

Wireless Broadband Initiative Request for Proposals



[Nassau County RFP #IT0111-0702](#)

Counties of Suffolk and Nassau, New York



RFP Issued: January 17, 2007

Questions due: February 1, 2007

Pre-Proposal Conference: February 8, 2007

Proposals due: March 19, 2007

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1.0 INTRODUCTION

1.1 Project Summary

The Counties of Suffolk and Nassau are seeking a private partner or set of partners to build, own, and operate an outdoor wireless network across all of the populated areas in the two Counties that will cover over 2.7 million residents and approximately 750 square miles. While this network will be one of the largest of its kind in the US, the Counties expect it will be well utilized due to the demographics of the region. Preliminary surveys of residents indicate a high likelihood of use, and the Counties are fortunate that their households have the 9th highest level of disposable income across the US and rank 4th across the US for media household EBA (effective buying income).

The project has garnered substantial support, including New York Governor Spitzer recently citing the project as a model for the State.

The Counties seek wireless broadband services that will benefit the public, the business community, visitors and County and local government authorities. To this end, the Counties have identified the following primary objectives for this endeavor. The Counties believe meeting these objectives will not only benefit all those who live and work on Long Island, but also the private partner or set of partners the Counties select through this RFP by fully utilizing the network for a wide variety of purposes.

- a. Ensure universal wireless broadband access for all residents of Long Island. The Counties envision multiple service levels on the network ranging from free service for all to high speed premium services optimized for video. Through-put performance and/or length of time of use for the free service may be different than the premium services.
- b. Stimulate economic development and promote job creation by enabling business entities in retail and industrial areas to purchase access to the Network in a timely fashion and at affordable rates.
- c. Improve the services provided by the Counties and the local governments within the Counties. A robust Network will enhance the ability of residents and visitors alike to have ready access to information provided by the Counties and other local governments. In addition, the Counties are interested in exploring the potential of VoIP, telemetry and camera surveillance over the Network. The Counties also desire to use the Network for applications such as permitting, inspections, health services, and probation tracking among others. The Counties are interested in anchor tenancy discussions.

- d. Enhance education and improve the interaction between teachers, students and parents. These educational enhancements may support one to one laptop initiatives as well as access to continuing education and library services. The Counties expect these services would be purchased.
- e. Enhance the experience of visiting Long Island for vacationers, tourists and business travelers. The Network may provide location based information for nearby restaurants, hotels, entertainment venues, and other applications. County Economic Development supports the project and Long Island enjoys very strong tourism business during the summer.
- f. Encourage competition by introducing an alternative method for wireless broadband service. Customer premise devices may allow residents to bring not only the free tier into their homes but also upper level, more capable tiers of service.
- g. Lay the foundation for wireless access to commuters on local modes of transportation. Over 140,000 residents of the Counties take public transportation to work each day and over 20,000 commute from elsewhere to Long Island each day to work.
- h. Provide a redundant path for critical information flow in times of crisis or disaster.

The Counties encourage Respondents to formulate and describe ideas and applications that supplement the goals above and to propose a network design and business strategy that best realizes the potential of an outdoor wireless network for Long Island.

1.2 Project Background

In January 2006, Suffolk County Executive Steve Levy announced his vision for a County wide wireless broadband network. In partnership with the Stony Brook Center of Excellence Wireless and Information Technology (CEWIT), Mr. Levy appointed a 15-member committee, the Suffolk County Wireless Committee, to devise a business plan and timeline for deploying a wireless broadband network. Shortly thereafter officials from Nassau County joined the Wireless Committee and plans were announced for a bi-county wireless broadband network. The island-wide network promises to be one of the most ambitious of its kind in the world.

On July 10, 2006, the Committee issued a Bi-County Request for Expressions of Interest, Information and Comments ("RFI/C") on creating a wireless broadband system which would allow residents, businesses and visitors to connect to the Internet from anywhere across the 1,200 square miles of Suffolk and Nassau counties. The RFI/C garnered 15 responses and provided input that helped the Counties prepare this Request for Proposal ("RFP").

Based on the Counties' leadership and actions, in October 2006, Suffolk County passed a resolution to authorize the establishment of Wireless Suffolk County Local Development Corporation. This not-for-profit local development corporation (LDC) has been chartered with the expectation that a wireless broadband network will promote individual achievement, provide jobs and an expanded business base, strengthen neighborhoods, empower families, and support local economies. Both Suffolk and Nassau County have responsibilities in appointing the LDC's five directors.

The LDC seeks to partner with a private vendor that will serve both Counties over an extended period of time and will benefit, not burden, the Counties' taxpayers. The purpose of this RFP is to solicit that partner, or set of partners, who can best serve the interests of the Counties' residents, businesses, visitors, and the two county governments that serve them.

Suffolk and Nassau Counties are requesting proposals from qualified entities for the deployment of an outdoor wireless broadband network throughout the two Counties. This RFP is issued to select an entity with which the Counties through the Wireless Suffolk County Local Development Corporation will enter into definitive contract negotiations.

1.3 Project Vision

Suffolk County and Long Island have been leaders in many areas of computer technology, and we believe government can play an active role in encouraging and enabling the creation of a system to serve all of Long Island with universal, affordable or even free broadband access.

