Executive Summary Nashville, TN

American Fiber Systems ("AFS") is requesting funding to deploy and operate a Middle Mile fiber optic network that offers uniquely diverse communications paths which serve all of the communities in Tennessee, which is titled BTOP: Expanding & Enabling Broadband Technology & Competition in Nashville, TN area. This network was developed and designed to provide interconnection with multiple last mile providers to provide service to the underserved areas and with the input from the community solving the unbudgeted needs of the community anchor institutions, public safety entities and critical community organizations.

- The AFS project for the Nashville, TN area will satisfy four key BTOP statutory purposes, and we will demonstrate our ability to accomplish these objectives not only here but throughout this entire funding application. First, AFS will be extending Middle Mile broadband access to consumers in underserved communities. Census data was analyzed to create a demographic-based model to establish that each of the targeted areas is underserved. Second, AFS will be providing broadband connectivity to community anchor institutions and critical community organizations such as schools, libraries, outreach agencies, medical and health care related facilities, and city & county government facilities. Third, AFS will connect to and improve interoperability for public safety entities. Fourth, AFS will stimulate investment in last mile broadband access.

- The proposed funded service area encompasses the

- These communities have an aggregate population of 111,902, according to the U.S. Census Bureau. The AFS proposed fiber route in the proposed communities passes a total of approximately 43,506 homes, 21% of which are low income households, and approximately 7,538 businesses employing about 100,000 employees, over 25 first responder and other public safety agencies, over 85 schools, 351 municipal facilities and 586 hospital and medical center or health related entities.

- Upon the initial announcement of stimulus funds being allocated for the proliferation of broadband services, AFS identified and met with key local leaders and community anchor institutions. AFS has identified over key target locations that we propose to interconnect with including: over Public Safety locations, K-12 schools, colleges and administration buildings, local libraries, and County, City, Courts, and Community Service buildings. The public safety locations will be connected with dedicated fiber optic pairs to ensure the highest level of information security and diverse...
service reliability. One key element is to provide connectivity to the public safety locations, city & county facilities and schools. The AFS Nashville project has generated the strong local support and community excitement needed to achieve our ambitious goals. AFS has developed an unprecedented community based alliance who are aligned and motivated to successfully implement this project.

○ AFS’ core service offering strategy is based on a multifaceted approach of offering a future proof and scalable fiber platform, high quality customer service, superior network reliability, virtually unlimited bandwidth speeds, a distinct local presence and prices that are below the advertised pricing of competitors. Through this non-discriminatory, open access network, AFS will offer transport services including Ethernet Private Line, Ethernet Virtual Private Line, Ethernet Virtual LAN, Ethernet Internet Access, managed wavelength service, intercity transport, TDM / SONET transport, and dark fiber at highly competitive prices.

○ AFS is truly a non-discriminatory open access provider, since its inception in 2000, of wholesale transport services to any party interested in purchasing such capacity whether carrier, enterprise or institutional. In addition, AFS also makes available dark fiber strand leases on a non-discriminatory basis to any party thus enabling control and growth of their capacity needs by enabling said party to light the leased strands and manage their traffic as they see fit. The AFS network is open on both a wholesale and dark fiber lease basis whereby other carriers may interconnect to AFS’s existing facilities to carry traffic to critical points on our current fiber optic network such as tier 1 peering points for internet access, data centers, carrier hotels, central offices and on-net buildings.

○ AFS proposes to deploy a state of the art, fully redundant fiber optic Middle Mile broadband network in a ring configuration with a footprint of approximately miles. This project is designed to deliver services over miles of aerial construction and miles of underground construction into community anchor buildings and interconnection points with last mile providers. The AFS design also includes lighting up buildings with state of the art equipment and provides the bandwidth and services needed by the customers.

○ AFS is a recognized industry leader that will support and manage the ARRA/BTOP Project across the breadth of the entire AFS organization. AFS has the managerial experience, operational track record and financial acumen to deliver on our business plan. As a company, our core competency is the design, implementation and successful support of fiber-optic networks. In the past nine years, AFS has successfully designed, deployed and operated in nine (9) metro markets across the USA, which demonstrates that our deployment methodology and our technology choice for fiber infrastructure and equipment is highly successful, easily replicable and can be used to improve future projects. In addition to the Nashville, TN area network, AFS has deployed fiber optic networks in the following markets: 1. Atlanta, GA (220 route miles), 2. Salt Lake City, UT (112 route miles), 3. Las Vegas, NV (270 route miles), 4. Boise, ID (182 route miles), 5. Kansas City, MO/KS (53 route miles), 6. Minneapolis & St. Paul, MN (89 route
miles), 7. Cleveland, OH (56 route miles), 8. Reno/Carson City, NV (93 route miles).
AFS has successfully enhanced the networks in all of its markets and completed over 100 fiber projects of varying scale and complexity to provide carrier grade, high-bandwidth service to its customers.

- The total project cost requested for funding for this broadband system as planned is $...$. The AFS implementation plan is shovel-ready, prepared to launch in January 2010, and has a planned completion in $...$. AFS will be providing $...$ of the total project cost. AFS will also be funding the $...$ of the total project cost. The total contribution by AFS of $...$ contribution yields an AFS investment that ranges from 30% to 45% of the overall project costs through the plan period. AFS already owns and operates a fiber optic system in the Nashville, TN area, consisting of 60 route miles. The network AFS proposes for this funding opportunity would not be an isolated island in that it has been conceptualized and designed to interconnect with our existing network at multiple points. This will exponentially increase the broadband competition in the entire served area and delivers a highly cost efficient leveraging of our existing network at no additional cost. The costs associated with our existing network, which provides many access points, and $...$, is not included in the project costs.

- To ensure maximum broadband penetration levels in each community, AFS will draw on its previous experience of working collaboratively with community anchor institutions, enterprises, and carriers. AFS will continue to reach out and assess their specific broadband requirements and enter into agreements to provide high speed broadband service. AFS fully expects that this strategy will result in penetration rates as high as $...$ of businesses passed by our networks within $...$ of offering service and market share levels as high as $...$ of available qualified customers.

- This project will quickly stimulate the economies of the $...$ area by creating approximately $...$ direct new jobs in the categories of construction, service, operations, marketing/sales and management, and approximately $...$ indirect or induced jobs. The fiber routes have purposefully been designed to include State-designated zones for economic stimulus and job creation.

To the best of our ability, AFS has completed each application item thoroughly and with proper due diligence. It should be noted, however, that the NOFA language, supporting FAQs, and application directions in some cases are unclear. We feel we have made reasonable interpretations where appropriate within the spirit of the Recovery Act and NOFA. Should the reviewing panel determine that AFS has misinterpreted an application item request; AFS is prepared to clarify or update any information provided, upon request.