

Broadband USA Applications Database

Applicant Name: City of Grapevine

Project Title: Public Safety Network Improvements

Project Type: Sustainable Adoption

Executive Summary

The city of Grapevine is located on the North side of the Dallas-Ft Worth Airport. The City is a major transportation corridor with over 200,000 vehicles passing through Grapevine daily. Grapevine has a nighttime population of 50,000 and a daytime population of 130,000. This large daytime population is caused by the DFW Airport, Gaylord Texan Conference Center, Mills Mall and other major daytime attractions being in Grapevine. Grapevine has over 18 million visitors every year. This large volume of traffic and people causes a strain on our Public Safety departments in Grapevine. The bad economy has effected Grapevine directly since over 50% of its revenues are from sales tax. The mall and the airport are both down significantly in sales tax revenues. We are down almost 7% in revenues this year and next year is predicted to be the same. This has caused us to not be able to fund any new projects for some time into the future. This grant would allow us the opportunity to solve some important issues for our Public Safety departments during these slow times.

The problems this project addresses are all attributable to low bandwidth , slow response times and unreliable service of using the available affordable services from local service providers for connecting our remote public safety facilities to the City network. Presently we are using available broadband Internet connections and Virtual Private Network technology to link these facilities to the City Network and ultimately to the Central Fire Station and main Police Station. During prolonged severe weather and recent storm events it became evident that such a system was unreliable at best. Our public safety departments were without broadband services for two days following a severe thunderstorm storm in June 2009. It quickly became evident that the city needed to develop a reliable alternative that was within the control of City staff and City owned hardware as not to rely on an outside service provider for critical connectivity. This project involves replacing the broadband service and VPN links to these remote facilities with wireless radio links. These links would handle more data and have faster response times. This project also involves installing video conferencing equipment between the public safety training rooms and the remote fire stations. The most pressing need that this project will address is training at the remote Fire stations. There are two types of training opportunities that firemen need on a regular basis. One is training opportunities on line through the Internet. These opportunities require streaming media and this technology will not work across the current VPN connections. The other training opportunities is local training in the Training room at the the Central Fire station and the Police Training Room. This causes the firemen and vehicles at the remote stations to be out of their assigned

locations thus causing slower response times to fire and medical emergencies where lives and property are dependant on a fast response time. Implementation of the above technologies will solve these training problems.

Some other issues this project will solve has to do with citywide emergencies. The video conferencing technology will allow the City to quickly publish video announcements from City officials to local news stations and the City web site during an emergency. This technology would also allow us to logically link the two emergency operations centers during an emergency. Currently there is not enough room for all needed City staff and public officials in the same room.

Another problem this project will address is some public safety applications that are needed at remote public safety facilities and will not function with the current data links to these facilities. One of these is the City GIS applications that can allow entrance views and floor plans for public buildings . This information can be used at these remote facilities during a fire or hostage situation to give public safety needed information to better handle the emergency.

The overall approach to solving these problems has two phases. The first phase involves implementing a point to point wireless radio network between the public safety facilities and the Water treatment plant. To close the existing City fiber loop with point to point microwave links to assure that the Central Fire Station and main Police Station stay connected during an emergency. The second phase involves implementing video conferencing equipment at all the public safety facilities.

This project will directly serve 250 public safety officers through better training and communications and indirectly serve the 50,000 citizens of the City of Grapevine through better trained public safety personnel, potentially more consistent fast response times and better information during emergencies.

The applying agency for this project is the City of Grapevine. This City has a strong well trained and experienced Information Technology department. In addition to this the Grapevine Police Department has two certified technicians on staff to compliment the IT department. Between IT and Police we have the following certifications among the staff:

CCNA, CCNP, MCSE (3), RCDD, CNE (2)

The Grapevine IT department has an excellent track record for successful projects and the strength of the good cooperation with the Police Department adds to this success.

The overall cost of this project is \$395,124 Where we are applying for \$316,099 in federal assistance and plan on matching it with \$79,025 in City funds.