**Executive Summary**

The Universities of Texas and Texas A&M, together with several non-profits, city owned electric utilities, electric co-operatives, and the Lower Colorado River Authority are submitting inter-related public interest grant proposals for National Telecommunications and Information Administration (NTIA) and Rural Utilities Service (RUS) funding within the Broadband Technology Opportunities Program (BTOP) and Broadband Initiatives Program (BIP). We are also coordinating our mapping efforts with the Texas Department of Agriculture. Since the publication of the American Recovery and Reinvestment Act of 2009 (ARRA), The University of Texas has researched how the public interest can best be served by the administration of this broadband grant program. Once the NOFA was published, we developed multiple grants of which the University of Texas is the lead requestor on four separate grants. Some of these grant requests overlap multiple public interest goals and can potentially be funded from many of the categories. Our interpretation of the rules requires that multiple applications must be filed to be considered for funding from different categories, which we have done. Where we have filed multiple applications we have internally ranked them based upon the “best fit” of the specific proposal. Below is a list of University of Texas filed grant requests ranked by best fit: • Texas Open Pop (“TOPP”) – (1) BIP Middle Mile; (2) BTOP Infrastructure Middle Mile; (3) BTOP Innovative; • Texas Greenline – (1) BTOP Innovative; (2) BTOP Community Centers • Texas Build – (1) BTOP Infrastructure End User; (2) BTOP Innovative; • Texas Broadband Best Practices and Dispute Avoidance Center – BTOP Innovative grant. These projects represent the joint, and often interdisciplinary, efforts of the University of Texas’s many specialized schools, particularly the schools of Law, Engineering, Technology, Communications, and Public Affairs all in partnership with community stakeholders in the targeted areas of need. It is our hope that these applications are viewed as a model for other public and private institutions and their collective public interest aspirations. At the end of the day, we firmly believe that public monies and public subsidies must be used for public broadband infrastructure and not high-tech, private toll roads. The overwhelming common theme in all of the University of Texas’ Grant request is to create a useful broadband infrastructure for the people in Texas who need it, while also creating a model for transparency on how to build and operate an “Open Internet.” Along the way, we will create an on-going education center that can serve as a touchstone and catalyst for innovation for future providers as well as policy makers. Texas Open POP Project The “Middle Mile” problem is the problem of building adequate network connections between the Internet’s backbone pipes and the last mile local loops that go to an end-user. Rural Americans end up being the victim of this “Middle Mile” problem and are often in the awkward position of having local connections being potentially available but no (or inadequate) means of connecting those local loops back to the greater network. The Texas
Open POP Project (TOPP), is prepared to solve this problem by building a series of points of presences (POPs), giving rural and innovative providers (many of whom are filing coordinated last mile applications) an accessible connection to the Internet backbone. This project seeks to connect 51 rural unserved communities, with at least 69,572 households, 8,436 businesses, 503 community anchor institutions and public safety entities. Differentiating the TOPP is a set of public interest goals that will drive the project every step of the way: 1.) Open Access. The TOPP will be operated with clear open access guidelines in terms of making connections, daily operations, and non-discrimination of packets. We will strive to exceed the standards of openness set by the FCC, and set the bar in the broadband industry for fairness and transparency. USFon, a 501(c)(3) non-profit designated as a charitable organization which is also a fully certified CLEC in the State of Texas, whose board of directors includes UT professors and a former Texas Public Utility Commissioner, will administer the day to day operations and will require that each participant of, and customer of the TOPP also adhere to Open Access standards as they develop. USFon will also be a charter member of the Texas Broadband Best Practices Center. 2.) Non-profit and promoting competition. Our goal with the TOPP is not to create a revenue machine but to build infrastructure designed to improve the quality of life for rural Americans. As such, the project's POPs will be available at a price designed to offset the costs of operations and maintenance, with no eye towards profit. We will also provide a discounted rate to anchor institutions who are city owned and/or are non-profits. Our model assumes a rural gig-e will be priced at $1,800 per month to for profit entities, and $1,000 to non-profits. Further we encourage for profits to establish their own networks which can even lower prices further. One example is a coordinated application of Worldcall Interconnect in Blanco County, Texas which establishes direct fiber connections to its anchor community tenants at $500 per month. All legal use will be encouraged. This overt policy will encourage multiple providers of broadband and anchor use. Due to the three page limit of this section we cannot list all the eligible anchor/non-profit institutions and partners, but we have done so in answer to Question 41. Essentially, the only product is a fiber based GigE connection that connects to the Internet, and may also be used for Intra-net purposes. The price includes 100 megs of dedicated throughput. Each connection to the TOPP will be incented to make maximum use of their bandwidth and will be charged an additional $18 per meg for sustained use over 100 megs. 3.) Maximum rural penetration. Understanding the balance between the costs of building middle mile infrastructure and reaching the greatest number of people possible is key to successful implementation and sustainability. To maximize rural penetration, TOPPs utilizes its extensive knowledge of existing fiber, conduit, and electrical transmission pole infrastructure capabilities and partners, to designing a system that provides direct fiber connectivity opportunities to as many rural communities and facilities as possible at a reasonable costs. With a grant request of $99,825,256 we have built a matching infrastructure being provided of more than $100,000,000 by multiple different entities (all non-profit, educational, or muni/co-op owned electric utilities). Our request of grant monies is to complete connectivity of seven intersecting rural long-haul routes. The resulting network will initially connect 47 unserved communities to 9 major points of interest where additional educational and medical institutions as well as other UT-related stimulus grants requestors will be connected. We fully anticipate that this TOPP project will be requested to add additional “unserved” communities in future grant rounds, and as such we have designed the network with this in mind. 4.) Replicability and sustainability. While the TOPP will be focused on solving the “Middle Mile” problem in Texas, we are aware that other states with significant rural populations suffer
from the “Middle Mile” problem as well. The project will focus on creating a scalable solution that can be replicated anywhere, and a set of guidelines will be developed alongside the project’s progress for others to follow. The “Middle Mile” problem can be solved without the need for major technological advances or continuing subsidies. We believe that our detailed request for a one-time grant is all that is economically required to build a sustainable model. However, what is also required is a clear vision of implementation and the technical expertise to execute it. In this case, such expertise and vision comes from the joint cooperation of the University of Texas, Texas A&M University, the LCRA and USFon. Thus, the TOPP is uniquely equipped to solve the “Middle Mile” problem and bring the benefit of open broadband to the largest rural population in American. BIP vs. BTOP – We feel that because this request focuses on 47 unserved rural areas that it best fits in the BIP grant. However, we are concerned that the self-scoring of loans vs. grant rule may score this grant request too low and thus are also requesting BTOP review. We also believe that this application qualifies for an innovative grant because a non-profit is providing the middle-mile solution in areas where traditional market approaches have failed. This innovation is readily applicable to solve the middle mile problems in other areas. THE BOTTOM LINE Collectively this project will: • directly employ over 18 people for operations; • will employ 200 people through sub-contracts • provide broadband access to over 69,000 households in unserved/underserved locations which in turn can help provide job opportunities to these people including competitive communications businesses • develop and engineer low cost rural solutions which focus on solving the “middle mile” problem throughout Texas as well as becoming a model for other areas.