that will most accurately estimate costs and provide reasonable support levels for the deployment of broadband services in rural areas.

- *Updated Mapping Data.* The model should incorporate the data from state broadband mapping areas to determine the extent to which broadband of various speeds is available today. Providers should be given an opportunity to update or correct any inaccuracies regarding their data.
- *Process for Updating the Model.* In the twelve years since it adopted initial values for the inputs to the HCPM, the Commission has for the most part left the initial input values unchanged, despite dramatic changes in technology and other factors during that time. To the extent the CAF model will be used for an extended period of time, the Commission should adopt a process upfront for modifying input values.

Based on the limited information available, it appears that the NBP Broadband Assessment Model (BAM) would not be appropriate for determining CAF support. The BAM was developed to estimate the cost of ensuring that all Americans have access to broadband services. The BAM – focusing on the incremental cost of extending broadband – is a very different exercise from determining the actual upfront and ongoing cost of providing broadband

and voice service in a particular geographic area. At this point, parties also have insufficient information to provide detailed analysis of the NBP model.<sup>56</sup>

**f. COLR-type obligations for all services should be tied to receipt of USF support.**

Any company that receives CAF support should be required to provide voice and broadband service throughout the area in which it receives support. Correspondingly, if an ILEC loses CAF support to another provider, the ILEC should be freed from any COLR obligation for voice services and price regulation of any services it provides in that area, and the auction winner should be required to provide voice and broadband services to all end users. Such a policy is fair and appropriate. The Commission should also establish incentives for states to eliminate COLR obligations in such circumstances.

**4. The Commission should avoid duplicative or burdensome reporting requirements.**

The *Notice* proposes a number of reporting requirements to ensure adequate performance management and oversight over the CAF.<sup>57</sup> Under these proposals, carriers would report annually on deployment, adoption, and pricing for both their voice and broadband offerings; on their financial conditions and operations; and their ICC revenues and expenses. The Commission also seeks comment on codifying additional reporting requirements applicable to USAC. Finally, the Commission proposes improvements to audit, annual certification and data validation processes.<sup>58</sup>

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<sup>56</sup> CenturyLink has previously provided detail comment on these issues, which it does not repeat here. See Comments of CenturyLink, WC Docket Nos. 10-90, 05-337, GN Docket No. 09-51 at 46-52 (dated July 12, 2010).

<sup>57</sup> *NPRM* ¶¶ 458-67.

<sup>58</sup> *Id.* ¶¶ 468-78.

CenturyLink supports the Commission's goal of ensuring that CAF support is used in a responsible and efficient manner to ensure the availability of broadband services. In doing so, however, the Commission should avoid duplicative and burdensome reporting requirements. For example, it would make no sense for broadband providers to submit performance reports to USAC on a quarterly basis,<sup>59</sup> given that the Commission is already considering similar disclosure requirements in Form 477 reports.<sup>60</sup>

### **III. THE COMMISSION SHOULD ALSO UNDERTAKE COMPREHENSIVE REFORM OF INTERCARRIER COMPENSATION IN A MANNER THAT FACILITATES THE SAME OVERARCHING GOAL OF BROADBAND DEPLOYMENT.**

The Commission should also act to bring about sensible and comprehensive reform of ICC following a reasonable glide path. The Commission should not pursue reform that causes unintended rate shock for consumers or negatively impacts the industry's ability to attract private investment capital for network build-out and operation. Given that the current ICC regime has been a key component of the Commission's historic universal service policies, it also makes complete sense to, as the *NPRM* suggests, "use the same section 254-derived principles to inform" ICC reform that the Commission uses to guide its universal service reform.<sup>61</sup>

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<sup>59</sup> See *id.* ¶ 116.

<sup>60</sup> *In the Matter of Modernizing the FCC Form 477 Data Program, Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership; Service Quality, Customer Satisfaction, Infrastructure and Operating Data Gathering; Review of Wireline Competition Bureau Data Practices*, WC Docket Nos. 11-10, 07-38, 08-190 and 10-132, Notice of Proposed Rulemaking, FCC 11-14 (rel. Feb. 8, 2011) (seeking comment on the collection of voice and broadband deployment, price, subscription and service quality data). See also *In the Matter of Preserving the Open Internet; Broadband Industry Practices*, Report and Order, 25 FCC Rcd 17905, 17939 ¶ 56 (rel. Dec. 23, 2010) (requiring disclosure of performance characteristics of broadband networks).

<sup>61</sup> That is, it must: (1) modernize [Commission] rules to make affordable broadband available to all Americans and reduce waste and inefficiency by taking steps to curb arbitrage; (2) promote

CenturyLink also echoes the Commission's overarching aim in ICC reform – to facilitate affordable broadband deployment to all areas of the nation to foster economic development, telemedicine, distance learning, and homeland security.

**A. Any ICC Reform Must Focus On Consumer Impacts And Preservation Of Private Investment – In Addition To The *NPRM*'s Other Stated Goals.**

**1. The Commission must ensure that any ICC reform does not undermine affordability, ubiquitous coverage and other critical consumer interests.**

The *NPRM* correctly identifies the importance of addressing existing arbitrage and marketplace distortions that arise under the current ICC regime and the importance of incenting transition to all-IP networks – as guiding concepts for any ICC reform it undertakes.<sup>62</sup> But, the Commission must also ensure that any ICC reform does not undermine the critical policy goals of affordability and ubiquitous coverage and other consumer interests at play here. There are, effectively, only three policy levers the Commission can work in reforming the existing ICC regime while balancing its underlying policy goals in fostering broadband deployment. These are ICC rates, retail end-user rates and explicit USF funding. Any ICC revenues displaced through ICC reform must be recoverable in an adequate manner from retail end-user rates and USF funding. But, because of competition and existing rate regulations in some states, carriers have limited ability to increase retail end-user rates. Indeed, given that competitive carriers have greater flexibility, reliance on significant retail price increases places one set of competitors—namely, ILECs – at a severe competitive disadvantage in the market. Access to USF funding as a source of revenue replacement will be essential to reach the Commission's overarching goal of ubiquitous broadband coverage. Current ICC and USF revenue streams are significant enablers

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fiscal responsibility; (3) require accountability; (4) transition to market-driven and incentive-based policies.” *NPRM* ¶ 490.

<sup>62</sup> *Id.* ¶¶ 524-28.

for existing providers to deploy advanced services. Yet, if ICC rate reform is not accompanied with adequate recovery of lost ICC revenue, it will prevent carriers from being able to make the investment necessary to build out broadband networks to reach unserved areas and at sufficient standards to support advanced services. If the Commission took this path, it would only be effectively creating an unfunded mandate for broadband deployment – all while leaving in place existing carrier COLR obligations. Moreover, to the extent broadband build-out did continue, many consumers would be priced off the network – undermining the Commission’s broadband adoption policy goals. While consumers should properly bear part of the cost of deploying these broadband networks, they should not be asked to pay more than their fair share. And, others that access and profit from the ubiquitous public telecommunications network must also pay for their fair share of that network. Likewise, if the Commission moves too quickly and too far in reducing ICC rates, each of these impacts is only amplified. Conversely, the Commission can minimize these risks by taking a more modest approach to ICC rate reform in the first place.

