

## Broadband USA Applications Database

**Applicant Name:** The University of Texas at Austin

**Project Title:** Texas Greenline Project

**Project Type:** Middle Mile

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### Executive Summary

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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), faculty and students at the University of Texas have analyzed how the public interest can best be served by the administration of this broadband grant program. Since the NOFA was published, we developed multiple applications in 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 Infrastructure Middle Mile; (2) BTOP Innovative; (3) 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 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 most 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 Greenline Project It is an unfortunate reality that one of the US demographic strata that stands to benefit most from broadband access also has one of the lowest adoption rates. Studies show that only around 25% of low-income households have adopted broadband service, compared to over 80% for middle- and high-income households. We believe the reason for low adoption rates in low-income households is twofold, 1) the

dominance of “red-line” business models among broadband service providers; and 2) a poor understanding of broadband utilization in low-income communities. A “red-line” business model is essentially one that forgoes the goal of maximizing overall adoption in favor of promoting only profitable adoption. This means that certain communities are explicitly disregarded in terms of infrastructure provision or are effectively priced out of the market in terms of service offerings. A corollary to this result is that while there has been a great deal of effort expended on understanding broadband utilization among middle- and high-income bracket users, no similar effort has been targeted at low-income users. The Texas Greenline Project (“the Project”) believes the best way to address this problem is as the mirror image of the “red-line” model, coupled with a rigorous study of broadband utilization. Specifically, the Project will 1) implement a non-profit, self-sustaining business model with the goal of achieving maximum penetration rather than maximum profit; and 2) conduct contemporaneous empirical research on factors that may accelerate or retard the deployment and use of broadband within low income demographic groups in the State of Texas. USFon, a 501(c)(3) non-profit designated as a charitable organization and a fully certified CLEC in the State of Texas, whose board of directors includes UT professors and a former Texas Public Utility Commissioner Brett Perlman, will be primarily responsible for executing the self-sustaining business model and providing the middle mile connections necessary to provide real access to the target low-income communities and households. Its operation will fully comply with the open access, non-discrimination, and transparent management requirements of both the NOFA and standards set by the FCC. USFon will also route all traffic in a neutral manner, without any discriminatory throttling of legal Internet applications or content, and is also committed to interconnecting with any requesting party on reasonable rates, but with a preference for reciprocal peering arrangements. Our broadband system will use existing DSL and fiber technology and will operate without an aim for profit as described in this application. The result is a targeted price of \$5 to \$10 per subscriber for broadband access. Where possible, USFon will partner with local organizations like the Housing Authority for the City of Austin, Houston-based non-profit Technology for All, and Austin Free-Net to deliver service. This represents the most efficient means of providing service to large groups of low income users by leveraging the pre-existing relationships that these non-profits have established. These local non-profits will also contribute their experience though adoption promotion, educational programs, customer liaison functions and front-line technical support. Throughout this process, all parties will assist in collecting data, including demographics, usage, geography, price impact, bandwidth impact, and subsidy impact. We plan to experiment in a scientifically rigorous way, in making varying degrees of subsidy available in broadband service plans for low income users, in order to better understand the impact of pricing on broadband adoption in economically disadvantaged groups, a subject on which there is currently almost no serious or reliable analysis available. Both the raw data, and the analytical studies that emerge from the research project will be gathered in a way that facilitates replication across the country, and will be made publically available for research use, in order to help inform future policy decisions. Out of the total cost of \$183,675,000 we have matching infrastructure being provided of \$77,325,000 by other multiple different entities (all non-profit, educational, or muni/co-op owned electric utilities) and are requesting \$106,350,000 of grant monies to build the infrastructure and acquire equipment necessary to provide service to 67,892 underserved households. We fully anticipate that the Project will be requested to add additional “underserved” communities in future grant rounds, and as such we have designed our model

and planned infrastructure deployments with this in mind. THE BOTTOM LINE Collectively this project will:

- directly employ over 275 people for operations;
- will employ hundreds of people through sub-contracts
- provide broadband service to 67,892 people in unserved/underserved locations which in turn can help provide job opportunities to these people including competitive communications businesses
- develop and engineer low cost solutions which focus on solving the “middle-mile” problem for low income communities
- create a new body of data and research relevant to designing policies to assist in connecting a historically underserved class of broadband users