

# Excellence in Public/Private Partnership Awards

## Award Application Form

### Executive Summary

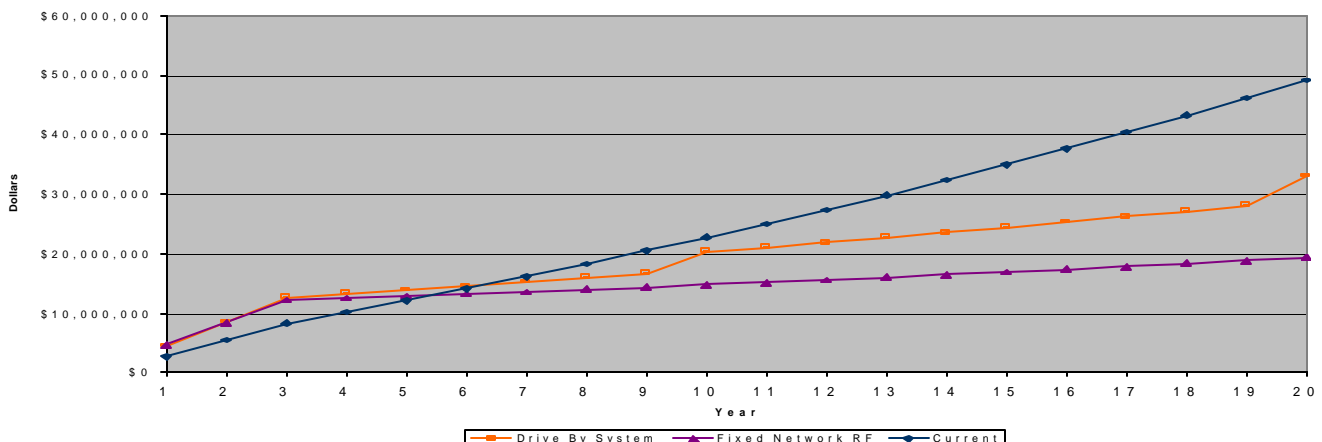
The City of Corpus Christi, Texas is home to approximately 300,000 citizens on the Texas Gulf Coast. In partnership with Northrop Grumman Corporation, Corpus Christi is installing a city-owned, multi-purpose wireless broadband network to serve as the backbone for enhanced e-government services in a broad-stroke technology transformation program. The mesh WiFi network, or WiFi Cloud, provides a technologically-advanced, multi-purpose, open wireless network with coverage and bandwidth (>1 Mbps throughout the entire coverage area), available for a host of cost-saving applications in all city departments. Applications are being deployed that capitalize on the voice, data and video communications capabilities to not only increase government efficiencies and enhance citizen services, but also provide direct connection between all local public agencies and citizens/visitors. The network's ubiquitous coverage, ease-of-use, capacity and security allow the city to address the operational efficiency challenges faced by all local governments, and to position itself for the future as an attractive place to do business, live and work in a 'right-here-right-now' information age with wireless connectivity as a valuable community attribute.

**The next stage of e-government:** Low cost, always-on, everywhere-at-once, high-bandwidth wireless communications access provided by the network is helping Corpus Christi address pressing public policy issues and better serve its citizens:

- Improving the efficiency and quality of government services with substantial return on investment (ROI)
- Fostering economic development in a competitive environment
- Bridging the digital divide
- Fostering a greater use and availability of information between internal operations and citizens at all levels

City operations under the WiFi Cloud currently are saving time and travel to more efficiently deliver services in all field-intensive departments, with new applications being added every day. WiFi mesh networks allow authorized personnel to take their offices on the road by delivering wire line quality data connections anywhere in the field. The first major application is fixed-network automated meter reading

Cost of Ownership



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(AMR) with **cost-savings of more than \$10 million** over system lifespan. Another widely deployed application is for construction and building inspectors who now schedule inspections, complete reports, capture needed signatures and approvals, submit for approval and post records to the e-government site for builder access and action. **The efficiency enhancement of this single inspection application has cut over a month from the total time it takes to build a home in Corpus Christi** at a savings to both the city and developers. Public works, parks, streets, transportation and public safety professionals are using the network to access data and video information instantaneously from anywhere in the city. Field workers can access city IT network databases, Web portals, e-mail, streaming video from vehicle cameras or from the more than 500 fixed video cameras in the city, and a host of other input sources to better do their jobs and serve the community. Public works crews use the system for dispatch, work order access and completion, equipment and parts manual access all in real-time. EMS personnel now can transmit video, voice and data images from incident sites directly to the emergency room physician and can access HIPPA-compliant patient histories to provide better emergency medical care. Other government applications under investigation for deployment under the wireless cloud include automated parking meters, Voice-Over-IP telephony for all mobile city workers; leased bandwidth to Internet, cable and phone service providers; automatic vehicle location; and water and wastewater system remote sensing and operation (SCADA). The internal operational efficiencies gained from the WiFi network provide a significant savings over other communications technologies and more than offset the installed cost of the network itself.

Moreover, the network has evolved into a broad-based **community network and resource**. Students, teachers and parents can instantly access assignments, virtual textbooks and student records, and communicate needs and progress. Schools are issuing wireless laptops to local students and using the network to push the computers outside the classroom and into homes that otherwise wouldn't have a computer. This is especially valuable in districts where the WiFi network may be the access portal to conquer the digital divide, improve learning, and, ultimately, improve the community's overall education level such that new businesses are attracted to Corpus Christi based on availability of skilled workers.

Northrop Grumman has partnered with the city throughout the entire initiative from conceptualization, technology assessment, internal capability and network architecture assessment, WiFi network planning, deployment and integration, technology roadmap planning and field AMR installation. The expert resources the company brought to Corpus Christi in this joint endeavor have helped the city define its future and institute practical technologies that enable a new style and era of e-government at a positive ROI and long-term savings to the city.

Corpus Christi is a proven example of the performance, features, applications, business efficiency enhancements, ROI and positive community impact of the implementation of a city-owned wireless network.