Through OaklandWEB, the City of Oakland will deploy a Middle Mile Broadband Fiber Optic Network Infrastructure to connect key government institutions, public safety agencies, and other community anchor institutions including community colleges, the Port of Oakland, healthcare providers, the Oakland Housing Authority and community-based organizations throughout the city. OaklandWEB is a shovel-ready project that has been in extensive planning since June 2007 when the City of Oakland embarked on an endeavor to eliminate the extensive Digital Divide in the city. As part of that process the City began assembling a broad range of public and private partners in order to ensure the accomplishment of this goal. Since that time the City and its partners have worked extensively, laying the groundwork for the development of a comprehensive, effective solution that would bridge the Digital Divide, improve access to underserved areas of the city, and expand broadband access to a wide range of institutions and individuals, including vulnerable populations across Oakland. A September 2007 report by the California Emerging Technology Fund shows that socioeconomic status is a key factor in the Digital Divide. Nearly 53,000 of Oakland's 400,000 residents live in targeted census tracts that have a higher proportion of youth under age 24, twice the high school dropout rate, much lower college graduation rates, twice the unemployment rate, and earn lower annual incomes by comparison to the City and county as a whole. Oakland’s unemployment rate has risen to 17%, much higher than county, state, and national rates. Households in underserved areas of the city have rates of broadband penetration below 40% (City average is 53%). Consequently, citizens across large areas of the Oakland have substantially fewer opportunities to benefit from the new opportunities presented by broadband than persons living in other, more wired parts of the city. Additionally, the economic downturn has impacted the City of Oakland particularly hard. We have seen many businesses close down or flee Oakland entirely for more affordable cities, resulting in a tremendous increase in the number vacancies across many parts of Oakland—most notably in those areas of the city where access to high-speed broadband Internet is limited. This not only drives down property values (and the tax revenue derived from those properties) but the loss of retail operations results in loss of sales tax revenue as well. In fact, from 2008-2009, sales tax revenue in the city fell from $64.8 million to $56.1 million, a drop of more than 13%. As City leaders struggle to find ways to attract businesses to Oakland to fill these vacancies and provide jobs for residents, the question of the availability of broadband access frequently arises. Providing high-speed broadband access to all parts of the city is essential for economic growth. The persistent economic slump has had the greatest impact on those persons living in economically distressed communities where access to high-speed broadband Internet is limited. Consequently, these residents look to our community anchor institutions to search for jobs and connect with vital
educational and health care services. However, many of these institutions do not have the broadband infrastructure in place to meet the demand for services. For instance, at many of Oakland's public libraries, long lines form for use of the public access computers. This demand--combined with the libraries’ dependency on broadband Internet to conduct basic operations--results in severe network congestion that severely inhibits the delivery of information and services. The City of Oakland is also plagued by an extraordinarily high rate of violent crime. In fact, in 2009 Oakland was ranked the third most dangerous city in the United States. The overwhelming majority of violent crimes are confined to the most economically distressed areas of the city, all of which lack broadband infrastructure. Without access to high-speed broadband infrastructure, the ability of our law enforcement agencies to protect the public safety is significantly hampered. High-speed broadband facilitates rapid, real-time communication among law enforcement, other public safety agencies and the community. It also allows law enforcement to collaborate with auxiliary security organizations such as the housing department's police agencies and crime prevention neighborhood service coordinators. In addition, a high-speed broadband infrastructure can also be used to implement crime-fighting strategies such as video surveillance with license plate reading capability and other innovative technologies. A high-speed broadband infrastructure can provide the foundation upon which the city can achieve key objectives to address the issues identified above such as enhancing economic development opportunities, improving public safety, increasing the capacity of health care, educational and community service organizations to serve their constituents, helping overcome the digital divide and improve the quality of life for all Oaklanders. Proposed service area: Our proposed service area covers 50,8420 square miles and includes 10 designated economic development zones throughout the City. Number of households and businesses passed: OaklandWEB will pass 135,183 households and 18,168 businesses. Community anchor institutions: OaklandWEB will connect approximately 80 community anchor institutions throughout including public libraries, medical and healthcare providers, public safety entities, community colleges, public housing, institutions of Higher Education, other government facilities and Hispanic serving institutions. Proposed services to be provided: The OaklandWeb project will deploy a Middle Mile Broadband Fiber Optic Network Infrastructure through a partnership between the City of Oakland, California, IPNetworks and Cisco Systems, and community anchor institutions. OaklandWEB will provide a broadband superhighway 80 Gigabit Backhaul Backbone and up to 10 Gigabit on/off ramp connection points to local government, public safety, and other community anchor institutions. Access to OaklandWEB will be made available to the partnership as the implementation progresses over a 24-month period. Ultimately, our fiber optic network will reach out to over 4000 middle mile locations which will include anchor institutions, health care providers, City, public safety and educational facilities. This will extend the reach of last mile providers to offer broadband services in underserved areas. This scalability network design will allow for speeds of 1 gigabit to 10 gigabits at spoke sites with over eighty gigabit (80) at the major hub locations. Non-discrimination IP Networks, the primary contract for this project has, and will continue to adhere to the Nondiscrimination and Interconnection Policies as set forth in the Federal Register Vol.74, no.130 and as defined in the principles contained in the FCC's Broadband Policy Statement (FCC 05-151 adopted Aug. 5, 2005). g. Type of broadband system that will be deployed (network type and technology standard); Broadband fiber optic backbone infrastructure-Dense Wave Division MultiPlexing (DWDM). h. Qualifications of the Applicant that demonstrate the ability to implement and operate a broadband infrastructure, and/or be a sustainable broadband service...
Provider: The City of Oakland has many years of experience maintaining a 5 node microwave backbone network that services public safety. The City designed and managed the installation of fiber optic network backbone to interconnect 5 network buildings in City Center. Moreover, the City has assembled a highly-qualified project management and engineering team with extensive experience dealing with large scale infrastructures such as voice over internet protocol (IP), extensive networking upgrades and infrastructure. IP Networks, a 100% Ethernet telecommunications transport carrier headquartered in San Francisco, will serve as the primary contract for the project. IPN has over 750 route miles of deployed fiber throughout Northern California. The Company’s reliable and diverse network has produced a marquee customer base including Oracle, HP Dreamworks, Apple and Google.

i. Overall infrastructure cost of the broadband system: The overall infrastructure cost of OaklandWEB is $35,739,772.

j. Overall expected subscriber projections for the project: and As noted above, approximately 80 community anchor institutions will initially be connected to the network. Agreements with last mile service providers will ultimately provide high-speed broadband access for 338,000 residents of Oakland.

k. Number of jobs estimated to be created or saved as a result of this project. This project will result in the creation of 173 direct jobs, 86 indirect jobs and 62 induced jobs.