**2. Any ICC reform must also emphasize preservation of private investment.**

It follows from this discussion that the Commission must also emphasize preservation of private investment in any ICC reform it undertakes. The elimination of arbitrage and market distortions complements this goal as it would eliminate improper practices and policies that undermine investor expectations. But, the Commission must emphasize preservation of private investment in all aspects of any ICC reform it contemplates and, particularly, in any transitional ICC rate reform. If the Commission ignores the critical role of ICC revenue and USF funding as an essential capital investment resource for building-out tomorrow’s broadband networks, it will negatively impact the private capital investment that is also critical to build-out. The *NPRM* acknowledges this at the beginning of its discussion of ICC reform when it stresses the

importance of creating “a framework and transition that is predictable to enable service providers and investors time to react and plan appropriately.”<sup>63</sup> Wall Street will keep a scorecard of “winners and losers” and will react quickly to interpret any rules changes that are implemented. Radical proposals such as the elimination of IAS support for price cap carriers and drastic near-term cuts to ICC rates will adversely impact mid-sized price cap carriers in the financial markets.

The record is replete with evidence of both the need for private investment in broadband to accomplish our nation’s broadband networks of the future and of the continued commitments of private companies to step up to that investment. CenturyLink will not attempt to restate that extensive record again here. By way of example only, the Commission itself, in its NBP proceeding, estimated that it will cost \$350 billion to build the required high-speed networks of the future.<sup>64</sup> CenturyLink covers more than 15% of the land mass and, as discussed above, this territory is heavily weighted to the parts of the country with low population densities. While it is not possible to use a simple proportion to accurately estimate the amount of investment needed to deploy such networks to the home throughout CenturyLink’s territory, the fact that 15% of the \$350 billion is almost \$50 billion means that any conceivable analysis of the necessary investment would show that such a build-out would take decades using CenturyLink’s current capital budget and a relative share of USF high-cost support. And, notably, according to the *Broadband in America Report*, aggregate U.S. broadband capital expenditures in 2008 were \$62.8 billion, with \$41.4 billion for wireline and \$21.35 billion for wireless.<sup>65</sup>

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<sup>63</sup> *Id.* ¶ 490.

<sup>64</sup> See Sept. 29, 2009 Commission Presentation, Framework for the National Broadband Plan at 45.

<sup>65</sup> *Broadband in America Report*, by Robert C. Atkinson and Ivy E. Schultz, dated Nov. 11, 2009 at 29.

Of course, the level of private investment required only expands as the Commission and the industry work towards building broadband networks that not only have greater capacity and higher speeds, but have ever expanding capabilities as they adapt to such needs as next-generation 911 and cybersecurity.<sup>66</sup> While difficult to quantify at this time, it is self-evident that the private investment needed to meet the nation's public safety and homeland security interests in broadband networks is substantial.

As with USF reform, it is critical that ICC reform be done with an eye to this reality that ICC is a critical contributor to private investment that is, in turn, critical to broadband deployment. As the *NPRM* itself details, in its extensive discussion of the history of the Commission's universal service and access regimes, carrier reliance upon ICC is a result of long-standing intentional legacy policy choice.<sup>67</sup> Through the existing ICC regime, long distance rate averaging requirements and a variety of other existing legacy regulations, the Commission has intentionally created a regulatory framework where incumbent carriers have been required to recover their costs from ICC charges and USF funding in addition to the charges they impose directly on consumers. Additionally, the Commission has implemented such requirements as ICC and rate averaging in order to keep subscriber local rates low and support universal service, policies still viable today. The Commission is right to focus on reforming ICC and on the laudable goals of reducing waste and inefficiency, addressing arbitrage and marketplace distortions, ensuring proper cost causation and appropriate pricing signals, and creating incentives for all-IP broadband networks. But, it would be a patently unfair policy choice – and legally challengeable – if the Commission were to simply take a hatchet to existing ICC rates

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<sup>66</sup> *In the Matter of Framework for Next Generation 911 Deployment*, Notice of Inquiry, 25 FCC Rcd 17869 (2010). Public Notice, DA 10-1354, *FCC Seeks Public Comment on National Broadband Plan Recommendation to Create a Cybersecurity Roadmap*, rel. Aug. 9, 2010.

<sup>67</sup> *NPRM* ¶ 496.

without fully acknowledging these historic policy choices and reconciling them going forward in any new ICC approach. The Commission must recognize the practical reality that carrier ICC revenues are performing a valuable function today – among other things, contributing to broadband deployment and maintaining the historical policies of universal service. Thus, the Commission cannot simply eliminate existing ICC charges or broadband deployment will be negatively impacted.

Even if one disagrees with this view that these historic legal and policy requirements must weigh heavily on any Commission action to reduce ICC rates, no one can seriously dispute the practical reality that broadband build-out is a function of a business-case modeling and interruption of cash flow is counter to that effort. Proposals to go to bill and keep or a very low uniform rate (*e.g.*, \$0.0007) and to reform IAS would substantially reduce CenturyLink's funding available for CAPEX, lead to adverse reactions by stock and bondholders, and ultimately lead to job reductions not job creation – one of the key objectives of the present Administration. As the Commission heard in its April 6, 2011 workshops, the Commission's actions in reforming ICC do have an impact on LECs' stability and how they are viewed by Wall Street. For example, Paul Gallant pointed out that without the structure and stability of access payments for all traffic terminating to the PSTN, the market sector of mid-sized (wireline centric) ILECs would be negatively impacted.<sup>68</sup> Without investor confidence, broadband deployment becomes increasingly difficult to fund.

For all of these reasons, the first principle of any ICC reform must be to ensure that private investment is not deterred.

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<sup>68</sup> Paul Gallant, Senior Vice President/Telecom Analyst, MF Global: Washington Research Group, Panelist for April 6, 2011 Workshop on Intercarrier Compensation Reform, Intercarrier Compensation for VoIP Panel.

**B. The Commission Should Not Pre-judge What Compensation And Interconnection For All-IP Networks Should Look Like And Must Recognize The Continuing Legitimate Function Of The PSTN – Factors Suggesting It Would Be Best Served By Striving First To Get TDM ICC Right.**

The *NPRM* also focuses, properly, on the need to create incentives for the transition to all-IP networks. But, it appears at times to signal that the Commission believes that the best overall approach is to simply determine what is the best ICC treatment for an all-IP end-state and then simply transition to that as soon as possible by regulatory mandate.<sup>69</sup> That would be a mistake. The Commission cannot and should not prejudge what an all-IP network should look like. As discussed above and below, doing so will only jeopardize the very funding need to make all-IP networks happen in the first place. The Commission should let the market determine the best end-state compensation and interconnection mechanisms for the all-IP networks of the future. And, it must continue to recognize the continuing legitimate function of the PSTN during a transition to an all-IP end-state. For these reasons, it should strive first to get TDM ICC right – then move on to addressing regulatory implications of an all-IP network at a later date.

In doing so, the Commission will still be making significant strides towards an ultimate transition to all-IP.

