North Dakota State Wide Mobile Broadband Project for Public Safety & Underserved Opportunity. This application would help establish a broadband network that addresses a wide range of ARRA goals but also specifically address broadband priorities identified by the state of North Dakota. Addressing modern requirements for public safety, education, health care, and economic development not only requires broadband access but broadband in a mobile environment. Flow Mobile’s broadband solution provides affordable access to both fixed and mobile services over the same network. Small rural communities are often among the last to have access to state-of-the-art broadband technologies that deliver video and data applications to public safety; open the door to distance learning; equip ambulances with live data and video services; and enhance business efficiency through a community-wide, open access broadband network that is available at a fixed affordable price at home or work or on the go throughout the community.

The vision of Flow Mobile is that rural communities can and should be first to deploy and use innovative state-of-the-art telecommunications services, eliminating the digital divide that has plagued rural America over the past couple of decades. Flow Mobile’s approach combines it’s rural roots and commitment to America’s heartland with the technological and entrepreneurial savvy of Silicon Valley and experienced veterans in the telecommunications field, utilizing innovative low-cost, 4G-like mobile broadband communications A low-cost, always and everywhere available IP open access network is one of the most effective means to enhance a whole range of public and social services; stimulate businesses, creating jobs; and open the door to new opportunity and reinvestment in rural communities. Flow Mobile will solve the rural riddle of providing affordable mobile broadband services to the North Dakota public safety community; unserved and underserved citizens; and community colleges and universities throughout the state through its low-cost solution. The proposed project will create a state-wide network providing never-before available services for public safety, citizens, and educational community in North Dakota.

Number of Households and Business Passed. 257,152 households, and 56,781 businesses in the service area, of which 62,148 households and 13,723 businesses are in the proposed funded service area.

Community Anchor Institutions. North Dakota has the following institutions that are covered under the state-wide network:: 50 Health Care Facilities; 45 Emergency Rooms (40 of which are designated as Trauma centers); 22 Public Safety Answering Points; 60 Police Stations; 263 Fire Stations and Volunteer Fire locations; 90 EMS locations; 53 County Sheriff HQ; 27 National Guard installations; 453 Transportation Facilities; 4 Tribal facilities; 18 Federal Agency Facilities (including Border Patrol; National Weather Service Fish and Wildlife,
Flow Mobile has identified state-of-the-art technology methodology that radically changes the rural telecommunications landscape. The technology being deployed utilizes the many benefits of open access mobile broadband services with an easy cost effective deployment in the 700 MHz licensed spectrum. The 4G-like mobile broadband services provides voice, video, and data applications in a mobile environment at typical data rates at or exceeding 3 Mbps. The network is all IP-based, which allows for interoperability and easy flow between applications for the end user. Flow Mobile will provide multi-mode 700 MHz IP handsets and allow users to perform all IP functions. The network will be capable of inter-operating with LTE devices once the interoperability standards are developed. For the fixed residential or business service, Flow Mobile will provide fixed broadband to home similar to Flow Mobile’s current WiFi solution. There will be a 700 MHz CPE that will be a wireless client/bridge to the wireless base station (BTS). Bandwidth can then be distributed through a wireless router or connected directly to a computer.

Non-Discrimination and Interconnection Obligations. The Flow Mobile business plan embraces the principles of non-discrimination and interconnection. We advocate an open standard in the 700 MHz band that would apply the successes of the openness of WiFi in the 700 MHz band. Our approach would avoid proprietary approach that has impeded interoperability and led to costly handset costs. The free flow of content and interconnection with other networks is vital to our business strategy.

Qualifications. Currently, Flow Mobile serves around 1100 customers in the state of North Dakota. The company is expanding its operations by deploying in 5 new towns in 3 different states. We are growing through acquisitions of local companies which are being completed regularly to increase our customer base. Under present operations, the company will become cash flow positive by middle of 2010. The Flow Mobile team combines the local passion and
commitment to serve rural America with the savvy of international technology. The company founder, Admiral Bill Owens, leads a Board of Directors including: Gregory L. Rohde (former NTIA Administrator); Rich Karlgaard, (Publisher of Forbes Magazine), Naveen Jain (founder of Infospace and Intelius); and Steve McCormick (Bismarck Entrepreneur and Angel Investor). The management team includes Sree Tangella and Yick Chan (cofounder of Altai Technologies). Flow Mobile has developed a seasoned team located in Bismarck that includes former state and local government officials and engineers capable of delivering service to rural communities and public safety. Flow Mobile deployed its —proof of concept‖ network in Dickinson, North Dakota – a rural community of about 20,000 in population over a 9 square mile area. In this deployment, we demonstrated that we could: a) Work with the local government to gain permission to deploy our base stations on light poles to provide community-wide coverage; b) Deploy the entire town rapidly. We deployed the entire town in 3 days to construct and c) Establish key partnerships with public safety, local government, and educational entities to provide broadband connectivity everywhere in the town, opening the door to new, previously unimagined applications. Overall Infrastructure Cost of the Broadband System. Flow Mobile’s business plan projects the costs of this North Dakota state-wide deployment to be $37,329,200 million, of which $29,116,776 million is requested under this application. Subscription Projections. Currently, Flow Mobile serves around 1,100 customers in North Dakota. Our low-cost technology and our first-mover advantage, especially in the area of public safety, will provide the company with a stable, anchor customer. Number of jobs estimated to be created. We estimate that, as a result of this proposed project, a total of 40 direct and approximately 880 indirect jobs, through the network deployment activities alone. The number of businesses that develop because of the bandwidth we offer and the networks we deploy are going to be way higher.