Mamakating Broadband Initiative

A) Opportunity
This initiative creates a local wireless broadband network for the Town of Mamakating that will connect Critical Community Infrastructure and provide a video network for security monitoring and access control. As proposed the initiative will also create the opportunity for wireless internet access within over 90% of the local businesses and establish wireless internet hotspots for public use. Lastly, this stage of the broadband initiative will create a mesh infrastructure that can both grow to more community anchors and potentially provide a revenue stream through household access. This town is a rural community in Sullivan County NY, the poorest NYS County in the mid-Hudson region, now experiencing a 10.34% unemployment rate. Mamakating is located just far enough outside the outer ring of the NY metropolitan areas that it remains almost entirely rural and economically undeveloped. The coverage area has major topography issues. The town is bisected lengthwise by a heavily forested Shawangunk Mountain Ridge. The BTOP program represents an opportunity to advance the town's communications infrastructure and make the town more competitive for new business and economic development. In the past two years Sullivan County and the Town of Mamakating have experienced a severe drop in revenues due to the recession in general and to the diminished real estate industry. The Broadband there is no way, other than federal and state grants that it could afford such an investment. Thus, the BTOP grant is the only way such an opportunity could be accessed.

B) Service area
The service area is a five square mile business and public works section of the Town of Mamakating, Sullivan County New York. Connecting the town and its two incorporated villages, Bloomingburg and Wurtsboro the initiative fits the essence of the Comprehensive Communities theme by unifying and consolidating a total of 19 physical critical community anchors and 6 community support organizations. These physical anchors include 6 public safety facilities and their occupant organizations, two incorporated villages, seven town facilities, two subsidized housing developments, an elementary school and a library. There are also six community organizations which, while they do not have a specific physical facility, would nevertheless benefit from the proposed project. Eventually the system could be expanded to provide access to professional services and residents of the service area.

C) Demographics
The town has a population of 11,002, 4153 households and about 150 businesses. The service area boasts 25 anchor institutions, public safety agencies, and community organizations that will be within the wireless mesh network. These include: 19 anchors involving a physical structure of which 6 house public safety agencies. There are 6 community organizations that operate for the benefit of the community but do not use a physical structure.

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E) Services and applications

F) Approach to Nondiscrimination
If funded, the town will develop policies for the system that insure access that is fair to all potential users and will follow the
federal and state nondiscrimination statutes and policies. G) Type of system Wireless Broadband Network 802.11 H) Qualifications CNC Microtech delivers secure wireless LAN systems to private enterprises, education, and government offices that are designed for easy deployment and integration with existing networks. With 30 years of technology project experience in the Northeast, CNC Microtech has done the design and deployment of over 1,000 infrastructure installs. CNC Microtech will be using Firetide engineers as well as Firetide hardware equipment. Designed for seamless indoor and outdoor operation, Firetide mesh networks securely handle concurrent video, voice, and data applications, making it ideal for large scale municipal and enterprise networks. The mesh’s self-forming and self-healing properties enable rapid deployment and highly reliable operation. Firetide’s AutoMesh routing protocol manages network load and traffic flow to optimize mesh-wide performance and capacity. Firetide’s end-to-end solution includes HotPort nodes for mesh infrastructure; HotPoint access points for wireless access, HotClient customer premises equipment extended wireless client access, HotView software for a complete management system, Firetide Mobility Controller software for mesh and client mobility, and Firetide WLAN Controller software for advanced wireless LAN management. The town will have the services of CNC Microtech as project consultant, engineers, installation and system maintenance. Their experience is summarized here and detailed in other portions of the application. I) overall cost The project is estimated to cost $1,428,263. A federal investment of 80 percent of this sum would be $1,142,610, a modest amount in terms of the difference the resulting system would make to this community. J) Overall subscriber projections 90% coverage of the Town of Mamakating. K) Jobs to be created The projection of jobs to be directly created, using the standard federal methodology that calculates that for every $92,136 in government spending that one job year will be created. Based on a projected project cost of $1,390,000 for the proposed broadband system, the Mamakating project will create a total of 15 new job years. This includes direct, indirect and induced job years.