- Suffolk County Executive Steve Levy

This Bi-County initiative will benefit residents, visitors and businesses across Long Island by making it easier to connect wirelessly to the Internet where ever they may be in Nassau and Suffolk. Wi-Fi service will help keep Long Island in the forefront of attracting and retaining cutting edge businesses and jobs while improving Internet access for beach and park visitors.

- Nassau County Executive Tom Suozzi

Cities across the U.S. and the world are engaging in efforts to study the issues of evolving telecommunications infrastructure that better connect people and businesses to the information and opportunities they seek, wherever they may be. The Bi-County Wireless Committee, in partnership with the Stony Brook Center of Excellence Wireless and Information Technology, has been studying appropriate business models, reviewing technology options, balancing their approach with key policies, soliciting input from the community, tracking regulatory constraints and enablers, and

inventorying and valuing their assets to understand more fully the potential benefits and cost savings that wireless can bring to the Long Island community.

Long Island has a history of innovation and the Counties believe Long Island may be profoundly impacted by the freedom from geographical restraints provided by emerging telecommunications networks. The Counties feel the emergence of wide area wireless broadband network technology will be a major factor in igniting this change.

Coupled with this technological innovation, the Counties believe Long Island's keen business acumen will lead the charge in using telecommunications as an economic development tool. Investment in emerging telecommunications networks through public private partnership is seen as a crucial strategy to attract and retain business. The governments of Long Island desire technologically advanced networks that will meet the current and future needs for two-way voice, data, video and interactive multimedia communications. The technology should ensure abundant bandwidth and an open platform to promote Long Island as a high tech center.

The Counties anticipate that this initiative will enhance delivery of government services, provide improved healthcare through telemedicine and remote patient care; facilitate better education; improve the experience for individuals vacationing on Long Island and those visiting Long Island for business reasons; promote more innovative broadband solutions for consumers; and by promoting telecommuting, reduce the strain on Long Island's roads and infrastructure.

We are very excited about this initiative because it leverages the State and University investments in the Center of Excellence for Wireless and Information Technology (CEWIT) and will help expand the size, and enhance the competitiveness, of the business and industrial base on Long Island.

- Yacov Shamash, VP for Economic Development and
Dean of Engineering and Applied Sciences at Stony
Brook University

1.4 Unique Aspects of Long Island

Long Island presents a unique opportunity to private partners. The selected Respondent(s) will enjoy an economic benefit by 'branding' of the service at all tier levels. The Counties offer the following to illustrate:

- Long Island, if it were classified as a city, would be the 4th largest city in the United States,

- Long Island is home to almost 80,000 businesses, 80% of which fall into the SMB Category, currently the fastest growing market segment for corporations today
- Nassau County is the 6th wealthiest county in the US on a per capita basis
- The median household income in Suffolk County was \$74,956, significantly greater than the State's \$47,349.
- The median home value in Suffolk reached \$405,000 in 2005. The rate of growth in Suffolk's home values between 1998 and 2005 was the highest in the State.
- Long Island's rate of home ownership was 85.7 percent, the 2nd highest rate among the top 75 metropolitan areas in the country.
- Nassau & Suffolk County retailers continue to thrive with total annual receipts of approximately \$40 billion.
- Long Island's Nassau & Suffolk County households have the 9th highest level of disposable income across the US, with Long Island ranking 4th for media household EBA (effective buying income).
- Suffolk County's economy recorded significantly strong wage growth in each of the past two years and achieved record highs in employment and population. Housing values have increased at a faster rate than any other county in the state, rising at an average annual rate of 14.2 percent between 1998 and 2005 (NY State Comptroller Alan Hevesi, Sept. 21, 2006).
- Long Island is home to two of the most nationally recognized and academically lauded research laboratories in the US: Cold Spring Harbor Laboratory and Brookhaven National Laboratory, the recipient of five Nobel Prizes. Brookhaven National Laboratory is building a new 65,000-square-foot Research Support Building (\$16.5 million), marking the first step in its master plan to develop a new 5,300-acre site. Plans are also underway to develop an \$80 million Center for Fundamental Nanoscience, which will be funded by the U.S. Dept. of Energy's Basic Energy Sciences program.
- Unemployment sits well below the national average in Long Island, and the real estate market and several other key industries are experiencing a major growth spurt. High-growth sectors in clued biotechnology, electronics, graphic communications, computer software and medical imaging/health information systems. Other areas, such as services, retail and construction, have continued to grow as well, staying on par with the national average.
- Long Island is home to 20 colleges and universities, and higher education remains a \$40+ billion industry on Long Island
- Long Island is home to the Center for Excellence in Wireless and Information Technology at Stony Brook University, part of Governor Pataki's \$40 billion investment in technology excellence here in NY.
- Stony Brook University has acquired 246 additional acres of land on which to build a research and development campus, anchored by CEWIT (100,000-square-foot building). It will include 22 additional laboratories, and ten additional buildings, all funded by a \$50 million grant form

NY State's Centers of Excellence program. Other buildings will include a Center for Computational Neuroscience and a Nanoscience and Technology Research Center.