Consistent with the Commission’s commitment to “market-driven and incentive-based policies,”<sup>70</sup> the Commission must recognize that the market is the best determinant of the answers to the *NPRM* questions on end-state compensation and interconnection issues for the all-IP networks of the future. There are multiple reasons for this. TDM networks are increasingly incorporating IP functionality and there will eventually be a convergence into an all-IP network with a single platform – broadband. Until that happens, IP networks will continue to utilize the

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<sup>69</sup> *NPRM* ¶¶ 529-32.

<sup>70</sup> *Id.* ¶ 490.

core network infrastructure of legacy TDM networks. But, there will also be material differences (market, technological, customer experience, regulatory, etc.) between networks utilizing legacy TDM communications and all-IP networks. Additionally, neither the Commission nor any party can predict what all-IP networks should look like. This is an area of fast-moving technology and vibrant competition. If the Commission tries to do this, there is a significant risk it will predict wrongly with negative impact on customers who rely on TDM network reliability today.

CenturyLink discusses the *NPRM*'s specific questions regarding all-IP networks in Section III.G., below. But, as discussed in that section, the Commission cannot and should not assume that the ideal reform for ICC treatment and interconnection for networks where legacy TDM functionality remains is necessarily the ideal reform for compensation and interconnection for the all-IP network of the future or vice versa.

Likewise, any ICC reform must account for the continuing legitimate function of the PSTN during a transition to the all-IP end-state. As noted, the Commission is right to focus on reforming ICC and on the laudable goals of ICC reform set forth in the *NPRM* – including the critical goal of creating incentives for all-IP broadband networks. But, this charge is, to some extent, a balancing act. TDM networks will continue to play a critical role in the provision of telecommunications and broadband/advance services to broad swaths of the United States for some time to come. So long as TDM networks play a significant role, the Commission must ensure that carriers receive fair compensation for like uses of that network. As discussed above, carriers are to some extent, still required to deploy TDM networks as a result of the Commission's legacy policy choices. And, they are dependent upon ICC revenues both to continue to deploy TDM networks and to deploy broadband. Any failure to attend to these

concerns will undermine the Commission's efforts to maintain and extend universal service and increase the deployment and adoption of broadband.

For all these reasons, the Commission should strive first to get TDM ICC right – then move on to dealing with a rational transition from the TDM network to all-IP networks and, finally, to addressing the regulatory implications of an all-IP network.<sup>71</sup>

It is noteworthy that, in taking this balanced approach to the way it fashions transitional ICC rate reform, the Commission can still make significant strides towards removing barriers to an ultimate transition to an ultimate market-driven all-IP network in the way it fashions transitional ICC rate reform. For example, by simply reducing ICC rates and making them more uniform, the Commission would be taking a significant step.

**C. The *NPRM* Correctly Recognizes That Eliminating Costly Arbitrage Must Be The First Order Of Business.**

Given the policy goals enumerated above, the *NPRM* correctly recognizes that the elimination of costly arbitrage must be the Commission's immediate focus.<sup>72</sup> Indeed, this step is clearly complementary to what should be a guiding principle of ICC reform – do no harm to private investment. For this reason, as noted above, the Commission's first order of business must be to adopt immediate steps to address the ICC treatment of IP-on-the-PSTN traffic, phantom traffic, and traffic pumping. Consistent with CenturyLink's recently-filed comments on those subjects, the Commission should immediately confirm that IP-on-the-PSTN traffic is subject to existing ICC charges under current law.<sup>73</sup> It should also adopt rules to stop phantom

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<sup>71</sup> As part of the latter, it will also have to answer threshold questions regarding its authority and jurisdiction to regulate all-IP networks.

<sup>72</sup> *NPRM* ¶¶ 603-67.

<sup>73</sup> See Comments of CenturyLink, filed in the above-captioned proceedings on Apr. 1, 2011 at 3-17.

traffic, by prohibiting mislabeling, masking, or failures to transmit identifying information.<sup>74</sup>

And, it should adopt sensible rules to stop the unlawful conduct of traffic pumping.<sup>75</sup> These reforms will go a long way toward eliminating the arbitrage abuses and minimizing the disputes that have become too common under the current ICC compensation system. Arbitrage and fraud are extremely costly to the telecommunications industry. Whenever it occurs, revenue and resources that could be used to create new viable products are instead diverted to fight cheating.

**D. Beyond The Proposed Interim Reforms, The Ideal ICC Reform To Accomplish The Desired Goals Is To Reduce Higher Intrastate Rates To Interstate Rates In A Stable And Measured Manner.**

The ideal transitional ICC rate reform at this time to accomplish the Commission's desired goals, beyond these proposed interim reforms, is to transition intrastate access rates and TELRIC rates currently above interstate access to interstate levels in a stable and measured manner on a per-carrier basis in each state or study area.<sup>76</sup> This approach will, together with the interim reforms discussed above, make significant strides toward addressing the arbitrage and marketplace distortions identified in the *NPRM*. At the same time, it will avoid numerous pitfalls of the more drastic transitional ICC reform plans identified in the *NPRM* – e.g., bill and keep or \$0.0007. CenturyLink's approach will also ensure that ICC reform does not undermine the critical consumer interests discussed above – most importantly, achieving and maintaining ubiquitous coverage at affordable rates. It will also minimize the risk that ICC rate reform will have a negative impact on private investment. And, it will best reconcile the numerous other policy considerations that should weigh on any ICC reform that the Commission undertakes.

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<sup>74</sup> *Id.* at 18-26.

<sup>75</sup> *Id.* at 27-53.

<sup>76</sup> As proposed, this initial rate reform would only apply to terminating ICC charges – *i.e.*, not origination charges. However, the Commission could address origination charges at a later date as well.

In the *NPRM*, the Commission identifies a broad variety of different potential transitional ICC rate reform mechanisms together with related questions about the potential sequencing and timing of these alternatives and the relative trade-off entailed in each of simplicity versus complexity.<sup>77</sup> The *NPRM* mentions, alternatively, simply reducing intrastate access rates to interstate access rate levels, moving to bill and keep or zero rating for all ICC traffic, and various alternatives in between.<sup>78</sup> The latter includes a plan that might reduce all three existing ICC rate categories (*i.e.*, intrastate access, interstate access, or the existing reciprocal compensation) in tandem or in different combinations of sequencing and timing.<sup>79</sup> With respect to levels of complexity, the Commission correctly notes that each alternative plan has different trade-offs. For example, it notes that "... reducing interstate access charges at the outset has the advantage that arbitrage related to interstate access charges would be addressed and eliminated earlier in the transition, thereby realizing the benefits of reform earlier in the transition."<sup>80</sup> On the other hand, it notes that:

Reductions in reciprocal compensation rates potentially could occur from the start of the transition, as well. Depending upon the reciprocal compensation methodology chosen, however, this could increase the complexity of issues that

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<sup>77</sup> As mentioned above, the *NPRM* appears at times to signal that the Commission believes it should simply determine what is the best ICC treatment for an all-IP end-state and then simply transition to that as soon as possible. It also assumes that, since an all-IP ICC end-state will not entail per minute rates, an essential part of that transition will be the elimination of per minute ICC rates as soon as possible. Again, for the reasons stated above, CenturyLink submits that the ideal course instead is for the Commission to strive first to simply get TDM ICC right – then move on to addressing regulatory implications of an all-IP network at a later date. This discussion, therefore, focuses on which, of all the alternatives raised by the Commission for transitional TDM ICC reform, would be ideal. CenturyLink addresses the specific issues raised in the *NPRM* regarding all-IP networks separately below.

