Executive Summary

The proposed Bi-State KC e911 & Community Broadband Infrastructure Project will greatly enhance broadband services to key anchor institutions, including public safety facilities & the region's 3 community college systems, including 2 systems located in economically distressed areas. The proposed system will serve areas that are currently underserved, including rural & newly developed portions of the metropolitan region, & low income neighborhoods where high speed services are either not available or are not available at competitive costs. The Bi-State Kansas City metro area expected to be served by this project includes portions of 3 Kansas counties, Johnson, Leavenworth & Wyandotte, & four Missouri counties, Cass, Clay, Jackson & Platte. The service area encompasses 1005 square miles & includes 1,102,807 population in 26 cities & in unincorporated county areas. The current service area includes 434,091 households & 44,211 businesses employing 691,326 persons, & is the area where much of the Kansas City metropolitan area's economic growth is expected to occur over the next 30 years. The 335-mile core system, supplemented by an additional 268 miles of contributed public network, will provide middle mile service with dark fiber to 708 anchor institutions, including 147 public safety facilities, 9 community college campuses and 15 other colleges, 241 schools, 49 libraries, 29 hospitals and 30 other health centers, 24 public housing developments with over 4200 units, and 165 other government facilities, including city halls & courthouses, community centers, local government Emergency Operations Centers, ambulance services, & federal and state office facilities. The proposed system will be a critical element of the region's e911 emergency communications system, replacing expensive T-1 lines with fiber as well as connecting 38 of the region's 44 public safety communications centers to a newly installed radio microwave system, enabling e911 traffic to be routed by both fiber & microwave. This critical redundancy addresses a need identified through the region's homeland security needs assessment process. The system will extend the coverage of the service area & tie together 6 local government public fiber systems (Johnson County, Kan., Olathe, Kan., Wyandotte County, Kan., Kansas City, Mo., Independence, Mo., & Lee's Summit, Mo.) The critical connection of local public fiber systems is a goal expressed by the local Information Technology Directors of area cities & counties working together through the Regional Information Technology Managers Association (RITMA). Connections with neighboring jurisdictions will allow them to provide back-up disaster recovery mutual aid support to one another. The proposed Middle Mile system will provide a series of fiber rings, each with four conduits. The project would include dark fiber in one conduit for public uses. The fiber would include last mile connections to 38 of the region's 44 e911 call centers & 6 campuses for one of the region's community college systems. Anchor Institutions would be able to create interconnections with dark fibers. One conduit would be licensed to TW Telecom, Inc., a collaborating broadband service provider, and two
conduits would be available for license to other service providers. These service providers will offer a range of Data, Voice, & Internet Broadband services, both retail & wholesale (see Section 18 - Service Offerings and Competitor Data for more detail). f. MARC would provide access to the system on a non-discriminatory basis to both public & private users & allow interconnections by other private broadband providers. MARC would own the system & would collect lease payments from public & private users to cover ongoing operational expenses, including the one-call system, ongoing maintenance and relocations and system expansion. The system benefits include reduced costs for local governments by replacing costly leases of fiber & costs for the construction of conduit for additional fiber in presently unserved areas; increased redundancy for public safety call centers & other critical facilities & institutions; increased opportunities for intergovernmental cooperation, including expanded education and training programs among the participating community college systems; increased capacity to provide the public & public institutions with information & educational opportunities; and increased opportunities for economic development along key transportation corridors consistent with the region's long-range transportation plan. The presence of high speed broadband is expected to have an economic impact of 894 jobs by attracting new businesses and retaining existing ones requiring increased broadband capacities. g. The proposed system is a Middle Mile (4) 1 " 335 mile conduit system. This system is designed in a series of rings in order to maximize redundancy & reliability. One conduit will be equipped with a 216 fiber cable for MARC to utilize for its e911 system & make available fibers for Community Anchor Institutions, & local governments. This system will be positioned with interconnection points throughout the network. This allows any user easy access into the system to utilize. The other 3 conduits will be licensed to telecommunication or cable providers so they can deliver Internet, Voice, and Data services to Community Anchor Institutions, businesses, & residences thought the servicing area. See section 13 for additional details. h. MARC is a public not-for-profit organization and instrument of local governments serving the nine-county bi-state Kansas City metropolitan region since 1972. MARC's annual budget is $75 million, which includes federal, state and local government grants and contracts, private foundation and corporate grants, and earned income. MARC is qualified to assume responsibility for this grant application and the resulting broadband middle mile system. MARC has successfully implemented other technology projects in cooperation with local and state governments, including Operation Greenlight, which is placing new traffic signal technology at 600 intersections in 22 cities across the bi-state Kansas City region to improve traffic flow and safety. MARC is the owner and operator of that system. MARC has completed the installation of a $10 million emergency radio communications system, RAMBIS, with a microwave loop to address interoperability among local public safety and other emergency response agencies with 800 Mhz, 700 Mhz, UHF and VHF radios. MARC coordinates the daily operation of the region's e911 emergency communications system working with 44 public safety answer points in nine counties and operating two selective routers. The e911 system coordinated through MARC operates with a $5 million annual budget. MARC employs two maintenance technicians and a telecommunications engineer that work with consultants to ensure the ongoing operation of the system 24/7. MARC does not have the resources, nor do its local government or community college partners, to implement this proposed project without the assistance of the requested federal funds. The project is a unique public/private partnership with the Mid-America Regional Council (MARC), an association of city and county governments, as the lead partner with other partners including a private broadband service provider, TW Telecom, Inc.; two community college
systems in two economically distressed counties in the metro area; a regional public safety communications program providing the region's e911 emergency communications service and supporting the region's interoperable communications systems; and a number of city and county governments. The total cost of the 335 mile conduit system is approximately $125M, $82M of which is Federal Funding requested and $43M is in-kind contributions and investments. $80.5M of the $82M Federal Funding request is for Middle Mile Infrastructure. As estimated in Section 18, Subscriber Estimates Attachment, by the end of year 8, 255 Anchor institutions are projected to be connected directly. 265 Anchor Institutions, 135,500 residences, and 8518 businesses and are projected to be connected via an indirect service provider. The project is expected to create 572 jobs based on the Council of Economic Advisors rule as presented in May 2009 report (http://www.whitehouse.gov/assets/documents/Job-Years_Revised5-8.pdf). In addition, the project will induce an additional 322 jobs per the Council of Economic Advisors rule as a result of the high speed broadband services at competitive prices to the service area. The project will enable 3 private broadband providers to provide improved residential/business services to approximately 75% of the KC region.