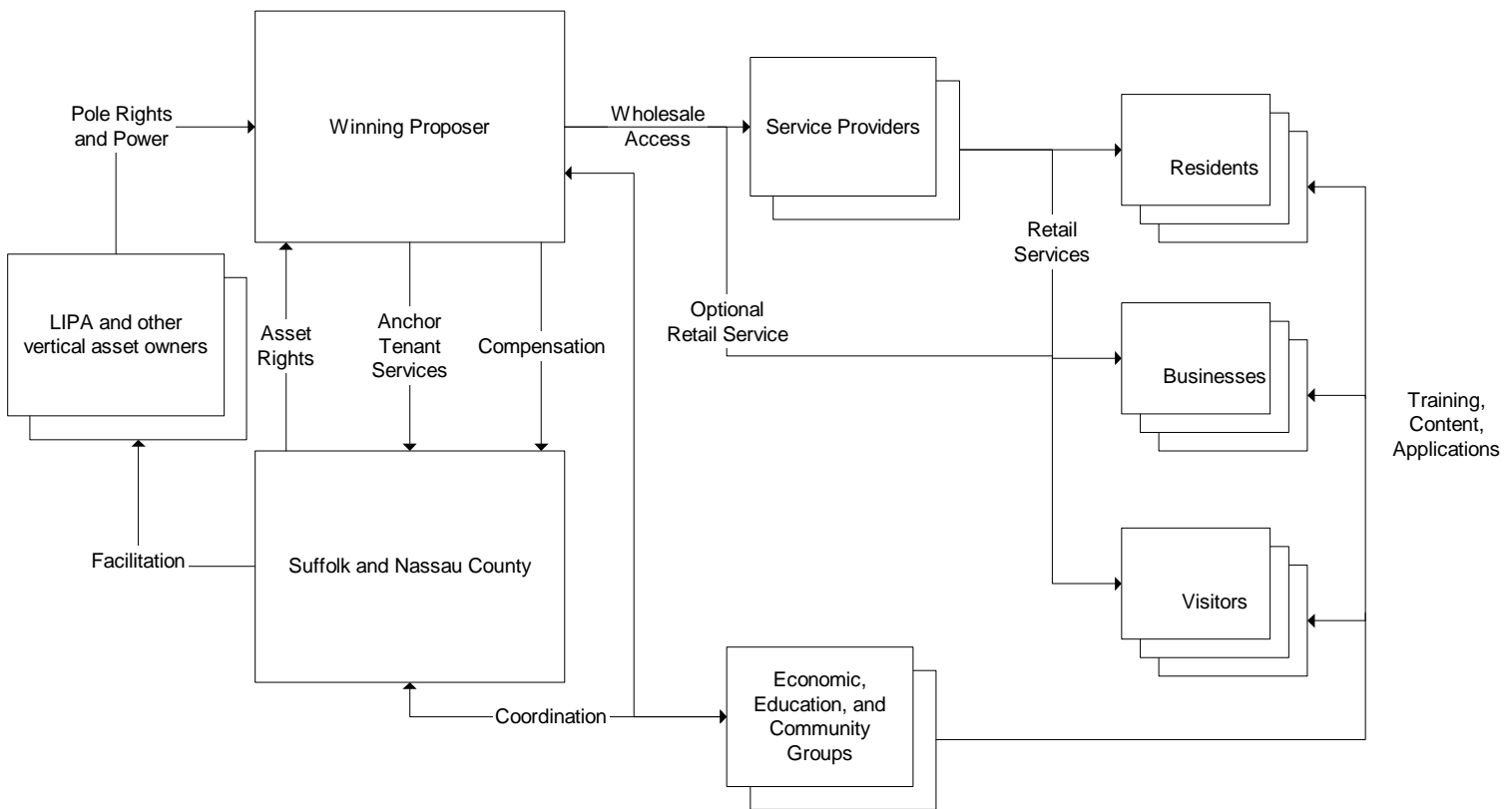
- Health Care, a \$12 billion industry, continues to be a major catalyst for economic growth here on Long Island (Dr. Pearl M. Kramer, chief economist, LIA).
- Long Island's workforce has generally congregated in five industries: services; retail trade; manufacturing; government; and finance, insurance and real estate.
- Three industries in particular are growing at startling rates here on LI: life sciences, software and electronics. More than 300 life sciences firms, more than 1700 software firms and approximately 400+ electronics firms are located on Long Island. These industries employ more than 50,000 people combined.
- The Long Island Tourism Industry, at \$6 billion, is 20% above the national average and continues to grow.
- Long Island's defense/military sector, which suffered setbacks from its highest levels prior to the mid 1980-s, has made what Gary Huth, an analyst for the NY Dept of Labor's Long Island Region, calls "the most notable turnaround." Northrop Grumman is a prime example, with recent major Navy contracts that promise to stretch out for years and are research and development-driven, contributing to the new growth.

