

areas. Similar conclusions can be reached with respect to the aggregate \$4.5 billion annual budgetary target that presently applies to federal high-cost support for all of the rural areas served by price cap carriers and rate-of-return carriers.

Hopefully, at an early future date, the economic, educational, medical, social, governmental and other benefits of broadband networks and services will convince the Commission and other federal authorities to furnish substantially greater universal service support for the deployment and operation of higher capacity, urban-comparable broadband infrastructure in rural high cost areas. In the meantime, every little bit helps, and WTA supports as large of an experimental rural broadband program as possible – whether \$50 million or \$100 million or \$200 million dollars or more in size -- to help a few more Eligible Telecommunications Carriers (“ETCs”) extend broadband facilities and services at an early date to more unserved or underserved rural customers.

WTA supports separate experimental rural broadband programs or allocations for price cap service areas and for rate-of-return service areas. Without even considering the differences that have long warranted separate regulatory systems and universal service support mechanisms for price cap and rate-of-return service areas,¹ there are several substantial reasons particular to this proceeding that warrant separate allocations. First, the Commission has indicated that it may be appropriate to adopt an implementation schedule for rate-of-return service areas different from that used in price cap territories.² Without a separate allocation, different implementation schedules can put rate-of-return area experiments at a disadvantage if price cap area experiments

¹ Whereas both price cap carriers and rate-of-return carriers serve rural areas, the rate-of-return rural areas tend to be ones that the former Bell System companies and larger independents (*i.e.*, today’s price cap carriers) did not want to serve (or got rid of as soon as they could). For a variety of reasons such as higher costs, lower revenue potential, more sparse populations, rugged terrain, and/or harsh climate, many rate-of-return service areas were frequently left unserved until local residents formed cooperatives or small corporations to fill the void. Throughout the ensuing years, differences in critical factors such as cost structures, financial resources and scale economies have resulted in separate regulatory systems and universal service support mechanisms for price cap and rate-of-return service areas.

² FNRRM at para. 207.

authorized and undertaken earlier deplete available funds. Second, proposals for rural broadband experiments in price cap areas will be entertained at the census tract level, while those in rate-of-return areas may be made at the census block level.³ It is not clear how such potentially dissimilar experimental areas and populations can be equitably compared pursuant to the same allocation and selection criteria. Third, whereas the developing Connect America Cost Model (“CACM”) provides substantial guidance as to what price cap areas may qualify for rural broadband experiments,⁴ similar guidance is not available for rate-of-return service areas. Rather, the Commission has “encouraged” entities interested in proposing rural broadband experiments in rate-of-return service areas “to focus their proposals on high-cost areas similar to those identified in the cost model as potentially eligible for the Phase II offer of model-based support to price cap carriers.”⁵ However, many RLECs are unfamiliar with the details of the CACM model, and can only guess what census blocks within their service areas are “similar” to the price cap areas identified by the CACM model as “potentially eligible” for Phase II support. Fourth and finally, the Commission has indicated its intent to use the rural broadband experiments as a vehicle to study long-term broadband support mechanisms for rate-of-return areas.⁶ If the Commission is going to collect reliable and useful data on the costs of deploying and operating broadband facilities in unserved and underserved portions of rate-of-return service areas, it is going to have to reserve enough of its allocation to conduct sufficient and appropriate experiments in such areas.

In light of these differences and considerations, it would be impracticable and inequitable to have price cap area and rate-of-return area experimental proposals compete against

³ FNPRM at paras. 111 and 209.

⁴ FNPRM, at paras. 110-12.

⁵ FNPRM, at para. 208.

⁶ FNPRM, at para. 205.

each other for funding, or to try to develop common selection criteria and scoring systems to compare such dissimilar classes of experiments. Rather, the more reasonable and practicable approach would be to establish separately allocated sub-programs (with separate selection criteria and scoring systems) for price cap service areas and for rate-of-return service areas. WTA proposes that at least 25-to-35 percent of the ultimate fund for rural broadband experiments be allocated to rate-of-return service areas.

