

Request for Information (RFI)

Wireless Broadband Access Project

CITY OF SUMMIT

NEW JERSEY



Information is requested to assist the City of Summit establish a City wide wireless broadband network in support of both residential and commercial uses for its citizens, businesses, local government and visitors.

Date of Issue:	May 25, 2006
Respond by e-mail: Final submission due:	<a href="mailto:khatfield@cityofsummit.org">khatfield@cityofsummit.org</a> by: June 16, 2006
Questions may be submitted by e-mail or in person to:	Kelly Hatfield at (908) 277-9415 <a href="mailto:khatfield@cityofsummit.org">khatfield@cityofsummit.org</a>
Physical Address for Information Purposes Only:	Summit Wireless Broadband Access Project City of Summit 512 Springfield Avenue Summit, NJ 07901

Our Vision:

The City of Summit envisions selecting a commercial vendor to plan, install and operate a wireless broadband networking environment throughout the City where our citizens and businesses, community service and non-profit organizations, -- whether operating in their homes, places of business, in open spaces such as parks, recreation areas, and throughout our downtown business district – have reliable, always available, high speed wireless “ready access” to the Internet at reasonable costs. The City of Summit views this project as an opportunity to provide Internet access for its citizens throughout the city while reducing the City’s communications costs, improving the delivery services to residents and improving access to City Hall. The project will increase consumer choice and affordability while promoting digital inclusion for families who cannot currently afford internet access or any access at all. At the same time the Principle Vendor we seek will recommend profit sharing and revenue generating opportunities for the City of Summit. However, the City expects that the full cost of the project will be borne by the selected Principle Vendor, without any City funding.

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## 1. INTRODUCTION

The City of Summit is a small residential city that seeks to maintain a high quality of life for all its residents. Located in Union County, New Jersey, with a population of 21,200 and 8,000 households, Summit is about 25 miles west on New York City. Although primarily residential in nature, the City has a relatively large commercial, service, industrial and non-profit presence with nearly 400 businesses and is a net importer of jobs. The leading employers include Atlantic Health Group Overlook Hospital, and Wachovia. Schering-Plough has recently located a workforce of 1,700 employees. Summit's broad tax base continues to grow with property valuation reaching \$6.4 billion in today's market, and its strong financial management gives Summit a "AAA" bond rating.

Summit is known for its superb school system and its seven public schools are evenly dispersed throughout the community. Summit is a family activity and service oriented community with many recreational programs for youth and a number of public parks and recreation areas.

Summit's train station is one of the most active in the Northeast with a direct connection to Manhattan. Major highways form two of its borders, without intruding into the City.

Points to consider:

- **Highly Desirable Demographics** – With a population of 21,200 and 8,000 households, Summit has a median household income of \$92,964 based on the year 2000 census. “The city's high wealth levels are evidenced by per capita income of more than twice the state's average and nearly three times the national average” according to Fitch 2001 research. From a demographic perspective, Summit households by annual income range are: 2,032 households over \$200K; 1,897 households between \$100-\$200K; 2,114 households between \$50-\$100K; 1,057 households between \$25-\$50K and 1,000 households under \$25K.
- **Showcase Community** – As a wireless broadband community, the City of Summit will be the first such community in Northern New Jersey and will be an attractive reference City for the successful vendor.
- **Location** - Summit covers an area of six square miles and is situated at one of the highest elevations in the region, which should be desirable for antenna placement and general communications.
- **Private Homes and Residential Housing** – The mix of residential housing within the six square miles of The City of Summit is as follows: single family homes 5,410; two-family homes 708; 3 – 19 multi-family units 1,220; 20+ multi-family units 799.

The combination of location and an attractive residential base, along with the numerous small and medium businesses and large corporations found in the City makes Summit an accessible market for a wireless broadband network.

## **2. PURPOSE OF THIS RFI**

Summit seeks to establish a wireless broadband network that encompasses the entire City limits and will support residential, commercial business, public service and recreational organizations, while also serving governmental use. Summit is seeking information from industry that will develop, deploy and operate a city wide wireless broadband network, titled the Summit Wireless Broadband Access Project.

This RFI solicits innovative proposals and solutions from respondents who wish to work with the City of Summit to develop and deploy a wireless broadband network. This request will identify a Principle Vendor – and one or more "partners" with whom the Principle Vendor will work should the Principle Vendor choose to work with others to respond to this RFI – that will work with the City of Summit to achieve the objectives outlined in this document.