1.5 Policy Standards

The Counties have defined the following policy standards for this initiative. All proposals must meet the following policy standards:

- a. **Universal Service.** The Network must provide ubiquitous service for outdoor usage and may provide for indoor use. All areas of the Counties currently developed for housing, commercial, or industrial use as well as parks must be served. County Planning Departments estimate this area to be approximately 750 square miles. As additional land is developed, the Counties expect the Network to expand to include this development.
- b. **Open Access.** The Counties expect Open Access principles to be fundamental to the success of the selected proposal.
- c. **Privacy and Non-Discrimination.** The Network should protect the privacy of consumers and respect consumer choice. Specifically, it must operate in a way that permits network users to:
 - 1) Run applications and use services of their choice, subject to the needs of law enforcement.
 - 2) Access the lawful Internet content of their choice.
 - 3) Connect their choice of legal devices that do not harm the network.
 - 4) Choose among network providers, application and service providers, and content providers.

1.6 Business Model



The Counties seek to facilitate a public-private partnership whereby:

- The Counties will make their assets, including light poles and other infrastructure, available on a nonexclusive basis in accordance with all applicable legal requirements and required approvals to a private company (or consortium of companies) that will finance, own, design, deploy, maintain and operate an island-wide wireless broadband infrastructure.
- The Counties will direct the winning Respondent to the entities that possess an interest in other assets that may be helpful in connection with the deployment of the Network. Long Island Power Authority (LIPA) owns a portion of the utility poles throughout the two Counties. LIPA has indicated that it is willing to enter into negotiations regarding the use and fees associated with the use of LIPA's assets.
- The selected Respondent is encouraged to provide access to the Network on a wholesale basis to multiple and competing retail Service Providers, who market service to residents, businesses and visitors. These Service Providers may also be responsible for subscriber

billing, customer care and other required functions. Wholesale rates will be negotiated and agreed-to between the Counties and the selected Respondent in order to stimulate competition for lower-priced retail services.

- The selected Respondent may also market retail services over the Network.
- The Respondent provides the option of discounted anchor tenant services for the Counties to purchase.
- The Counties receive on an on-going basis a share of revenues generated by the Network from the Respondent, in accordance with a multi-year contract inclusive of option periods.
- The Counties and the selected Respondent collaborate with numerous economic development bodies, educational institutions, and community groups to maximize the positive results of well applied wireless technology.

The Counties will not own the Network, nor will they maintain, operate, or upgrade the Network or support the customers who use it. The Counties will stipulate certain Requirements, outlined in this RFP for the Network, regarding the use of the Counties' infrastructure, minimum service requirements, coverage areas and technology standards, but encourage Respondents to craft their own innovative solutions to meet these Requirements.

The Counties expect that a free service be provided throughout the community. The Counties will consider responsible proposals, such as those that support the operating of the Network through advertising or other revenue-generating methods to the extent that these proposals demonstrate a sound investment strategy and create a sustainable network.

The Counties encourage proposals that provide benefit to the Counties, either in the form of financial consideration and/or in-kind services. This RFP precludes funding models that require any financial commitment or contribution from the Counties for the capital expense of the network.

The Counties envision a multi-year agreement with the selected Respondent, with subsequent renewal options. The Counties request Respondents to specify revenue sharing proposals and a recommendation for the length of the multi-year agreement. Any recommendation for a multi-year agreement shall include the initial term as well as the duration of subsequent option periods.

2.0 GENERAL INSTRUCTIONS

2.1 General Invitation

The Counties invite Respondents to submit a written proposal for the deployment of a community wireless broadband network throughout the Counties. Proposals are solicited in accordance with the terms, conditions and instructions as set forth in this RFP.

Both Suffolk and Nassau County maintain pages related to this initiative. For the purposes of the RFP, all respondents should go to the following site for materials related to the project and the RFP process:

<http://www.co.suffolk.ny.us/wireless/wireless.html>.

The primary contact for this RFP is:

Sharon Cates-Williams
Chief Information Officer and Commissioner
Suffolk County Department of Information Technology
H. Lee Dennison Building, 12th Floor
PO Box 6100
100 Veterans Memorial Highway
Hauppauge, NY 11788-0099
613-853-4000
Wireless@SuffolkCountyny.gov

There will be a Pre-Proposal Conference on February 8, 2007 at **1 PM** at in the Media Room on the ground floor of the Dennison Building. Directions will be posted on the Suffolk County project website.

The Pre-Proposal Conference will include an opportunity for those interested in teaming or subcontracting to indicate their interest and share their contact information.

The Counties will receive proposals at the primary contact address above up until March 19, 2007 at 4 PM.

The Counties reserve the right to reject any or all proposals or to accept any proposal or portion of a proposal deemed to be in the Counties' best interest.

2.2 Submittal Procedure

1. Respondent must submit twenty-five (25) copies of their proposal, plus one (1) printed original, signed in ink, plus one (1) CD-ROM PDF version of proposal, in a sealed envelope. Respondent may elect to either personally deliver, or mail, their proposals to the primary contact address above.
2. To be assured of consideration, Proposals must be received by the Counties no later than 4:00 p.m. Eastern on March 19, 2007. Respondents may submit their proposals at any time prior to the above stated deadline. Failure to submit the required number of copies by this deadline may be cause for disqualification from the RFP process. The original documents must be clearly marked as "ORIGINAL", and must bear the original signature of an authorized corporate agent on all documents requiring a signature. Respondent must enclose all documents in sealed envelopes or boxes.