<sup>78</sup> *Id.* ¶¶ 509-22, 533-58.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.* ¶ 538.

need to be addressed earlier in the transition process, as compared to an approach that deferred reciprocal compensation rate reforms until later in the process.<sup>81</sup>

Likewise, the *NPRM*, stresses the importance of balancing “several potentially competing considerations” in connection with any given rate reform plan.<sup>82</sup> These are:

(a) harmonizing rates and otherwise reducing arbitrage opportunities; (b) minimizing disruption to service providers, including litigation and revenue uncertainty; and (c) minimizing the impact on consumers and on the FCC’s ability to control the size of the universal service fund.<sup>83</sup>

The ideal transitional ICC rate reform to accomplish the Commission’s desired policy goals and to strike the best balance of these competing considerations is to simply transition intrastate access rates and TELRIC rates currently above interstate access to interstate levels on a per-carrier basis in each state or study area in a stable and measured manner.<sup>84</sup> CenturyLink proposes that the path to this proposed reform be set forth in a Commission ICC reform order issued before the end of this year and that it be accomplished during a two-to-four-year period following that order. The Commission would then pause and re-evaluate the need and desired timing for subsequent ICC rate reform. If further reform proved to be appropriate, CenturyLink believes that adoption of a fair uniform rate applicable to all ICC traffic would be the best model to consider for further reform. But, it is far too early to tell whether a subsequent reform stage will be necessary or precisely what that reform should look like – other than to say that bill and

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<sup>81</sup> *Id.*

<sup>82</sup> *Id.* ¶ 535.

<sup>83</sup> *Id.*

<sup>84</sup> It is noteworthy here that, in fashioning its ICC framework for ISP-bound traffic, the Commission did not flash cut to its desired reform, but took a more measured approach to avoid what it perceived to be potential harm to CLECs that built business cases on the revenue at issue. *See, e.g., Intercarrier Compensation for ISP-Bound Traffic*, Order on Remand and Report and Order, 16 FCC Rcd 9151 (2001) (*ISP Remand Order*), remanded, *WorldCom, Inc. v. FCC*, 288 F.3d 429 (D.C. Cir. 2002), cert. denied, 538 U.S. 1012 (2003), mandamus granted, 531 F.3d 849 (D.C. Cir. 2008).

keep or very low uniform rate (*e.g.*, \$0.0007) are clearly not the right solutions. These plans do not incent the necessary investment today for the networks of the future and they will create rate shock and otherwise adversely impact consumer rates.

This proposed CenturyLink approach will, together with the interim reforms discussed above, ideally balance the multifaceted policy goals that any transitional ICC rate reform must serve. To begin with, because it would result in more modest ICC rate reductions, this approach will moderate the impact on consumers and allow higher broadband adoption. CenturyLink's proposal also minimizes the risk that reform will have a negative impact on private investment.

Additionally, this approach will take significant strides toward harmonizing rates and addressing the arbitrage and marketplace distortions. Regarding rate disparities, this proposed approach addresses one of the most significant existing rate disparities – that which currently exists between intrastate and interstate access charges for most carriers. Thus, this plan, together with the requisite interim relief on IP-on-the-PSTN traffic, phantom traffic and traffic pumping, will address much of the current arbitrage. By lowering intrastate access rates and higher TELRIC rates, this approach also reduces a key marketplace distortion identified in the *NPRM* – the concern that carrier charges cannot be disciplined by competition.

CenturyLink's proposal also strikes an ideal balance for numerous other policy factors impacting transitional ICC rate reform. By reducing ICC rates overall and requiring carriers to look more to their subscribers or an explicit fund for revenue recovery, this approach also takes a reasonable step towards the *NPRM*'s concerns that both the calling and called parties should share the cost of a call. However, this approach recognizes that other parties must share in the cost. Placing all network costs on end users, for example, ignores the existence of intermediary transit transport scenarios where carriers transport traffic yet do not have a customer relationship

with either the calling or called party. Similarly, by maintaining positive ICC rates, CenturyLink's proposal reflects the fact that other parties that access and profit from the ubiquitous public telecom network must also pay for their fair share of that network. Otherwise, improper economic incentives will continue to exist in the marketplace to the detriment of network owners, operators, consumers, and investors. Ultimately, the overriding principle on cost causation should be the sound economic principle that carriers should pay for what they use. CenturyLink's proposal would accomplish that.

By taking a more cautious transitional approach, CenturyLink's plan also best serves numerous other important considerations. CenturyLink's plan entails significant ICC rate reductions. But, it gives the Commission, the states and industry a realistic timeframe for doing the complicated work necessary to implement reform. This approach also moderates the impact of ICC reform on the ability of the Commission to control the size of the USF.

CenturyLink's proposed approach will also avoid numerous pitfalls of the more dramatic transitional ICC reform plans – *i.e.*, the bill and keep/zero rate and very low uniform rate (*e.g.*, \$0.0007) reforms that have been advocated in the past. These reform plans, while having surface appeal, have proven to give rise to considerable underlying complexities. Bill and keep/\$0.0007 reforms, by definition, magnify the impact of reform on the industry and the Commission's task in crafting adequate revenue recovery mechanisms without harming consumers and undermining its universal service reform goals. These reforms carry a much greater risk of negatively impacting investment in broadband networks. The rate reduction to interstate rate levels reduces CenturyLink's switched access revenues significantly while a move to \$0.0007 or bill and keep virtually eliminates the company's per-minute access revenues. This funding must be made up from other sources if continued investment and maintenance of broadband capable networks is

the Commission's long-term objective. Further, the lack of such funding increases CenturyLink's financial and operational risk, reduces its flexibility in deployment of resources, and potentially jeopardizes its access to capital. Quite simply, in this economic environment, drastic rate reductions down to \$0.0007 or to bill and keep would require increases in consumer rates to economically and competitively unacceptable levels and accelerate access line losses which would lead to adverse reactions from Wall Street and would create even greater problems for the Commission to deal with longer term. The potential unintended consequences of such plans greatly outweigh any potential pay-off. Indeed, bill and keep/\$0.0007 plans would likely deprive carriers of a critical source of capital for build-out of the all-IP networks of the future that the Commission seeks to incent in the first place.