Respondents are encouraged to submit a proposal for a community-wide high speed wireless broadband network designed with current proven technology and next-wave “state of the art” technology to minimize any lags in technology that may develop from the time of this RFI until implementation.

Summit also requests, and seeks to have submitted with all responses to this RFI, creative business plans and operating models, including, but not limited to: financial models; profit sharing with the City of Summit, design and installation; operations and on going wireless network support; billing, revenue collections and customer service. The City of Summit is expecting to outsource all aspects of the high speed wireless broadband network it seeks.

Specifically, this RFI seeks the following information:

- Technical feasibility and alternative assessments to meet RFI outline.
- Information about spare or unused telecommunications capacities that could support Summit Wireless Broadband Access Project minimizing the need for special construction and associated costs and time delays.
- Planning and installation schedule estimates.
- Suggestions that provide alternative approaches to designing, developing, acquiring, operating, and managing Summit Wireless Broadband Access Project.
- Any value added services or solutions that may be provided as part of the wireless broadband project.
- Revenue sharing opportunities for the City of Summit.

- Proposed cost estimates for various levels of bandwidth consumption.
- Recommended partners to supply high speed Internet network core connectivity.
- Free access for City services and employees.

### 3. SERVICE OBJECTIVES

This section outlines the high-level functional requirements for the City of Summit Wireless Broadband Access Project.

There are distinct customer levels to be services by the City of Summit Wireless Broadband Access Project. They are:

- **Residential:** Summit would like to provide high speed wireless broadband internet access to all Summit residents to enjoy all available broadband internet services, including VoIP phone services, security camera monitoring, and possibly over time, video services and IPTV (see below) at competitive rates.
- **Public Sectors:** City government agencies and facilities include City Hall and the Police Department, Fire Department, Library, Recreation Department, Department of Public Works, Department of Community Services and the Johnson Center for Youth. Other public sectors include Summit Public Schools and the Board of Education, emergency medical service providers, non-profit agencies, private schools, and religious institutions.

Use within these departments and agencies shall not be for primary emergency response communications, or other “first responder” types of communications. However, Summit does envision the network to provide alternate Public Safety communications that can be used with a priority override in a local, regional or national emergency by Police, Fire and Medical Emergency teams for public safety. Additionally, it would give the Police Department the capability to provide 24/7 video surveillance of critical infrastructures location within the City of Summit. Further, Summit would utilize the wireless broadband access for code inspection and public works, fire department inspections, police department inquiries, non-emergency medical services, recreation parks and open spaces.

- **“Hot Spots”:** As a kick off, the City may establish Internet Hot Spots in the downtown business district, parks, recreation areas and public spaces.
- **Commercial/Industrial, Medical, Religious Institutions and Non-Profit Organizations:** These customers are primarily concentrated in the Summit Downtown area; however, this group will also include business beyond the Downtown.

Prospective vendors are encouraged to approach this RFI as a Principle Vendor, either as a sole source solution provider, or together with others as a multi-solutions provider, keeping in mind that each customer group defined above has distinct and unique network security requirements and should be considered to have their own virtual private network, regardless of the physically network design.

Summit Wireless Broadband Access Project will require multiple tiers, some to be private, such as certain secure municipal access by City municipal employees and a VPN; the Board of Education, for several levels of secure, private access by administration, teachers and students. Other access shall be traditional open access to the Internet with appropriate general levels of security and privacy commonly available in "public access wireless hot spots."

We expect to use the wireless broadband network for video security monitoring at the onset. The potential for adding other video and IPTV services exists as a secondary requirement at this time. Supported video services will include, but not be limited to, conferencing, multicast/broadcast and video streaming security cameras.

Key elements of Summit Wireless Broadband Access shall include:

- High levels of reliability and availability including trunk and access diversity, and rapid response times for outages. This RFI does not specify a particular requirement for availability or reliability; however the wireless broadband network must be supported 24/7/365.
- Responses to this RFI will assist in establishing operational SLA requirements. In formulating responses, each respondent should describe the reliability and availability characteristics of each alternative included in their response. To be clear, the City will expect proposed service level agreements (SLA) to be outlined in detail and to be included with all RFI's submitted. Operations on a 24/7/365 basis by the vendor, with defined Service Level Agreements (SLA) for all aspects of the high speed wireless broadband network operations, services and customer service. Summit expects suggested SLA's to be provided for every tier of service listed in RFI submissions.
- Management of QoS (quality of service) in a shared Summit Wireless Broadband Network is imperative. The RFI must have detailed Principal Vendor's solution to maintain acceptable levels of QoS.
- A turnkey solution offered and priced as a service to users (commercial and residential), including administrative, customer care and support operations. Customer billing should be through monthly invoices direct to subscribers, with supporting detail.