The outside of each sealed envelope or package must be labeled as follows:

Proposal Enclosed

Request for Proposals (RFP) for Community Wireless Broadband Network

Due: March 19, 2007,

Submitted by: (Name of Respondent)

Package ____ of ____

2.3 Pre-Proposal Conference

A Pre-Proposal Conference will be held on February 8, 2007 at 1 PM at in the Media Room on the ground floor of the Dennison Building. The complete address for the building is listed in Section 2.1. Interested Respondents should plan to attend. Respondents are encouraged to submit questions in writing using the instructions provided in Section 2.4 by 4 PM February 1, 2007 to be discussed at the Pre-Proposal Conference. The Counties will issue an Addendum at the project website to this RFP addressing questions discussed at the Pre-Proposal Conference and any other required clarification.

2.4 Additional Information and Questions

Respondents must communicate only with the Primary Contact. All requests for clarification must be in writing, sent by mail or email to Wireless@SuffolkCountyny.gov, and directed to the attention of Sharon Cates-Williams. The face of each envelope or the title of each email must clearly indicate that the contents are “Questions and Request for Clarification” about the RFP, and are “Not a Proposal” and must refer to “Request for Proposal (“RFP”) for a Community Wireless Broadband Network.” No telephone calls will be accepted unless the questions are general in nature. A Respondent that deviates from any of these restrictions may be subject to immediate disqualification from this RFP process.

2.5 Addenda & Modifications

All addenda, amendments, and interpretations to this solicitation will be in writing. Any amendment or interpretation that is not in writing will not legally bind the Counties. All contacts that a Respondent may have had before or after receipt of this RFP with any individuals, employees, subcontractors, consultants or representatives of the Counties and any information that may have been read in any news media or seen or heard in any communication facility regarding this RFP should be disregarded in preparing responses.

The Counties do not assume responsibility for the receipt of any addendum sent to Respondent.

If it becomes necessary to revise or expand upon any part of this RFP, an addendum will be sent to all of the prospective Respondents who expressed interest at the Pre-Proposal Conference. Prospective Respondents are automatically listed when they sign or leave a business card at the Conference. Each addendum is incorporated as part of the RFP documents, and the prospective Respondent must acknowledge receipt in their proposal.

The addendum may include, but will not be limited to, the following:

1. Responses to questions and requests for clarification according to the provisions of Section 2.4 herein; or
2. Responses to questions and requests for clarification raised at the Pre-Proposal Conference or by the deadline for submission of questions.

2.6 Examination of Documents and Requirements

Each Respondent will carefully examine all RFP documents and thoroughly familiarize themselves with all requirements prior to submitting a proposal to ensure that the proposal meets the intent of this RFP.

Before submitting a proposal, each Respondent will be responsible for making all investigations and examinations necessary to ascertain conditions and requirements affecting the requirements of this RFP. Failure to make such investigations and examinations will not relieve the Respondent from the obligation to comply, in every detail, with all provisions and requirements of the RFP.

2.7 Evaluation and Selection Process

A. Evaluating Proposals

The process for selecting a selected Respondent for this RFP will be an open, competitive and fair process.

Firms with extensive experience in partnering with local governments to deploy community wireless broadband infrastructure - consistent with the vision, objectives, policies and requirements defined in this RFP - are encouraged to respond.

An Evaluation Committee, which will include representatives from several departments of both Counties, will review and evaluate the Proposals, as described below.

In evaluating Proposals, the Evaluation Committee will first consider the completeness and responsiveness of the Respondent's Proposal. The RFP proposal evaluation process is organized into three phases:

Phase I - Preliminary Proposal Assessment

Phase II - Proposal Evaluation

Phase III - Site Visits and/or Oral Presentations (if necessary)

Phase I - Preliminary Proposal Assessment

Phase I will involve an assessment of the Respondent's compliance with and adherence to all submittal requirements requested in **Section 3.2, Required Content of the Proposal**. Proposals which are incomplete and missing key components necessary to fully evaluate the Proposal may, at the discretion of the Evaluation Committee, be rejected from further consideration due to "non-

responsiveness” and rated Non-Responsive. Proposals providing responses to all sections will be eligible for detailed analysis in Phase II, Proposal Evaluation.

Phase II - Proposal Evaluation

In Phase II, the Evaluation Committee will evaluate the extent to which a Respondent’s proposal meets the project requirements set forth in the RFP. Phase II will include a detailed analysis of the Respondent’s qualifications, experience, proposed implementation plan, preliminary cost proposal and other factors based on the evaluation criteria outlined in **Section 2.7B, Evaluation Criteria**.

As part of the evaluation process, the Evaluation Committee will review the information required by **Section 3.2** for each Proposal received. The Evaluation Committee may also review any other information that is available to it, including but not limited to information gained by checking references and by investigating the Respondent’s financial condition.

The Counties reserve the right to seek clarification of any information that is submitted by any Respondent in any portion of its Proposal or to request additional information at any time during the evaluation process. Any material misrepresentation made by a Respondent may void the Proposal and eliminate the Respondent from further consideration.

The Counties reserve the right to enlist independent consulting services to assist with the evaluation of all or any portion of the Proposal responses as they deem necessary.