And, there are other complexities with bill and keep or \$0.0007 plans. By way of example, as noted in the *NPRM*, adoption of bill and keep or \$0.0007 requires the Commission to adopt new rules defining in great detail and with precision how the multitude of functions provided by a carrier should be encompassed by the bill-and-keep/minimal rate framework and how to accommodate the various and evolving different network architectures in existence.<sup>85</sup> With such plans, even if sufficient replacement is provided for lost ICC revenue, a failure by the Commission to attend to these issues adequately would only result in bill and keep/\$0.0007 plans having additional flaws. History proves that certain parties will inevitably try to take advantage of purported ambiguities in such rules. Factors such as uneven network edges and out-of-balance traffic will lead to inadequate cost recovery and new forms of arbitrage. Again, these flaws exist even if it is assumed that sufficient replacement is provided for lost ICC revenue – a questionable assumption given the concerns discussed above regarding the potential for

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<sup>85</sup> *NPRM* ¶ 530.

unfunded mandates. These challenges, and the inability of industry and the Commission to solve them in a rational and cohesive manner, have repeatedly doomed the Commission's past ICC rate reform efforts to failure. A more modest reform should be pursued in this round – allowing the Commission time to evaluate and correct or avoid any unintended consequences from ICC reform. CenturyLink's proposed transitional ICC rate reform would reflect regulatory humility by intentionally avoiding the legal and policy complexities and other challenges associated with the more drastic bill and keep/\$0.0007 reforms that have drawn the most attention in prior Commission attempts at ICC rate reform.

Finally, as noted above, CenturyLink's approach will also take a significant step towards an all-IP network world without pre-judging what that world should look like. By significantly reducing ICC rates, it takes a significant step toward a final elimination of per-minute rates at a later date. In the meantime, this approach, together with the clarification of the correct ICC treatment of IP voice, will ensure that like uses of the PSTN pay fair compensation equally during a transition to all-IP.

**E. Carriers Must Also Have The Opportunity To Recover ICC Revenue Lost As A Result Of ICC Rate Reform.**

Of course, regardless of what transitional ICC rate reform the Commission pursues, carriers must have the opportunity to recover lost ICC revenue as a result of reform. This is not only required in order to meet the Commission's overall policy goals for ICC reform, but is required by law. In the *NPRM*, the Commission seeks comment on a number of issues relating to the general subject of how to structure a recovery mechanism (RM) as part of comprehensive ICC reform and underlying detailed aspects of doing so.<sup>86</sup> As discussed more fully below, all carriers should have an opportunity to replace all ICC revenue lost as a result of rate reform.

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<sup>86</sup> *Id.* ¶¶ 559-602.

Any RM should be revenue-based. And, recovery should be permitted first from end users via a reasonable local rate benchmark, then via an explicit subsidy fund as necessary. But, as noted above, careful attention is warranted to ensure that any RM also balances the consumer interests at play here and genuinely allows for revenue recovery opportunity.

The Commission must provide adequate cost recovery of ICC revenues lost by virtue of any ICC rate reform both in order to meet its policy goals and its legal obligations. From a policy standpoint, for all the reasons discussed in detail above, any failure to provide adequate cost recovery to carriers ignores the vital role that ICC charges still play in the Commission's legacy regulatory policy frameworks for universal service. It fails, among other things, to recognize and reconcile going forward the continuing critical role that ICC rates have played in keeping subscriber local rates low and supporting universal service. The Commission cannot ignore the practical reality that carrier ICC revenues contribute to broadband deployment and that reducing those same revenues without replacing them negatively impacts broadband deployment. From a legal standpoint, the Commission must ensure that carriers have a reasonable opportunity to recover their costs.<sup>87</sup> It must also ensure that any ICC rate reform overall satisfies the Section 252(d)(2) "additional costs" obligation – as applicable.

To meet these requirements, CenturyLink supports an access recovery framework that gives providers the opportunity to recover the revenues they previously collected through ICC charges while implementing reasonable local rate benchmarks. CenturyLink's RM proposal is very straight-forward. It has the following basic components – in bullet points corresponding to the detailed issues raised in the *NPRM*:

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<sup>87</sup> See *Duquesne Light Co. v. Barasch*, 488 U.S. 299 (1989).

- The Commission should set a reasonable local rate benchmark.<sup>88</sup> The benchmark should start, in an initial phase, at \$25.00 and could be adjustable thereafter – although increases should not exceed \$1.00 in a given year. In other words, CenturyLink’s benchmark mechanism includes two effective limits on local rate charge elements. Incumbent carriers would never be required to raise rates above the benchmark and would never be required to raise rates more than \$1.00 per year.
- The benchmark should include all end user charges – *e.g.*, mandatory EAS charges, intrastate and interstate SLC charges, etc.<sup>89</sup>
- Revenue recovery should be permitted first via end-user charges up to the benchmark.<sup>90</sup>
- In the event that end-user charge increases to the benchmark do not, alone, enable providers to recover their lost ICC revenues, carriers should be permitted to draw from an explicit subsidy fund.<sup>91</sup> To accomplish this, support available for a given provider from that fund will be calculated as though the carrier has raised its end-user rates to the highest levels permitted under the plan through the transition.<sup>92</sup> In other words, as noted above, the two effective limits on CenturyLink’s proposed benchmark rule would carry over to this imputation rule. Support from the fund will be calculated as though the carrier has raised its rates to the benchmark or the level permitted by the \$1.00 per year increase limitation – whichever is lower.

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<sup>88</sup> *NPRM* ¶¶ 573-78.

<sup>89</sup> *Id.* ¶ 576.

<sup>90</sup> *Id.* ¶ 574.

<sup>91</sup> *Id.* With regard to the questions raised in the *NPRM* as to how to reconcile the Commission’s use of an explicit fund as part of an ICC RM and its overall USF reform efforts discussed above, for all the reasons discussed above, the overarching guiding principle must be that the Commission ensure that carriers continue to have sufficient and predictable recovery of their network costs. In that effort, as is also discussed above, it will be critical that the Commission focus on elimination of fraud and waste in existing USF funding as well as the elimination of duplicative non-cost based ETC support. *Id.* ¶ 585.

<sup>92</sup> *Id.* ¶ 574. Regarding the *NPRM*’s questions as to how to handle rate re-balancing proposals, CenturyLink stresses once again that increased end user rates have to be approached with caution, particularly given the current state of the economy, if the Commission truly wants to ensure that consumers stay connected to a ubiquitous broadband network at affordable rates that foster broadband adoption.

- All carriers (*i.e.*, regardless of whether they are rate-of-return or price cap) should have an opportunity to replace all ICC revenue lost as a result of any ICC rate reform.<sup>93</sup>
- Revenue replacement should be revenue-based, not cost-based.<sup>94</sup> There is no legal requirement that recovery be cost-based and doing so would only introduce unnecessary complication in the RM. Also, consistent with the discussion above regarding potential impacts on private investment, a revenue-based approach is essential to maintaining investor expectations.
- Revenue replacement should also be based on gross revenue, not revenue net of ICC expense savings (*i.e.*, savings in access or reciprocal compensation expenses).<sup>95</sup> In other words, it should reflect the reality that any ICC expense savings, be they access or reciprocal compensation expense savings, will be competed away quickly. It also does not make sense to attempt to offset access revenue reductions, which impact local networks, with access expense savings, which impact long distance and wireless networks. Additionally, this addresses the reality that rational businesses will respond to changing economic incentives and reduce investment in local networks if access replacement mechanisms are denied on the basis of long distance expense savings.
- Revenue recovery replacement amounts available should be measured as of the implementation date for the reform plan.<sup>96</sup>
- Line loss and decreasing minutes-of-use should not be explicitly factored into an RM.<sup>97</sup> To the extent revenue replacement is through end-user rates or a fund, any appropriate adjustments based on line loss or decreasing minutes will be self-effectuating.

