



CITY OF CLEVELAND MUNICIPAL WIRELESS NETWORK INITIATIVE

“Becoming A Digital City of Choice”



CITY OF CLEVELAND
Mayor Frank G. Jackson

FACT SHEET

Opportunities for Our City

Mayor’s Jackson’s Municipal Wireless Network Initiative

At his State of the City Address on March 1, 2007, Mayor Frank G. Jackson said, “Cleveland will move forward with developing a Citywide WiFi network...and position us for the future. We will increase our broadband penetration, and begin bridging the digital divide that has adversely affected low-income communities. Cleveland will be recognized as a City of technology. We will have an environment that promotes innovation, and we will be able to compete globally.”

The vision of the wireless network is to provide Internet services for public access, public safety and public services for ANYONE, at ANYTIME, from ANYWHERE! This is what empowers residents, workers and employers, and maximizes the human potential of our Community.

A Significant Opportunity

The wireless industry is growing at 48% per year. In 2003, there were 23 million hotspots across the world. This number will grow to 64 million by the year 2008. This explosive growth is indicative of the demand for using wireless technology at work, at home, and for play. The Internet has become a critical element for improving our quality of life. It is no longer a question of whether to have it. It is simply a question of when and how.

Becoming A Digital City of Choice

Over 200 cities and towns throughout the world have already rolled out wireless (WiFi) networks to help expand public broadband Internet access, improve the quality and efficiency of public services, and enhance public safety.

Cleveland is committed to becoming a wireless City for a number of reasons, including: improving government services, reducing the Digital Divide in low-income neighborhoods, and fostering a stronger economy by attracting and retaining businesses. Combined, all of these reasons ultimately improve the quality of life for our citizens, businesses and visitors to our City. We will become known as a Digitally Advanced City using “world class” technologies to deliver services throughout the City.

Building Stronger Public/Private Partnerships

The City has chosen a business model which invites a private sector company to enter into a public/private partnership with the City. The private partner supplies capital, expertise, technology and resources. The City supplies access to assets for deploying the network and helps identify other government entities to be potential anchor tenants. The private

company is expected to own, operate and upgrade the wireless network to ensure it meets the needs of the City.

Benefits to Our City

Delivering Better City Services

The City will deploy a citywide municipal WiFi network to solve immediate, specific, operational needs in a more cost-efficient way. A wireless network will help the City deliver better services by providing a safety environment for our citizens by monitoring high crime areas; arming our social service professionals with information in the field; issuing permits and violations in real-time, and offering other City services to support mobile workers with immediate information to make quicker decisions.

Closing the Digital Divide - Increasing Digital Literacy in Underserved Communities

A wireless network helps the City to bridge the “digital divide” by providing Internet access to underserved communities that a for-profit carrier might not consider viable from a pure business standpoint. With this strategy, no neighborhood has to wait to be included in the digital community. It will bring this technology to the household, coupled with digital literacy training and tools to participate on the network. Our strategy uses a model which is universal, sustainable and scalable as the network is installed on an aggressive deployment timetable.

Fostering Economic Development

The City is deploying a wireless network to revitalize the downtown core, attract tourists, and to signal to the business world that we are forward-thinking and fully embracing the “always-on” reality of life in the 21st Century. Our move to a wireless community signals our recognition that technology and business development go hand in hand. The City wants to see more business start-ups as a result of deploying this technology citywide.

Enhancing Our Visitors Experience

Business and leisure visitors to our City should come to expect excellent services and a memorable experience. They want 24/7 immediate access to information about the City, events, and to enjoy high-speed broadband access anywhere they travel throughout the City. They want to remain “connected” to their office and home while enjoying their City experience. A “walled garden” free Internet service will be available to these visitors without having to be a subscriber to the local provider to check in for a flight, reserve a car, find a restaurant, buy tickets to events, and other needs.

Prepared By: Office of IT Planning and Review

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Improving Our Competitive Position in the Country

Cleveland, as a top-50 city, must be counted among the most digitally wired and wireless cities in the Country to remain competitive and be a City of Choice. Increasing our broadband penetration is one of the strategies we are using to ensure our competitive position continues to improve. Our goal is to rank among the best for offering broadband services to our citizens, businesses and visitors.