B. Evaluation Criteria

In addition, the Evaluation Committee will generally review the Respondent's Proposal using the following criteria. Total points possible are 105 points as follows:

Degree of Compliance with Specifications: 60 Points

1. Value to the Community

This will be determined by the proposed level of free service, proposed wholesale rates for all services, and level of proposed interaction and partnership with other government programs and community-based organizations demonstrated in response to this RFP.

2. Value to the Counties

This will be determined by the proposed amount and type of benefits for the use of County assets and the proposed rates and terms for government usage of the Network demonstrated in response to the Requirements defined in this RFP.

Broadly speaking, the Counties envision two general categories of benefit and encourages creativity in this area. They are:

- a) Direct financial benefit, for example revenue sharing or lump sum payments; and,
- b) In-kind benefit, for example free or reduced accounts.

3. **Degree of Compliance with Requirements, Laws, Ordinances, and Statutes**

The Evaluation Committee will consider the degree to which proposals are compliant with the Requirements stated in this RFP and Respondent's compliance with all laws, ordinances, and statutes governing the contract.

4. **Level of Innovation**

This will be determined by the programmatic creativity and technical innovation demonstrated by the Respondent. The Counties prefer leading-edge, but proven, technology. The Counties favor innovative use of publicly owned infrastructure and community assets.

5. **Deployment Strategy and Plan**

This will be determined by the timeliness and reasonableness of the proposed deployment plan and Respondent's approach to covering the Counties' requested area. Other determining factors include: the Quality, Comprehensiveness and Adequacy of the proposed approach to developing and implementing the Deployment Strategy, including the staffing plan and Respondent's local availability and commitment of personnel who will manage and oversee the project.

The Evaluation Committee will review each proposal for the Respondent's understanding of the objectives of the services and how these objectives may be best accomplished. Each Respondent will be evaluated on their overall strategy, methodology, timetable, and approach to meeting the Counties' requirements.

Firm Qualifications: 40 Points

1. **Professional and Technical Competence**

The Respondent's ability to provide the services described in the RFP, including the capacity to achieve the project goals, objectives and the scope of services described in this RFP will be determined by the following:

- a) Respondent's Professional Qualifications and the Specialized Experience of Respondent's Team in providing Community Wireless Broadband Network Service on projects of similar scope and magnitude (e.g., specifically with respect to large organizations, organizations with strong identities of their own and government agencies);
- b) The Local Availability of Respondent's Key Personnel which will be committed to the project;
- c) The Past and Current Performance of the Respondent (and Team members) on other contracts in terms of quality of services and compliance with performance schedules. The Committee may solicit from current and/or previous clients including the Nassau and Suffolk Counties, other government agencies, or any available sources, relevant information concerning the Respondent's record of performance.

2. **Financial Capacity**

The Evaluation Committee will consider the financial condition of Respondent. Respondent must be financially stable to ensure performance over the duration of the contract.

3. **Legal Actions**

The Evaluation Committee will consider any legal actions, if any, against Respondent and any division, subsidiary or parent company of Respondent, or against any member, partner, etc., of Respondent if Respondent is a business entity other than a corporation.

4. **Conflicts of Interest**

The Evaluation Committee will consider any information regarding Respondent, including information contained in Respondent's Proposal, that may indicate any conflicts (or potential conflicts) of interest which might compromise Respondent's ability to satisfactorily perform the proposed Services or undermine the integrity of the competitive procurement process. If any Respondent has provided any services for the Counties in researching, consulting, advising, drafting or reviewing of this RFP or any services related to this RFP, such Respondent may be disqualified from further consideration.

W/MBE Participation: 5 Points

The Counties encourage substantive plans for Women and Minority Business Enterprise (“W/MBE”) participation in the Respondents’ proposals. Participation may include, but not be limited to, sub-contracts for labor, materials and/or supplies, and professional services.

C. Vendor Selection

After the Evaluation Committee completes its review of Proposals in Phase II, it may submit to the Selection Committee a recommended short list of Respondents (Phase III), or the Evaluation Committee may forego Phase III and submit a recommendation to select one or more Respondent(s), or a recommendation to reject any or all Proposals.

Phase III - Site Visit and/or Oral Presentations

If the Evaluation Committee submits a short list of Respondents for further review, then, in the sole discretion of the Selection Committee, those short-listed Respondents may be subject to a site visit and/or invited to appear before the Evaluation Committee for an oral presentation; to clarify in more detail information what was submitted in Respondent’s Proposal; and/or to ask Respondent to respond to additional questions. Afterwards, the Evaluation Committee will make a final evaluation, including a final ranking of the Respondents, and will submit a recommendation for one or more Respondents to the Selection Committee.

If the Selection Committee concurs with the selection recommendation from the Evaluation Committee, the Counties will enter into negotiations with the selected Respondent(s). The Counties may enter negotiations with more than one Respondent and may pursue a Best and Final Offer process with these Respondent(s) before completing the final agreement. The final agreement is subject to the Counties’ legal counsel approval.

Phase IV - Pilot

The Counties reserve the right to request that the final Respondent(s) construct and demonstrate a pilot network at their own expense before the final agreement is completed.

The Counties reserve the right to terminate this RFP solicitation at any stage if determined to be in the Counties’ best interests. The receipt of Proposals or other documents will in no way obligate the Counties to enter into an agreement of any kind with any party.