Regarding the detailed issues raised in the *NPRM* relating to potential interstate SLC increases,<sup>98</sup> CenturyLink addresses each of those in turn as well – again, in bullet points corresponding to the issues raised in the *NPRM*:

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<sup>93</sup> *Id.* ¶¶ 564-72.

<sup>94</sup> *Id.*

<sup>95</sup> *Id.*

<sup>96</sup> *Id.* ¶ 572.

<sup>97</sup> *Id.* ¶ 570.

<sup>98</sup> *Id.* ¶¶ 579-84.

- SLC increases, together with any other type of end-user charges regardless of its form, would be subject to the overall benchmark. As a result, there would no longer be any need for individualized SLC caps (*i.e.*, in the current categories of residential/single-line business lines, non-primary residential lines, and multi-line business lines specified in the Commission’s rules). The only cap needed in addition to the local rate benchmark would be on the permissible yearly benchmark increase and that would be accomplished via the overall yearly end-user charge increase cap of \$1.00 discussed above.
- All SLC increases, indeed any permissible end-user charge increases included in an RM, should be effective simultaneously with the initiation of ICC rate reform reducing rates.
- The Commission should not impose any additional conditions on the availability of increases to SLCs or other end-user rates. For example, the 2008 Order *and ICC/USF FNPRM* proposed conditions stating, respectively, that carriers must first raise state retail rates to the “maximum level permitted under state regulations” and that initial SLC increases are not available where “a carrier’s state retail rates have been deregulated.”<sup>99</sup> Not only was the operative language for each of these conditions potentially ambiguous, but each condition only promised to impose high implementation costs on carriers without any corresponding benefit. Given that the benchmark and yearly benchmark increase cap would already provide protection against unreasonable SLC increases, there is no need for such conditions.
- Finally, the Commission should, as discussed below, permit increases in interstate SLCs as part of an RM that includes lost intrastate access revenue regardless of which jurisdictional path it chooses.

CenturyLink’s proposed RM also carefully balances the critical consumer interest factors described above. It recognizes that, in ICC rate reform, some portion of displaced ICC revenue should be recovered from a carrier’s end users. However, it also recognizes that carriers have limited ability to increase retail end user rates and that higher end-user rates, at some point, threaten the Commission’s policy goals here for universal service. Thus, CenturyLink’s

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<sup>99</sup> *In the Matter of High-Cost Universal Service Support; Federal-State Joint Board on Universal Service; Lifeline and Link up; Universal Service Contribution Methodology; Numbering Resource Optimization; Implementation of the Local Competition Provisions in the Telecommunications Act of 1996; Developing a Unified Intercarrier Compensation Regime; Intercarrier Compensation for ISP-Bound Traffic; IP-Enabled Services, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking*, 24 FCC Rcd 6475, 6630-31 ¶ 299, 6639-40 ¶ 320 (2008).

approach of adopting more modest ICC rate reductions in the first place is complementary to an RM that requires, in turn, more modest end-user rate increases and less need for new USF funding.

The Commission should also resist the temptation to sweep non-regulated and competitive services into TDM ICC rate reform and any related RM. For example, the *NPRM* asks whether non-regulated revenues or special access revenues should be factored into any RM.<sup>100</sup> These revenues should not be factored in – at least for price cap carriers. These services are being deployed based on their own business cases and, as such, if the Commission wants network providers to attract capital for these types of investments, a light regulatory approach is required. Similarly, the Commission should not include non-regulated services in any benchmark.<sup>101</sup> The correct policy exercise here is to take reasonable steps to move in a measured way away from the Commission’s regulated legacy framework and not to introduce new services to that framework. This is another area where, as noted above, the Commission should heed the caution that it not pre-judge all-IP networks and not let TDM ICC reform drive all-IP ICC reform or vice-versa. Rather, as discussed above, it should strive first to get TDM ICC right first – then move on to addressing regulatory implications of an all-IP network at a later date.

**F. The Commission Has The Legal Obligation And Authority To Accomplish The Required ICC Revenue Recovery Mechanism.**

The Commission has the authority to accomplish the required ICC RM regardless of the ICC rate reform it chooses and regardless of the jurisdictional path it chooses. Whether it adopts CenturyLink’s proposed approach or some other ICC rate reform, the Commission has authority to implement CenturyLink’s proposed RM. As described above, CenturyLink’s RM would

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<sup>100</sup> *NPRM* ¶ 577.

<sup>101</sup> *Id.*

involve a combination of (1) end-user charge increases, via SLC increases or otherwise, and (2) explicit support designed to ensure that any revised ICC system does not deprive carriers facing particularly high costs from recovering those costs. The RM would satisfy the legal requirement that, with the adoption of an ICC rate reform plan, carriers have a reasonable opportunity to recover their costs.<sup>102</sup> The RM would also satisfy the requirements of sections 251(b)(5) and 252 of the Act. The *NPRM* discusses a variety of potential jurisdictional paths for any ICC reform that it undertakes.<sup>103</sup> Regardless of the path it takes, section 251(b)(5) and the corresponding pricing standards set forth in section 252(d)(2)(A)(i) will likely continue to be applicable to at least some portion of the traffic subject to that reform. Section 251(b)(5) directs LECs “to establish reciprocal compensation arrangements for the transport and termination of telecommunications.”<sup>104</sup> The associated pricing provision, section 252(d)(2)(A)(i)-(ii), asserts that rates for reciprocal compensation must “provide for the mutual and reciprocal recovery by each carrier of costs associated with the transport and termination on each carrier’s network facilities of calls that originate on the network facilities of the other carrier,” and must reflect “a reasonable approximation of the additional costs of terminating such calls.”<sup>105</sup> Without adequate recovery of any ICC revenue displaced by ICC rate reform through an RM, no ICC rate reform can satisfy this standard.

The Act provides the Commission with substantial authority to adopt the RM as proposed by CenturyLink. To the extent that the Commission relies on interstate SLC increases, these increases are permitted by (*inter alia*) sections 4(i) and 201-205 of the Act, which together afford

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<sup>102</sup> See *Duquesne Light Co. v. Barasch*, 488 U.S. 299.

<sup>103</sup> CenturyLink does not endorse either path at this time and reserves its rights with respect to the legal merits of the specific proposals contained in the *NPRM*.

<sup>104</sup> 47 U.S.C. § 251(b)(5).

<sup>105</sup> 47 U.S.C. § 252(d)(2)(A).

the Commission broad discretion in establishing carrier rates. To the extent the Commission implements a new explicit support mechanism to spread costs beyond a specific carrier's consumers, this action would be warranted by section 254 of the Act, which directs the Commission to ensure that rates paid by customers in high-cost areas are "just, reasonable, ... affordable," and "reasonably comparable to rates charged ... in urban areas."<sup>106</sup>

Indeed, in 2000 and 2001, the Commission found that these provisions justified actions legally identical to adoption of the RM proposed by CenturyLink here.<sup>107</sup> In the 2000 *CALLS Order*, the Commission adopted a plan that removed implicit subsidies in price-cap carriers' access charges and "replaced" the relevant revenues by increasing SLCs and creating a new explicit support mechanism, the IAS fund (which remains critical as addressed above).<sup>108</sup> The Commission found authority for raising the SLC in sections 4(i) and 201-205 of the Act,<sup>109</sup> and authority for creating the interstate access support mechanism in section 254.<sup>110</sup> Similarly, the *MAG Order* addressed access rates for rate-of-return carriers, raising SLCs and "creat[ing] a

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<sup>106</sup> 47 U.S.C. § 254(b)(1), (3).