Free-to-Low-Cost Internet Access for Low-Income Households

Cleveland's household technology penetration rate is below the national average, only 50% of Cleveland households access the Internet as compared to a national average of 67%. To move up in the rankings nationally, the City's municipal wireless strategy requires the wireless provider to offer free-to-low-cost services to less advantaged citizens and households who might not otherwise have access to the Internet. This is a major strategy to close the Digital Divide and to increase the level of digital literacy skills in these underserved neighborhoods. The provider will offer a special rate with a rate of at least 1 Mbps (up/down).

Citywide Wireless Access

The Municipal Wireless Strategy requires the deployment of a network to cover the entire City's populated spaces. This universal access ensures no area is left behind and citizens can fully take advantage of this technology for improving their quality of life, growing their business or enhancing the delivery of goods and services, including government services, for a growing mobile workforce. The City will have the ability to cost-effectively provide wide coverage and reach locations that have proven cost-prohibitive with other "hard-wired" broadband technologies.

The Technology

We Can Optimize Current Technology, Today

There are several manufacturers out there today who provide the technology, in compliance with industry standards, to offer wide-area wireless networks that cover whole cities or counties. The City is looking to a solution which optimizes the industry standards and provides the ability for the network to grow as demands grow. The technology must support VOIP and bandwidth-intensive video and data applications.

There will be no restrictions on who can use the network. This "Open Access" model makes it open to other providers. It will not be restricted to just government employees in specific functions. We envision taxpayers, commuters, students, tourists, business travelers, and other private businesses will use the network.

In addition, we expect other service providers to offer their services over the network through arrangements with the owning provider.

Our Wireless Network Can Be Deployed Quickly

The technology involves putting up adapters on light or electric poles, and rooftops. These adapters or access points, can be installed in 15 minutes or less per worker. This low-cost solution allows the City to rapidly build out the network and begin using it immediately. As each adapter is added, it is immediately recognized on the network and the user can begin immediately to use the wireless capability.

Our Wireless Network Is Universal and Affordable

One of the major principles of the City's Municipal Wireless Strategy is to offer universal and affordable access to the Internet so no citizen is left behind. This requirement is a signal to all providers that the City intends to ensure the pricing is competitive and increases the percentage of the population using the services available. We expect to see a tiered pricing

approach that offers free services to everyone at certain levels and then graduates to more premium services at higher rates.

The Funding and Governance

Public/Private Collaboration

The City has elected to seek a private sector company to enter into a public/private partnership. The private company will provide all of capital, technology, expertise and support. The City will make all of the needed assets and services available to ensure that the deployment and network is successful and meets the needs as outlined in the Municipal Wireless Broadband Strategy, which was adopted by the City. No tax dollars will be used to build and deploy the network.

In addition, we expect the provider to offer special rates to disadvantaged small businesses and other government entities wanting to participate on the network.

Program Oversight

The City will establish a Wireless Network Program Management Office (PMO), which will be managed by the Chief Technology Officer. The PMO will be accountable to the IT Strategic Council, which is chaired by the Chief Operating Officer, and is the citywide IT governance group consisting of City of Cleveland cabinet members, elected City Council representatives, Municipal Court and community leaders. This will ensure the proper oversight and accountability is in place throughout the deployment phase.

Early Adoption Applications

Safety

Applications which will be deployed to ensure safer neighborhoods and streets such as mobile data terminals in police cars, handheld devices for EMS workers, and camera surveillance for targeted buildings such as recreation centers and other public spaces.

Utilities

There are several applications planned for Utilities. The first will be meter reading for water and electric workers. Another application will be remote maintenance and surveillance of equipment by Cleveland Public Power (CPP).

Building & Housing

This department has a majority of its workers out in the field each day doing inspections and issuing violations and permits. The inspectors will be using handheld devices to access the City's Permitting system.

Measuring Impact

The City will measure its progress toward achieving the benefits of going wireless. Some of the measurements will include:

- Number of New Business Start-ups
- Percent of Citizens Online and Using E-Government Applications
- Change in Household Technology Penetration Rates as Compared to National Averages
- Reduction in Time to Issue Permits or Conduct Inspections for New Buildings
- Decreased Support Costs for Meter Reading
- Availability, Reliability, Speed and Power Levels
- Percent of Workforce Who Are Digitally Literate
- Increase of New Technology-Intensive Companies