2.8 Post-Proposal Discussions with Respondent

It is the Counties' intent to commence final negotiation with the Respondent(s) deemed most advantageous to the Counties. The Counties reserve the right to conduct post-proposal discussions with any Respondent(s).

2.9 Terms, Conditions, Limitations and Exceptions

- a. This RFP does not commit the Counties to award a contract, issue a Purchase Order, or to pay any costs incurred in the preparation of a proposal in response to this request. The Respondent shall be solely and fully responsible for all costs associated with the development, preparation, transmittal, and submission of any material in response to this RFP. The Counties assume no contractual or other obligations as a result of the issuance of this RFP, the preparation or submission of materials by a Respondent, the evaluation of materials, the Respondent's conducting of presentations, or the selection of any Respondent for further negotiations. There may be no claims whatsoever for reimbursement from the Counties or any of its consultants or agents for such costs.
- b. The Counties will not be held accountable if material from proposals is obtained without the written consent of the Respondent by parties other than the Counties, at any time during the proposal evaluation process.
- c. All submissions for the Counties' consideration will be held in confidence pending final execution of the contract(s). However, fully executed contracts are subject to the New York State Freedom of Information Law (FOIL). Therefore, if a Respondent believes that any information in its submission constitutes a trade secret or is otherwise information which if disclosed would cause substantial injury to the competitive position of the Respondent's enterprise and Respondent wishes such information to be withheld if requested pursuant to FOIL (Article 6 of the Public Officers' Law), the Respondent shall submit with its submission a separate letter addressed to the primary contact referenced at section 2.1, specifically identifying the page number(s), line(s) or other appropriate designation(s) containing such information, explaining in detail why such information is a trade secret or is other information which if disclosed would cause substantial injury to the competitive position of the Respondent's enterprise, and formally requesting that such information be kept confidential. Failure by a Respondent to submit such a letter with its submission will constitute a waiver by the Respondent of any rights it may have under Section 89(5) of the Public Officers' Law relating to protection of trade secrets. The proprietary nature of the information designated confidential by the Respondent may be subject to disclosure if it is requested and the

Counties deem it disclosable or if ordered by a court of competent jurisdiction. A request that an entire submission be kept confidential is not advisable since a submission cannot reasonably consist of all data subject to FOIL proprietary status.

- d. Respondent(s) will not offer any gratuities, favors, or anything of monetary value to any individual, employee, subcontractor, consultant or representative of the Counties (including any and all members of proposal evaluation committees).
- e. Respondent(s) will not collude in any manner, or engage in any practices, with any other Respondent(s), which may restrict or eliminate competition or otherwise restrain trade. This is not intended to preclude subcontracts and joint ventures for the purposes of: a) responding to this RFP, or b) establishing a project team with the required experience and/or capability to provide the goods or services specified herein.
- f. Respondent(s), their authorized representatives, and their agents are responsible for obtaining, and will be deemed to have, full knowledge of the conditions, Requirements, and specifications of the RFP at the time a proposal is submitted to the Counties.
- g. All proposals submitted must be the original work product of the Respondent. The copying or paraphrasing of the work product of another Respondent is not permitted.
- h. The Counties reserve the right to reject any and all Proposals that do not conform to the requirements set forth in this RFP; or that do not contain at least the information required by Section 3.2, Required Content. If no Respondent is selected through this RFP process, then the Counties may utilize any other procurement method available to obtain the Services described herein.
- i. The Counties reserve the right to amend this RFP. The Counties reserves the right to reject any or all of the proposals, or any part thereof, submitted in response to this RFP, and reserve the right to waive formalities, if such action is deemed to be in the best interest of the Counties. The Counties reserves the right to request additional information from any Respondent.
- j. While the Counties are under no obligation to contact Respondents for clarifications, they reserve the right to do so. Depending on the number and quality of the proposals submitted, the Counties may elect to interview all or some of the Respondents during the selection process and to request presentations.

- k. The decision to award a contract shall be based on the ability of the selected Respondent to provide quality products and services and to comply with all applicable laws, rules and regulations.
- l. The award of any contract will be made as judged to be in the best interest of the Counties. The Counties reserve the right to award negotiated contracts to one or more Respondents. The Counties may elect to negotiate directly, or alternatively, to authorize a local development corporation to negotiate a contract or contracts with the selected Respondent, if any. Such contract or contracts will include negotiated terms and conditions including but not limited to indemnification, insurance, bonding, service level agreements, and the review of finances such as they relate to revenue sharing and other arrangements with the Counties.
- m.

2.10 Schedule

Listed below are important target dates and times by which actions related to this RFP should be completed. Note that these target dates are subject to change by the Counties.

<u>EVENT</u>	<u>DATE</u>
Date of Issue of RFP	January 17, 2007
Written Questions from Respondent Due	February 1, 2007
Pre-Proposal Conference	February 8, 2007
Responses to Questions Due to Respondent	February 15, 2007
Proposals Due	March 19, 2007

3.0 PROPOSAL FORMAT AND REQUIRED CONTENT

3.1 Proposal Format

Proposals must be prepared on 8 ½" X 11" letter size paper, printed double-sided, with three holes punched suitable for binding, and optionally bound by three ring binder. The Counties encourage using reusable, recycled, recyclable and chlorine free printed materials for bids, proposal, reports and other documents prepared in connection with this solicitation. Expensive papers and bindings are discouraged as no materials will be returned.