<sup>107</sup> See *In the Matter of Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Low-Volume Long-Distance Users; Federal-State Joint Board On Universal Service*, Sixth Report and Order in CC Docket Nos. 96-262 and 91-4, Report and Order in CC Docket No. 99-249, Eleventh Report and Order in CC Docket No. 96-45, 15 FCC Rcd 12962 (2000) (*CALLS Order*); *In the Matter of Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers; Federal-State Joint Board on Universal Service; Access Charge Reform for Incumbent Local Exchange Carriers Subject to Rate-of-Return Regulation; Prescribing the Authorized Rate of Return for Interstate Services of Local Exchange Carriers*, Second Report and Order and Further Notice of Proposed Rulemaking in CC Docket No. 00-256, Fifteenth Report and Order in CC Docket No. 96-45, and Report and Order in CC Docket Nos. 98-77 and 98-166, 16 FCC Rcd 19613 (2001) (*MAG Order*).

<sup>108</sup> See *CALLS Order*, 15 FCC Rcd at 13046 ¶ 201.

<sup>109</sup> See *id.* at 12991 ¶ 76 n.120.

<sup>110</sup> See *id.* at 13046 ¶ 201.

universal service support mechanism,” the Interstate Common Line Support mechanism, “to replace implicit support in the interstate access charges with explicit support.”<sup>111</sup>

For these reasons, the Commission enjoys substantial discretion to adopt the RM as proposed by CenturyLink.<sup>112</sup>

**G. The Commission Should Address The Appropriate End-State Compensation And Interconnection Treatment For All-IP Networks As Well As The Final Transition To That End-State At A Later Date.**

As noted above, the Commission should address the appropriate end-state ICC treatment for all-IP networks and IP interconnection as well as the final transition to that end-state at a later date. Again, the *NPRM* appears to suggest at points that the Commission believes that the best approach to reforming ICC rates and related issues (*e.g.*, interconnection) is for it to determine the desired end-state on all these issues for an all-IP world and impose that now (or as soon as possible) on TDM networks. But, the two key assumptions built into that approach – the assumption that the Commission can possibly divine now the ideal compensation and interconnection end-state for the all-IP networks of the future and the assumption that, even if it could, it should impose that framework on TDM networks today – are both erroneous. As discussed above, all-IP networks are fundamentally different from TDM networks from virtually every standpoint – market, technology, customer experience, regulatory treatment, etc. If left alone, market forces will drive sound economic choices about things like compensation and interconnection. And, if the Commission sought to anticipate that and drive a certain model or pick winners and losers in advance, it will get it wrong.

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<sup>111</sup> *MAG Order*, 16 FCC Rcd at 19617 ¶ 3; *see also id.* at 19621-22 ¶ 15.

<sup>112</sup> Nor is it a material distinction that, in this case, the Commission might be increasing rates for an interstate service to make up, in part, for a decrease in rates for intrastate services. It is enough that the SLC increases and new explicit support mechanism, standing alone, fall within the Commission’s broad authority under sections 201 through 205 and they clearly do.

Two examples are illustrative. The *NPRM* seeks comment regarding the ideal end-state compensation methodology for all-IP, suggesting that methodology might establish the correct end point for transitional reform of existing TDM ICC.<sup>113</sup> The *NPRM* then asks for comment on two specific methodologies - bill and keep and flat-rate charges. Neither reflects the current compensation schemes that govern interexchange of all-IP traffic, which is typically subject to peering arrangements. With peering, at a high level, providers exchange traffic on a settlement-free basis subject to certain conditions. When those conditions are triggered, payment obligations are triggered. But, the Commission is not in a position to divine that peering will continue to be the most efficient form of compensation going forward. Nor does it make sense to impose the peering model as a regulatory mandate at any point in the near future on TDM networks. Also, meeting voice telephony requirements likely cannot be accomplished with a best-effort-only broadband platform. It will also necessitate active customer participation in customer premise equipment and increased IP investment. These distinctions will likely drive many differences in the compensation model that will be most economically efficient among all-IP providers, beyond the obvious one pointed out in the *NPRM* – the likely elimination of per-minute rates. New principles, like the essential need to deal with out-of-balance traffic flows, will likely be at the forefront of all-IP ICC debates. In the meantime, the critical step the Commission must take regarding ICC and IP voice traffic is to immediately confirm, as discussed in Section III.C., above, that IP-on-the-PSTN traffic is subject to existing ICC charges under current law.

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<sup>113</sup> *NPRM* ¶¶ 529-32.

Similarly, the *NPRM* asks “whether the transition from circuit switched to IP networks may affect our rules concerning POIs.”<sup>114</sup> It will clearly be desirable, in an all-IP network, to have a different POI framework. It’s fair to say, for example, that the market may drive a result of fewer, more geographically dispersed POI locations. But, the Commission is a long way from being in a position to dictate the details of the ideal POI rules for such networks – even if determined that it had the authority to do so. And, even if that were knowable, it makes no rational sense to impose that model on TDM networks where carriers operate under a legacy framework built around existing mandatory POI rules. Imposition of all-IP POI rules on networks with significant legacy TDM elements – elements TDM carriers are often mandated as a regulatory matter to maintain – will only impose extensive new and potentially unnecessary costs on carriers. For example, current TDM providers will have to construct new gateways and routers and construct new fiber routes into communities. And, they would have to do so regardless of whether such costs made economic sense. In other words, determining new POI and other interconnection rules for all-IP will also require a fundamental re-conception of those issues as well. Driving economically equivalent points of interconnection and network edges will likely become the critical concern – a function best driven by the market. It follows from this that the Commission should also not force LECs to accept traffic in IP now or during any transitional ICC regime.

As the *NPRM* notes, all-IP networks and TDM networks differ from a regulatory standpoint as well.<sup>115</sup> Carriers are subject to regulatory obligations to continue to deploy the legacy PSTN – for example, COLR, section 251 obligations, etc. The regulatory glide path from

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<sup>114</sup> *Id.* ¶ 682.

<sup>115</sup> *Id.* ¶ 506.

these obligations connecting to the legacy PSTN has yet to be determined. The regulatory treatment of all-IP networks has yet to be determined.<sup>116</sup>

**H. The Commission Should Address, Now, Certain Other Important Issues Associated With Transitional ICC Rate Reform.**

Regardless of the ICC rate reform approach taken by the Commission, it is essential that the Commission address, now, certain other important issues associated with transitional ICC rate reform regardless of the specific ICC rate reform approach it adopts. In each of these areas, purported uncertainty is being used as an excuse for arbitrage.

