



Wireless Broadband Demonstration Network Invitation

City of Grand Rapids Information Technology Department
201 Market Ave. S.W., Grand Rapids, MI 49503 (616) 456-3094

Introduction to the Project

Grand Rapids Mayor George K. Heartwell outlined his vision for bringing wireless broadband to our community. The City is committed to deploy a solution using proven technology that is cost effective, self-funded, and will continue to serve our citizens for an extended period. City Manager, Kurt Kimball assigned a team to research wireless technology, best practices, funding models, and applications.

Demonstration Networks

Grand Rapids' next step is deployment of several demonstration networks. The City is seeking applications from wireless technology providers that are prepared to install a demonstration network that is at least one-quarter mile by one-quarter mile in size for technology comparison, testing, and evaluation purposes. From applications submitted by the deadline, the City will select multiple vendors representing a variety of wireless technologies to demonstrate in the City for a period of eight weeks. Each vendor deploying a demonstration network will be required to provide wireless network management software and cursory training to the City's network engineers. Following evaluation of the networks, a formal request for proposals is planned.

Goals for a Community Wireless Broadband Network

It is the City's goal to establish a wireless broadband network without a burden on taxpayers. The purpose of developing a community wireless broadband network in the City of Grand Rapids is to leverage the government's infrastructure and regulatory authority to partner with private providers, community institutions, businesses, and community organizations to:

- Provide an economic development tool to attract and retain business
- Reduce the digital divide with affordable high-speed broadband service
- Improve service delivery to residents
- Facilitate wireless technology use for citizens and visitors
- Create a seamless wireless infrastructure to attract and retain young professionals

City of Grand Rapids

Grand Rapids is the second-largest city in Michigan and encompasses an area of approximately 45 square-miles. Grand Rapids is located in Kent county and is the county seat and urban center for the region. According to the 2000 census, the City's population is 197,800 and the metropolitan area exceeds one million. The City's population increased 9.17% from 1980 to 2000.

Along with public and private K-12 school systems, the Grand Rapids area is home to ten four-year colleges and universities. Western Michigan University, Michigan State University, Ferris State University, and Thomas M. Cooley Law School have recently built satellite campuses in downtown Grand Rapids. Grand Valley State University continues to expand its presence in the City. Grand Rapids Community College's eight-block campus, which is located in downtown Grand Rapids enrolled over 14,000 students in fall 2004.

Grand Rapids is host to several popular museums and theaters, the John Ball Zoo, and the 12,000 seat VanAndel Arena. DeVos Place, a \$211 million downtown convention center that opened in December 2003, provides meeting rooms, a performing arts hall, parking, and a 162,000 square foot exhibition hall.

Potential Applications

Municipal

- High-speed data and voice communications for Public Safety, Public Works, Land Management, and others.
- Improved bandwidth and networking in remote offices outside of central governmental buildings
- Wireless mobile and on-site access to geographic information systems (GIS) maps and data
- Real-time wireless electronic ticketing
- Video surveillance and transfer
- High-speed record sharing
- Mug shot and Amber Alert transfer
- Wireless call boxes
- Inner-building tracking for firefighters
- Real-time field reporting
- Enriched command and field communications during events
- Mobile real-time computerized maintenance management system (CMMS)
- Work management and field reporting
- Asset management and tracking
- Automated water meter reading
- Traffic signal control
- Remote monitoring and control of critical infrastructure systems such as HVAC systems, water and sewer pipelines
- Automated notification of expired parking meter
- Wireless credit card payment of parking fees
- Remote access to building prints for inspectors
- Real-time permitting
- Wireless recording of assessment updates, including downloading photographs

Education

High speed data and voice communications including:

- Student access to current school information, homework assignments, and help via a school Web site and remote teaching
- Improved communication between school administration, teachers, parents, and students with use of email
- College and university access to campus network for off-campus students, distance learning

Economic Development

- Wireless internet service provider (ISP) partnerships
- "Smart zone" growth opportunities
- Provide homes and small businesses with low-cost, high-speed Internet access
- Create an inviting atmosphere for conventioners, tourists, and visitors
- Attract new businesses, entrepreneurs and young professionals creating a "cool" city

