

## Broadband USA Applications Database

**Applicant Name:** City of Glendale

**Project Title:** Glendale Citywide Broadband Network

**Project Type:** Middle Mile

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### Executive Summary

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Executive Summary of Project for BTOP: a) Opportunity the proposed system seeks to address: In this grant application, the City is seeking to build its own citywide network to all City sites thereby eliminating the need for the current I-Net. As a by-product, the City would then be able to offer free Internet access to the public at City sites. The City is not proposing to compete with private sector vendors to provide public Internet access but it would install sufficient "dark fiber" to lease to vendors who may wish to use it for commercial purposes. This would provide a funding stream to maintain the City network. b) A general description of the proposed funded service areas (location, number of communities, etc.) The City of Glendale, California has a total population of 194,973 (U.S. Census 2000), of which 15.3% are below poverty level. With the proposed Citywide broadband network, the City will be able to reach all of the City sites including public access and public safety facilities. Within Glendale there are four (4) Services Areas: a) Census Tract 3022.01 – An Underserved Neighborhood by the calculations of the California Public Utilities Commission (CPUC), Census Tract 302201 is underserved at 37% access to broadband Internet service. See: <http://www.cpuc.ca.gov/PUC/Telco/Information+for+providing+service/announcingcasf.htm> b) South Central Glendale - An Underserved Neighborhood including Census Tract 3022.01. Also included are 3020.01, 3021.03, 3022.02, 3024, and 3025.01. The highest density of households is in South Glendale with 24,904 households (34% of total). This area (which includes our Target Census Tract 302201) consists of six (6) census tracts with a household count of 13,473, or 18% of the City's households. c) West Glendale - An Underserved Neighborhood with 12,717 households (17.5%). Also included are 3015.02, 3016.01, 3016.02, 3017.01, 3017.02 and 3018. d) The Remainder of the City (North/Central) – This area contains 35,253 households, and has pockets of high-density, low-income households as well. c) Number of households and businesses passed. According to the 2000 U.S. Census, the City has 72,877 households. The Target Service Area of South Central Glendale has 13,473 households. Based on counts by the Glendale Fire Department, there are 5,780 businesses in the City. d) Number of community anchor institutions, public safety entities, and critical community organizations passed and/or involved with project (e.g., health care, education, libraries, etc.). The facilities listed below will be connected as a result of approval of this grant application (Project I) except those noted for Project II (a planned second grant application). City Libraries-9: (Project I) Parks & Recreation Areas-35: (Project I) Glendale Police Department-4: Glendale Fire Department -10 City Community Buildings/Senior Services-12: (Project I) Other Community Anchor Institutions:(Project II) Los Angeles County Courthouse-1 Schools- 61: Hospitals (JACHO accredited)-3 :(Project II) Medical/health Services-5 :(Project II) e) Proposed services and applications for the proposed funded service areas and users: This Middle Mile Project will provide

Internet access to City workers at City sites to enable them to use information systems to assist them in providing City services to the public. This will enable the distribution of existing City applications such as PeopleSoft Human Resource, Payroll, Budget, Accounting, Procurement as well as City Document Management (FileNet) and a host of other similar applications. This would include public safety applications such as Fire Inspections, Police video surveillance of public spaces, and potentially traffic signal monitoring. In addition, at each appropriate City site, such as parks and libraries, the City will provide free wireless (Wi-Fi) Internet access to the public. f) Approach to addressing the non-discrimination and interconnection obligations The City intends to abide by the standard the FCC imposed in the AT&T/BellSouth merger conditions, which specified no differential treatment of packets based on source, destination, or ownership . The City will employ generally-accepted technical measures to provide acceptable service levels to all customers, such as caching and application-neutral bandwidth allocation, as well as measures to address spam, denial of service attacks, illegal content, and other harmful activities. The City will also comply with applicable statutes such as the Communications Assistance to Law Enforcement Act (CALEA) . It is understood that this requirement applies only to Internet applications and content, that is, those that traverse the public Internet. The City may offer managed services such as public safety communications, and distance learning, which use private connections or virtual private networks, rather than the public Internet. This approach ensures that the City will not distort the Internet's neutral environment for applications and content, while giving it the flexibility to design its networks in a technically efficient manner and the ability to provide services that may require enhanced quality of service or separate connections for privacy and security reasons. Because the City Broadband Network will extend to all public access facilities and public safety services, the entire city population will be served. Within the target Service Areas and underserved target census tract (3022.01) there are three major public access services – the Glendale Central Library, the Adult Recreation Center, and Central Park. g) Type of broadband system that will be deployed (network type and technology standard). The network will incorporate a Cisco 9000 at its core and spoke out via 1 GBs links to three major rings. These rings will connect a total of thirteen (13) electric power substations with Cisco switch equipment. From the substations smaller Cisco switches will be fed via 1 GBs fiber links to the final destinations. All final destinations will use a combination of Cisco switches and Blue Socket wireless access points. h) Qualifications of the applicant that demonstrate the ability to implement and operate a broadband infrastructure, and/or be a sustainable broadband services provider. City of Glendale Information Services Department (IS) currently operates a wide area network (WAN) that links several City sites to the main civic center complex over the Institutional Network (I-Net) provide by the local cable company. In addition, City IS operates and maintains its own network provide 7 X 24 support for 1,900 networked desktops supporting 2,000 employees in 55 sites. i) Overall infrastructure cost of the broadband system. \$6,472,717 j) Overall expected subscriber projections for the project. The City fiber network will incorporate 48 fibers to each location. Depending on the exaction location of a subscriber requirement, up to 20 fibers will be available for lease. This will enable private firms to develop broadband access not only for private commercial use(enhancing the attractiveness of Glendale to business) but also lays the foundation for end-user services to all of the 210,000 residences of Glendale, It further enhances the attractiveness of Glendale in terms of quality of life when the City provides free Internet hotspots at all appropriate City sites such as parks, meeting rooms and libraries. k) Number of jobs estimated to be created or saved as result of this project. Fiber Installation - The cost

of fiber optic cable plant is estimated to be 75% labor and 25% materials. On the cable plant, 75% of the \$3,872,488 total will result in \$2,904,366 for labor costs such as project management, fiber optic cable splices, fiber optic cable pullers, diggers, trenchers, miscellaneous general labors. Base upon a three year implementation, the following jobs would be created. This would equate to the creation of 15 new jobs for a period of three years. This would be:

Job Title	FTE	Cost	Years	Amount
Project Manager	1	150,000	3	\$450,000
Engineers	2	100,000	3	\$600,000
Senior technicians	6	75,000	1	\$450,000
General cable installers	30	50,000	1	\$1,500,000
<b>Total</b>				<b>\$3,000,000</b>

Network Equipment Installation - On the network equipment side of the system the cost allocation would be 30% of equipment cost is added for labor to install. This is \$421,910.

Job Title	FTE	Cost	Years	Amount
Project Manager	0.33	150,000	3	\$148,500
Engineers	0.16	100,000	3	\$48,000
Senior technicians	3	75,000	1	\$225,000
<b>Total</b>				<b>\$421,500</b>