**1. The Commission should clarify the rules for POIs and network edges during any transitional period.**

The *NPRM* seeks comment on “requirements and methods for establishing POIs and on proposed rules for network ‘edges.’”<sup>117</sup> As mentioned above, the Commission should address at a later date the appropriate end-state rules around POIs and network edges for all-IP networks as well as the final transition to that end-state. However, it should clarify now the rules for POIs and network edges for purposes of any transitional TDM ICC rate reform. This will be important in connection with any ICC rate reform plan that the Commission may pursue, but it will be particularly critical for a bill and keep/\$0.0007 plan. If the Commission fails to adequately address POI and network edge issues in connection with TDM-ICC plans, carriers will be prevented from having adequate cost recovery and new forms of arbitrage will arise. For example, bad actors will no doubt seek to free ride on transport and transit networks.

The Commission would adequately address POIs/network edges if it incorporated the following clarifications with respect to POIs/network edges in any ICC reform order.

CenturyLink agrees with the high level premise that the volume of traffic exchanged with a

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<sup>116</sup> *Id.*

<sup>117</sup> *Id.* ¶ 680.

carrier should govern the number and locations of network edges/POIs. And, CenturyLink agrees at a high level with the principle that competitive carriers should be allowed to continue to use a third-party intermediary tandem owner to exchange small volumes of traffic with smaller ILECs who subtend a foreign ILEC tandem. However, the Commission must also clarify the following rules to enable reasonable network architecture requirements for the proper exchange of traffic:

- The LATA will continue to govern how carriers interconnect their networks, including traffic exchanged with CMRS carriers.
- Traffic volumes should dictate the number of POI locations for traffic exchanged with an ILEC (including traffic flowing in both directions).
- When establishing POIs/network edges, competitive carriers are financially responsible for establishing and maintaining direct interconnection facilities.
- Provided that traffic volumes are below a defined appropriate threshold, competitive carriers will have the economic option of exchanging traffic on an indirect basis via the foreign ILEC tandem under section 251(a) when an ILEC end office subtends a foreign ILEC tandem.
- Competitive carriers that make the economic choice to utilize a third-party intermediary provider to exchange traffic with an ILEC who subtends a foreign ILEC tandem must assume financial responsibility for costs that reside outside that ILEC's serving territory, including transit costs for traffic originating in both directions.

**2. The Commission should clarify the rules for transiting services for purposes of any transitional period.**

The *NPRM*, acknowledging the presence in the record of still more evidence that the market for transit services is competitive, asks that parties refresh the record with regard to the need for the Commission to “regulate transiting service and its authority to do so.”<sup>118</sup> It also asks parties to comment on whether the proposed reforms under consideration here would impact the

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<sup>118</sup> *Id.* ¶ 683 and n. 1096.

provision of transit service and if so, how.<sup>119</sup> As discussed above, adoption of CenturyLink's proposed initial ICC rate reform would go a long way toward eliminating the arbitrage problems associated with the current ICC regime. Even with adoption of such a reform (or with adoption of one of the other transitional ICC rate reforms outlined in the *NPRM*), the Commission should still adopt the United States Telecom Association's (USTelecom) proposal to ensure that adequate signaling stream information accompanies telecommunications traffic or the slightly different phantom traffic plan set forth in the *NPRM*.<sup>120</sup> But, the Commission, in any of these scenarios, must also anticipate the rise of a new realm of arbitrage opportunities if transiting providers are not assured of adequate compensation for their services. Transiting occurs when a LEC receives local or intraLATA toll traffic from one carrier for delivery to another carrier. In the transit scenario, the transit service provider has no relationship with either the calling party or the called party and often does not have the ability to identify the true financially responsible party for the traffic. As a result, the Commission must recognize that there would be an incentive to misuse or abuse transit or transport carrier networks unless carriers had the ability to charge appropriate rates for their networks.

The Commission would adequately address transiting if it incorporated the following clarifications with respect to transiting in any ICC reform order:

- Transit service is not subject to sections 251 and 252 and transit service providers have no mandatory obligation to provide such service.<sup>121</sup>
- Transit providers must be adequately compensated for the use of their networks.

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<sup>119</sup> *Id.*

<sup>120</sup> Comments of CenturyLink, WC Docket No. 10-90, *et al.*, filed Apr. 1, 2011 at Section II.

<sup>121</sup> *See, e.g.*, Letter to Ms. Marlene H. Dortch, Secretary, Federal Communications Commission from Timothy M. Boucher, Qwest, CC Docket No. 01-92, dated Mar. 23, 2006 at 10-16.

- Originating carriers are generally responsible for compensating the transit provider. The only exception is where a competitive carrier is exchanging traffic with an ILEC whose end office subtends a different ILEC's tandem. In that case, the competitive carrier should compensate the transit provider for the traffic flowing to/from the subtending ILEC's end office.
- Transit service providers are not financially responsible when other carriers send traffic to the transit service provider for termination and the transit service provider passes on the signaling information it receives.<sup>122</sup>
- Transit providers also do not have a mandatory call detail obligation. Rather, the generation and distribution of call detail records should be subject to commercial contract negotiation. Among other reasons, this is because the capabilities of carrier networks vary across the industry. This does not change any obligation to provide accurate information within the signaling stream.

**3. The Commission should clarify how transitional ICC reform will impact ICAs and commercial agreements.**

The *NPRM* also seeks comment on the effect of any proposed ICC rate reforms on different types of existing agreements.<sup>123</sup> Specifically, it seeks comment regarding the potential impact of such reforms on interconnection agreements (ICAs), tariffs, and commercial agreements, respectively. With respect to current ICAs and ICAs functioning in an "evergreen status," ICC rate reforms should be treated as a change of law under the governing terms and conditions of the applicable ICA. No amendments to such agreements should be required. As part of an ICC rate reform order, the Commission should require that any tariff changes required by the order be completed by the date that the applicable ICC rate reform becomes effective. As for commercial agreements, the Commission need not make any special findings for such contracts and should simply let the applicable terms and conditions negotiated by the parties prevail.

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<sup>122</sup> See Letter to Ms. Marlene H. Dortch, Secretary, Federal Communications Commission from Ms. Melissa E. Newman, Qwest, CC Docket No. 01-92, dated Sept. 26, 2007 at 2.

<sup>123</sup> *NPRM* ¶¶ 688-89.

**IV. CONCLUSION.**

CenturyLink shares the *NPRM*'s recognition that the Commission should act to bring about sensible, comprehensive reform of universal service and intercarrier compensation. It should transition the country to a new and more sustainable regime promoting investment in broadband-capable networks.

Respectfully submitted,

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April 18, 2011

CERTIFICATE OF SERVICE

I, Richard Grozier, do hereby certify that I have caused the foregoing **COMMENTS OF CENTURYLINK** to be: 1) filed with the FCC via its Electronic Comment Filing System in WC Docket Nos. 10-90, 07-135, 05-337, 03-109, GN Docket No. 09-51 and CC Docket Nos. 01-92 and 96-45; 2) served via e-mail on Mr. Charles Tyler, Telecommunications Access Policy Division, Wireline Competition Bureau at [Charles.tyler@fcc.gov](mailto:Charles.tyler@fcc.gov); and 3) served via e-mail on the FCC's duplicating contractor, Best Copy and Printing, Inc. at [fcc@bcpiweb.com](mailto:fcc@bcpiweb.com).

/s/Richard Grozier

April 18, 2011