Heath Care

- Remote monitoring of patients with chronic illnesses
- First responder access to vital patient information and medical assistance

Digital Divide

- Provide low-cost, high-speed Internet access for residents in urban, suburban and rural areas.
- Create wireless kiosks anywhere for citizens to access city government
- Offer free broadband access to governmental, educational, tourism, and non-profit web sites
- Enable an intelligent, informed, and interactive citizenry

Neighborhood Organization and Non-profit Applications

- Improved communication with residents, businesses, law enforcement, Neighborhood Improvement, and other City departments
- High-speed, lower-cost broadband service
- Free access to Web site information

Timeline

March 4, 2005	Invitation issued
March 11, 2005	Memorandum of interest requested
March 17, 2:00 p.m.	Pre-proposal Q & A vendor dial-in
March 25, 2005	Vendor response due by 5:00 p.m.
April 15, 2005	City will select demonstration network vendors
May 6, 2005	Demonstration Networks "live"
May 23, 2005	Submit initial network use and performance statistics
June 6 & 20, 2005	Network use and performance statistics due
June 30, 2005	End of official test period
July 11, 2005	Final network use and performance statistics due

The City will provide:

- Broadband connectivity
- Power
- GIS maps of the assigned demonstration network area
- Demographic information for the assigned demonstration network area
- Access to utility poles and City-owned buildings

Vendor Will Provide

Vendor will incur all costs other than those enumerated above. The City will be "held harmless".

Proof of insurance will be required:

General Liability: per occurrence limit \$1,000,000

Workers Compensation: statutory limits

Auto: \$1,000,000 combined single limit, including hired/non-owned liability

Locations

Demonstration network locations will be determined and assigned by the City of Grand Rapids. Networks must be a minimum of one-quarter mile by one-quarter mile. The vendor will include Grand Rapids' information on the "splash" page explaining the demonstration project and linking to City specified Web pages.

Interested vendors should submit a statement not later than Friday, March 25, 2005, detailing company name, contact information, description of proposed technology, total coverage area, any requirements of the City in addition to those stated above, plans for deployment, and reasons why they should be selected. Statements and proposals should be submitted to:

Sally J. Wesorick
Project Manager
City of Grand Rapids
Department of Information Technology
Wireless Demonstration Network Proposal
201 Market Ave. SW
Grand Rapids, MI 49503
(616) 456-3094

A memorandum of interest is requested by March 11, 2005. Vendor proposals are due by March 25, 2005, 5:00 p.m. In an effort to answer vendor questions in a fair and efficient manner, a pre-proposal vendor dial-in will be held on Friday, March 17, 2005 at 2:00 p.m. Vendor questions are requested by March 14, and shall be submitted to swesorick@ci.grand-rapids.mi.us. The dial-in number and teleconference "room" number will be provided upon request. Spontaneous questions will be answered on March 17 when feasible. Answers to all questions asked will be available as soon as possible following the event.



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Deadlines

Memorandum of interest to participate requested by March 11, 2005.

Wireless broadband network vendor proposal due by March 25.

Statements and proposals should be submitted to:

Sally J. Wesorick

Project Manager

City of Grand Rapids

Department of Information Technology

Wireless Demonstration Network Proposal

201 Market Ave. SW

Grand Rapids, MI 49503

(616) 456-3094

Bidder contact information

Name of company/corporation _____

Street address _____

City/State/Zip _____

Bidder Name _____

Bidder Title _____

Email address _____

Phone number _____

Bidder signature _____

Date _____



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Please use separate sheets or attachments as needed

Name of company/corporation _____
Contact _____
Email _____

List all subcontractors and partners in the proposed demonstration project

Provide a description of proposed technology (i.e. point to multi-point, phased array, mesh, combination)

Why propose this technology for Grand Rapids? Make a case to persuade the City to select vendor's company and specified technology or technologies _____

What is the proposed coverage area size for the demonstration network (i.e. one square mile by one square mile)

What are anticipated throughputs for specified technology? _____

List any and all requests of the City in addition to those previously stated _____