B. Experiments in Areas Where the Incumbent is a Rate-of-Return Carrier

The critical fact regarding rural broadband experiments in rate-of-return service areas is that most WTA members and other RLECs presently provide some level of broadband service to 90 percent or more of their rural customers. During the 1990s, large numbers of RLECs began offering broadband digital subscriber line (“DSL”) service over existing copper lines to customers located in or near the towns and other population centers they served (*i.e.*, those customers relatively close to their central offices). Since that time, RLECs have deployed fiber optic facilities and repeaters to extend DSL service further and further into the outlying portions of their service areas, and to increase the bandwidths of the broadband services available to their customers. Most RLECs now have substantial broadband-capable networks in place, and are currently providing at least 3 Mbps/768 kbps service to the core portions of their service areas and substantial portions of the more outlying areas thereof. These existing RLEC networks already have soft switches, routers and/or other switching facilities, plus substantial fiber optic facilities in both customer loop plant and interoffice plant. RLECs also have already made at least primary (and, often, alternative) middle mile routing arrangements to get to the Internet (including, for some, participation in state or regional fiber transport networks). Finally, given that most schools, libraries, government offices, police and fire stations, and rural health care

facilities are located in towns, villages and similar rural population centers, the RLECs serving these communities are already serving most or all of the anchor institutions situated therein.

In rate-of-return areas, rural broadband experiments are predominately going to take place in outlying census blocks that do not presently have 3 Mbps downstream/768 kbps upstream service. WTA notes that, in many sparsely populated areas of the West, outlying rural census blocks tend to be large in size, but to contain relatively small numbers of households. Hence, even substantial clusters of outlying rural census blocks may not contain many households, and particularly not enough to support stand-alone experimental networks.

From an efficiency standpoint, it makes no sense for new carriers to build and maintain (or for the Universal Service Fund to support) new networks and infrastructure (including switches, interoffice facilities and middle mile arrangements) to serve these outlying census blocks. Rather, the most efficient and cost-effective approach is to encourage and enable RLECs to continue edging out their existing networks into these outlying and underserved rural census blocks. With the other network facilities and arrangements necessary to furnish broadband services already in place, what most RLECs have to do is to extend fiber optic facilities further toward underserved outlying census blocks. Whereas extending a fiber facility in a rural area can be an expensive undertaking, it is far less expensive than constructing an entirely new broadband network. The contemplated fiber extensions can be accompanied by useful technical experiments with fiber drops, repeaters, copper and other metal conductors, and WiFi to increase and extend bandwidth and service quality along the affected routes.

The massively greater efficiency of RLEC fiber extensions constitutes a compelling reason to adopt the NTCA proposal that incumbent RLECs be given an initial window (in advance of other potential applicants) to submit applications for rural broadband experiments in

their certificated local exchange service areas, and/or to give RLECs a right of first refusal regarding broadband experiments to be conducted and financed by federal high-cost support in their local exchange service areas. Put another way, it makes no sense for the Commission to use federal high-cost support to finance the construction of wholly new broadband networks in certain outlying census blocks in rate-of-return service areas, when the only obvious way for the new networks to acquire the minimal scale economies necessary to survive is to engage in ruinous competition that will threaten the financial viability of existing RLEC broadband networks that have been supported by existing federal high-cost mechanisms.

C. Selective Criteria for Rural Broadband Experiments

WTA agrees that efficiency and cost effectiveness should be the primary criteria for evaluating which applications to select for the proposed rural broadband experiments. For rate-of-return service areas, these questions come down, as discussed above, to whether outlying areas lacking 3 Mbps/768 kbps service can be upgraded more efficiently and less expensively by extending the fiber optic facilities of existing local networks that are already providing voice and readily upgraded lower bandwidth broadband services to the areas, or whether entire new broadband network facilities and arrangements are to be deployed. If an existing RLEC can serve an area by less expensive fiber extensions, it should receive a controlling preference over an applicant that must construct a substantially new broadband network.

