

CITY OF OAKLAND
AGENDA REPORT

OFFICE OF THE CITY ADMINISTRATOR
2006 JUN 30 PM 4:58

TO: Office of the City Administrator
ATTN: Deborah Edgerly
FROM: Finance and Management Agency
DATE: July 11, 2006

Re: **Informational Report Regarding The Work In Progress To Develop A Digital Community Initiative**

SUMMARY

The purpose of this report is to provide information to the City Council regarding the work in progress to develop a Digital Community Initiative. The Digital Community Initiative will consist of a citywide wireless broadband network infrastructure based on open industry standards and innovative services that meet the needs of the City's agencies, citizens, and businesses.

BACKGROUND

WiFi and WiMAX are two of the most popular standards used for deploying Digital Communities. A coalition of wireless industry leaders support and manufacture products that comply with these standards. Currently, there are approximately 13 companies manufacturing products that comply with at least one of the standards (WiFi or WiMAX). WiFi has gained acceptance in many environments as a cost-effective alternative to "wired" broadband. Many airports, hotels, and other services offer public access to networks that use the WiFi standard so people can log onto the Internet and receive emails on the move. These locations are known as hotspots or hot-zones.

A Digital Community could provide the City of Oakland with access to the Internet and help citizens, businesses, schools, health care, public safety, and community non-profit organizations effectively use wireless technology wherever the need exists. This report provides background information on what cities across the country have done to deploy a Digital Community and the work currently in progress to address deployment in the City of Oakland.

KEY ISSUES AND IMPACTS

There is compelling evidence that Digital Communities have emerged as a very beneficial municipal infrastructure. Local governments are discovering that wireless network technology can contribute to government operational efficiencies, increase citizen satisfaction, and assist economic development. A 2005 report done by *MuniWireless.com*, a national organization that reports on municipal wireless and broadband projects, indicated that cities use the network for public access, municipal purposes, and to create large hot-zones that cover many square blocks. Additionally, many cities have planned projects which will provide for affordable public wireless internet access and public safety applications.

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Cities use different applications as the primary reasons to justify the deployment of a Digital Community. For example, the City of San Mateo, California used a public safety application as the primary reason. Initially, the City of San Mateo installed a Digital Community network that allowed 72 police officers in 40 patrol cars to take their desks on the road. In the past, officers would return to the station and use the internal network to get DMV photographs, a report from another city, or a six-pack of mug shots to show victims, but now they can do this in their patrol cars. Officers also have access to the Department of Justice, Amber Alert, Megan's Law, a Video Server, and the Cal Photo Database. The City of San Mateo is now planning to expand the network to include video surveillance. The City of Spokane, Washington launched municipal services applications and e-Government initiatives. Ocean City, Maryland implemented integrated digital, voice and video for city buildings. Chaska, Minnesota used the network to close the digital divide for schools, businesses, and residents.

The City of Philadelphia is deploying a 135 square mile Digital Community. Philadelphia's primary reasons were broad and far reaching. The City's business plan stated that the City *"embraced the technology to remain a competitive location for businesses, a world-class center for education, and an attraction for visitors. The investment will also reduce the cost of delivery of public services, and finally, act as a long-term strategy to invest in the human capital of the City's workers, residents, and the future of the children."*

The City of Oakland has applications that could be used as the primary reasons for justifying a Digital Community. For example, Oakland's Police Department is currently evaluating a long list of applications that will need the capacity of a Digital Community network. Applications such as electronic citation, video surveillance, gun shot locator, in-car mug shots, in-car video, and field-based reporting are just a few that will use wireless network technology. While these applications are designed to support the City's public safety field-force, other field work related applications such as: field inspection, engineering, permitting, traffic management, and meter reading are also supported.

Additionally, a needs assessment of the Oakland community could bring forth other social, education, business, and health related reasons for the deployment of a Digital Community. The City is home to many industries, such as: technology, auto and transportation, manufacturing, building and construction, retail, finance and other service industries. All of these industries rely on access to information for appropriate business planning and expansion opportunities. Access to broadband technology is increasingly viewed as a critical interface for businesses within the marketplace. In general, businesses are looking for quality communication services at affordable rates. Unfortunately, most small businesses have little understanding of how to use telecommunications services and technologies, wired or wireless, and will continue to be left behind as content and service providers cater to the higher-volume, cheaper-to-serve, and greater-margin customers. Affordable access to the Internet and increased availability of information and services online would drive up the demand for PC's, mobile computing devices, and handheld devices. Access to libraries throughout the City and the opening of community

technology learning centers in low income areas could bring the worldwide community to local neighborhoods.