- “Bandwidth on demand” services at user locations should be included and should be scalable to meet growth in overall network demand and/or peak requirements.
  - ❖ Maintain technology and service currency with “state of the art” other competing commercial services to the maximum extent practical.
  - ❖ Open, non-proprietary technologies with industry standard interoperability preferred.
  - ❖ 2.4 GHz (802.11b, g, x) preferred for network access.
  - ❖ 4.9 GHz preferred for public safety backhaul connectivity and possible future public safety network access.
  - ❖ GHz preferred for other municipal and commercial network backhaul and as redundant backup for public safety network backhaul.
  - ❖ Mesh or other ad hoc networking functionality preferred to support network mobility and flexibility.
  - ❖ Dynamic interference detection and interference abatement functionality preferred.
  - ❖ Modular, accessible equipment designed to facilitate technology upgrades (software, firmware, hardware components) preferred.
  - ❖ 9/11 Homeland Security Public Safety emergency override capability within the network design.
  - ❖ Provide initial operational capabilities within six months from contract award.

The City of Summit will not manage operations of the Summit Wireless Broadband Access Project, in part or whole. It seeks turnkey, open, non-proprietary solutions having the Principle Vendor handling physical maintenance, system management, service provisions, billing and customer service options, etc. Summit desires a mixture of options and solutions for system management, but under no circumstances will the City of Summit be a provider.

Other requirements, such as assurance, reliability and network survivability should be addressed in the RFI response. Examples of such requirements include: security policies and security management requirements; privacy of user accounts, data and navigation; mandatory active defense measures; security of network management and control technologies.

The City of Summit Wireless Broadband Access Project must meet functional requirements specified within this RFI. Summit is open to alternative solutions that meet these requirements and we encourage creativity and “outside the box thinking” in responses to this RFI.

#### 4. CITY OF SUMMIT ASSETS, RESOURCES AND OTHER ASSETS

The City of Summit has the following City-owned assets that can be considered in the design of a wireless broadband network:

- City of Summit buildings:

City	City Hall	512	Springfield Ave
City	Youth Services	2	Walnut St.
City	Library	75	Maple St.
City	Fire Department	396	Broad St.
City	Broad Street Garage	301	Broad St.
City	Tiered Garage	444A	Springfield Ave.
City	Old Town Hall	71	Summit Ave.
DPW	DPW	41	Chatham Road
DPW	Transfer Station and Compost Building	40	New Providence Ave.
DPW	Pump Station		Glen Ave
DPW	Pump Station		River Road
DPW	Pump Station		Constantine Pl
DPW	Pump Station		Chatham Road
Rec.	Recreation	100	Morris Ave.
Rec.	Tatlock Field House		Butler Parkway
Rec.	Memorial Field Maintenance Building		Ashland Road
Rec.	Cornog Field House		Myrtle Ave
Rec.	Golf Course	189	River Road
Rec.	The Wilson Pavilion	41	Beekman Terrace
Rec.	The Pool	100	Ashwood Ave.

- Summit Public School buildings:

Board of Ed	Brayton School	89	Tulip Street
Board of Ed	Franklin School	136	Blackburn Road
Board of Ed	Jefferson School	110	Ashwood Ave
Board of Ed	Lincoln-Hubbard	52	Woodland Ave
Board of Ed	Washington School	507	Morris Ave
Board of Ed	Lawton C Johnson Middle School	272	Morris Ave
Board of Ed	Summit High School	125	Kent Place Boulevard
Board of Ed	Wilson School		Beekman Terrace

- Traffic Signals:  
The City owns most of the traffic signals throughout the City of Summit.
- Utility Poles:  
City street light and utility poles are available for network infrastructure.
- Expediting permitting process for network construction.
- Network operations storage facilities to be made available.

The City reserves the right to review all proposed mounting locations and reject those that the City deems inappropriate.