WTA opposes the use of the current CACM model as a measure of potential cost-effectiveness for RLEC applicants. Without going into specific details or running afoul of protective orders, it is clear that: (1) the CACM model has been developed by and for approximately a dozen large and mid-sized price cap carriers; (2) that its assumptions, variables, formulas, inputs and calculations have not been devised for, or tested against, the specific and

material circumstances and conditions faced by RLECs; and (3) that it will need substantial revision, testing and adjustment before it can reasonably or reliably be used to estimate appropriate costs or high-cost support for approximately 1,000 RLECs that are very different from each other as well as wholly distinct from the larger price cap carriers. In fact, one significant potential benefit of rural broadband experiments in rate-of-return service areas is to obtain actual network and cost data that might be relevant to the evaluation and revision of cost models to determine whether they can be reasonably and equitably employed to evaluate the costs of certain rate-of-return carriers.

WTA agrees that robust, scalable networks should be a prominent goal of the IP transition, as well as an important selective criterion for rural broadband experiments. However, it is not clear how such a criterion should be defined and used in this proceeding. As the Commission is well aware, fiber-to-the-home (“FTTH”) is the most robust and scalable broadband technology, for it can be upgraded to higher and higher bandwidths by changing the electronics at each end of the fiber loop. Given that the contemplated budget for rural broadband experiments, not to mention the existing budgetary targets for federal high-cost support, are not sufficient to support widespread FTTH deployment, WTA suggests that preferences or points for “robust, scalable networks” be awarded to applicants that can readily extend existing fiber facilities further toward unserved or underserved census blocks in order to provide higher bandwidth broadband services therein.

WTA agrees that additional preferences or scoring points can be awarded to applicants who are able to leverage state, local or tribal funding, and to applicants proposing to offer high-capacity connectivity to Tribal lands. However, such preferences and points should be much smaller than those awarded for cost-effectiveness and for robust, scalable networks.

D. Additional Considerations for Rural Broadband Experiments

WTA agrees with the Commission that rural broadband experiments should not be authorized or conducted in areas where an incumbent carrier is currently providing at least 3 Mbps downstream/768 kbps upstream service.⁷ There should be a rigorous challenge process to prevent to waste of the limited rural broadband experiment dollars in areas that already have 3/768 service. To ensure that existing service providers are aware of proposals to conduct experiments in areas where they provide 3/768 service and that they will have sufficient notice and opportunity to challenge such proposals, applicants for rural broadband experiments should be required to serve copies of their rural broadband experiment applications upon any and all incumbent local exchange carriers and competitive local exchange carriers that serve the proposed experimental area. Such applications should be served no later than the date on which they are filed with the Commission. Failure of timely service upon existing carriers should be punished by dismissal of the rural broadband experiment application.

WTA also believes that the Communication Act requires each and every entity receiving federal high-cost support to be a properly designated ETC. In order to avoid delays and disruptions in the processing, grant and implementation of rural broadband experiment applications, the Commission should require applicants to be ETCs at the time they file their applications. At the very latest, applicants should be required to have obtained ETC status at the time that the Commission is ready to grant their applications, or such applications should be denied.

E. Conclusion

While not a substitute for the sufficient future high-cost support necessary to bring reasonably comparable broadband service to rural areas, the proposed rural broadband

⁷ FNPRM at para. 113

experiments can provide tangible benefits and useful information if they are designed, allocated and implemented properly. WTA applauds the Commission for taking efforts to ensure that the proposed experiments do not threaten the financial viability of existing broadband networks that have been supported by present high-cost mechanisms. A transparent application and challenge process, plus emphasis upon efficiency, cost effectiveness and scalability in the selection process, will help to ensure that rural broadband experiments in rate-of-return service areas will help to advance the IP transition and to provide useful information to the Commission and other interested parties.

Respectfully submitted,
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