The Information Technology Division (IT Division) will serve as the central point-of-contact for building consensus and marshaling the resources to develop a Digital Community Initiative and the IT Division will work with the City's agencies, community organizations, and businesses to ensure that the applications and services mirror local priorities, achieve efficiencies, and increase satisfaction to deliver a broad return on investment to the community.

PROJECT DESCRIPTION

The IT Division recently facilitated a meeting between a small group of private citizens, business leaders, and City of Oakland staff representatives. The purpose of the meeting was to begin the implementation stages that will be required to develop a Digital Community Initiative. Initial plans to build broad community consensus in support of the initiative through community involvement on matters of vision, policy, purpose, objectives, application needs, and priorities were discussed. Organizations represented at the meeting included the Oakland Metropolitan Chamber of Commerce, Youth Radio, Police Department, Fire Department, Public Works Agency, Community and Economic Development Agency, Parks and Recreation, Oakland Public Library, a wireless technology author and consultant, private citizens, and a local IT consulting firm. ITD will continue to work with this small group from the community to seek out additional community participants to ensure a fair representation of the City's public and private stakeholders.

At the next meeting, scheduled for June 23, 2006, emphasis will be placed on establishing an executive committee to serve as an oversight, advisory, and advocacy group responsible for advancing the Digital Community Initiative to the citizens of Oakland and City Council. The executive committee will be chaired by the City's Chief Technology Officer. A project team will also be established to execute the necessary implementation stages to develop the Digital Community Initiative. The Chief Technology Officer will assign a Project Manager to lead the project team. Small focus groups will be formed throughout the City to begin the needs assessment process. The project team will provide a facilitator to lead the focus group needs assessment discussions.

The process for developing a Digital Community Initiative will consist of executing a series of overlapping implementation stages. These stages are meant to enable City government, small and large business, and community stakeholders to participate in accomplishing a major portion of a desired outcome where possible. Some of the stages include:

- Identify core action groups (executive committee and project team),
- Conduct community outreach, assemble stakeholder focus groups and perform needs assessments,

- Reach out to incumbent and non-incumbent technology service providers to participate in the process,
- Devise a business case or model for long term network sustainability,
- Build community consensus,
- Locate funding sources,
- Explore partnership opportunities within the private sector,
- Establish a network management model,
- Audit, document, and assess City-owned assets (e.g. light poles, traffic light poles, building, walls, water towers, underground conduit and existing fiber optic cable plant) and incentive capacity,
- Develop and execute a comprehensive Request for Proposal process.

ITD and the community participants proposed that the City allocate funds to obtain the services of a consulting firm to assist with accomplishing the implementation stages. In particular, the consulting services would be used to assist with conducting community outreach, focus group needs assessments, and other community and business related deliverables. ITD estimates that \$75,000 in funding will be required to obtain the services of a qualified consulting firm.

FISCAL IMPACT

This report is informational only, fiscal impacts are not included.

SUSTAINABLE OPPORTUNITIES

This report is informational only. Sustainable opportunities will be identified as part of The Digital Community Initiative's implementation process.

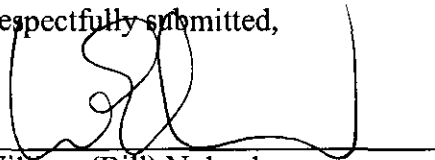
DISABILITY AND SENIOR CITIZEN ACCESS

There are no ADA or senior citizen access issues contained in this report.

ACTION REQUESTED OF THE CITY COUNCIL

Staff requests the City Council receive this report.

Respectfully submitted,



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Director, Finance and Management Agency

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APPROVED AND FORWARDED TO THE
COMMUNITY AND ECONOMIC DEVELOPMENT COMMITTEE:



OFFICE OF THE CITY ADMINISTRATOR