Other assets to be considered, but are not City-owned, include:

- New Jersey Transit Right of Way
- Atlantic Healthcare Systems Overlook Hospital – high point antenna site

## **5. COSTING & ONGOING SERVICE FEES**

Potential vendors must include a costing summary in their submissions including, but not limited to, the following as appropriate:

- Monthly service fee schedules for each propose tier of service
- Residential and business customer required equipment costs

Operational business models including a proposed fee structure which the prospective vendors proposes to offer to residents and business for the variety of tiered services being offered, including but not limited to: how charging, billing, collections and profit sharing will be handled as well as recovery of planning, design, installation, on going operating and customer service costs.

## **6. VALUE-ADDED REQUIREMENT**

The City of Summit invites vendors to demonstrate creativity and innovation by including a section in submitted RFI responses outlining their vision of how the proposed solution could be leveraged to provide significant, value-added benefits to all Summit citizens, customers, and affiliates.

Potential value-added benefits may include providing access for redundancy, to facilities of other Summit and public sector institutions in Summit and elsewhere in Union County and adjacent communities in Morris and Essex Counties. Potential vendors are asked to specify their role in helping Summit realize the vision.

This section of the proposal is optional, but will help Summit to evaluate potential partners' creativity and willingness to work with the City of Summit to further develop the wealth of applications in use by the City and for the benefit of the larger community.

## **7. REVIEW OF SUBMISSIONS**

The City of Summit will be solely responsible for review of responses to this RFI, and will decide whether or not to issue a Request for Proposal (RFP). If workable solutions are received from potential vendors responding to this RFI, the City of Summit reserves the right to proceed directly to contract. The City of Summit may also choose to manage the coordination of vendors addressing components of the services required, encouraging consortiums.

Potential vendors should note that their response to this RFI does not obligate the City of Summit to award all or part of the project to the respondent, or to incur any costs associated with responding to the RFI.

Submissions become the property of the City of Summit and will be evaluated on their merit and ability to:

- Facilitate a viable solution as near as possible to the core request outlined in this document.
- Coordinate efforts with other prospective proponents to offer a complete solution where on respondent cannot provide all services.
- Adhere to the guidelines and time frame listed in this document.

## **8. NEXT STEPS**

Submissions are invited from any company, organization or Principle Vendor organizing a consortium interested in forming a partnership to perform the work, and offer the services, described in this document. In particular, the City of Summit is interested in receiving submissions from a variety of qualified companies including, but not limited to: telecommunications companies, wireless network integrators and service providers, public utilities, media infrastructure, internet service providers.

Potential vendors are requested to include the following with their submissions:

- Reference information from similar projects that were previously installed and operated by the vendor. The information should include at minimum: Name of contact person, telephone number of contact person, costs and scope of project, and date project was completed. Please submit a minimum of three references.
- Names of organizations and individuals who will be included on a project team along with description and financial highlights of the participating organizations and resumes of individuals.

Interested potential vendors are required to submit their response to this RFI by June 16, 2006 at 5:00 P.M. (EST). RFI submissions will be accepted prior to the filing deadline and early submissions are encouraged. **Late submissions will not be considered or accepted.** The City of Summit requires that submissions be made electronically, in Microsoft Word and/or Adobe Acrobat PDF format.

All submissions must be sent to [khatfield@cityofsummit.org](mailto:khatfield@cityofsummit.org). Interested potential vendors are required to allow sufficient time for their e-mails to traverse the network. Interested potential vendors should also confirm receipt of their e-mail with the contact provided below prior to the submission deadline.

## **9. CONTACT FOR FUTHER INFORMATION**

If there are any questions regarding how to file the RFI, they can be submitted electronically to [khatfield@cityofsummit.org](mailto:khatfield@cityofsummit.org) before the date deadline. All questions about the content of the RFI itself and responses to the RFI will be held until the Wireless Broadband Access Project Committee initially reviews RFI submissions.

## **10. DISCLAIMER**

This RFI is issued solely for information and planning purposes and does not constitute a solicitation or offer to form a contract. Responses to the RFI will not be returned. Responses to this notice are not an offer and cannot be accepted by the City of Summit to form a binding contract. Responders are solely responsible for all expenses associated with responding to this RFI.

Information presented in this RFI is for informational purposes only and is considered confidential. By accepting this RFI potential vendors and affiliates agree not to share, divulge or distribute any information contained herein with another party, unless it is for the purpose of responding to this request.