Sections should be separated by labeled tabs and organized in accordance with subject matter sequence as set forth below. Each page of the Proposal must be numbered in a manner so as to be uniquely identified.

Respondents are advised to adhere to the submittal requirements of the RFP. Failure to comply with the instructions of this RFP may cause for rejection of the non-compliant Proposal. Respondent must provide information in the appropriate areas throughout the RFP. Submission of a Proposal in response to this RFP constitutes acceptance of all requirements outlined in the RFP.

Twenty-five (25) copies of the written proposal should be submitted. All proposals should be electronically generated and the printed original signed in ink. Legibility, clarity and completeness are important and essential.

One (1) CD-ROM containing an Adobe Portable Document Format (PDF) version of all proposal materials should also be provided.

The proposal must be signed by individual(s) legally authorized to bind the Respondent(s) and must contain a statement that the proposal and the prices contained therein will remain firm for a period of one hundred-eighty (180) days after receipt by the Counties.

3.2 Required Content

A. Cover Letter of Introduction and Executive Summary

Respondent must submit a letter of introduction and an executive summary of the proposal. The letter of introduction must be signed by a person authorized by your firm to obligate your firm to make the commitments contained in the proposal. Submission of the letter will

constitute a representation by your firm that your firm is willing and able to perform the commitments contained in the proposal. Respondent must also submit an executive summary.

The executive summary will explain Respondent's understanding of the Counties' intent and objectives and how Respondent's Proposal would achieve those objectives. The summary must discuss Respondent's plan for implementing and monitoring the services; approach to project management; strategies, tools and safeguards for ensuring performance of all required services; equipment, software and firmware considerations; training and on-going support; and any additional factors for the Counties' consideration.

Respondent's cover letter must be signed by an authorized representative of the entity committing Respondent to provide the Services as described in this RFP in accordance with the terms and conditions of any contract awarded pursuant to the RFP process. The cover letter must:

- (i) Indicate the number of years the entity has been in business, and provide an overview of the experience and background of the entity and its key personnel committed to this project.
- (ii) Identify the legal name of the entity, its headquarters address, its principal place of business, its legal form (i.e., corporation, joint venture, limited partnership, etc.), and the names of its principals or partners and authority to do business in Illinois.
- (iii) Indicate the name and telephone number(s) of the principal contact for oral presentation, or negotiations.
- (iv) Identify participants in Respondent's "Team." For example if Respondent is a business entity that is comprised of more than one legal participant (e.g., Respondent is a general partnership, joint venture, etc.), then Respondent must identify or cause to be identified all participants involved, their respective ownership percentages, and summarize the role, degree of involvement, and experience of each participant separately.

If Respondent has a prime contractor / subcontractor relationship instead, this information regarding role, involvement and experience is also required for any subcontractor that is proposed to provide a significant portion of the work.

- (v) Provide a chronological history of all mergers and/or acquisitions involving the Respondent team members, including all present and former subsidiaries or divisions and any material restructuring activities, if applicable. Include any such forthcoming

actions, if such disclosure has already been made generally available to the public and is permitted by law.

B. Company Profile Information

Respondent must also submit a brief description of Respondent's firm which will include:

- a. Name, mailing address, e-mail address, telephone number and fax number of the primary contact person for your firm.
- b. A brief description of your firm, including the number of years in business, major business lines, major markets served, company history, relevant operating segments, primary vision and strategy, number of employees, office locations and any Joint Venture Partners.
- c. Respondent must furnish a resolution or some other form of authority, signed by a Chief Executive Officer, Corporate Secretary, or managing partners, which lists the specific officers who are authorized to execute agreements on behalf of the Respondent.
- d. Financial details demonstrating your firm's financial capacity to undertake and complete the project as proposed, which will include.
 - A current audited statement of financial condition and financial statements for the two (2) prior years prepared by an independent certified public accountant and a non-audited statement for the most recent quarter-end with a comparable statement for the prior year. Respondents that are comprised of more than one entity must include financial statements for each entity. The Counties reserve the right to accept or reject any financial documentation other than the financial statements requested by this section. Financial statements should include all of the following:
 - Income/operating statements,
 - Balance sheets,
 - Cash flow statements and/or statements of change in financial position,
 - Appropriate footnotes to above statements and all related schedules, including debt terms and schedules, and contingent liabilities, and
 - A statement of capital investments made over the last five years.
 - A list of other business pursuits of similar size and scope to this RFP that your firm is currently involved in.

- A statement disclosing any state or federal bankruptcy or insolvency proceeding that Respondent has filed or with which Respondent is otherwise involved.
 - Electronic copies or Internet links to the most recent Form 10-K filed by the Respondent with the U.S. Securities and Exchange Commission.
 - Electronic copies or Internet links to all Form 8-Ks filed since the filing of the most recent 10-K.
 - Provide any other information not specifically itemized above that is believed to be demonstrative of your firm's financial capacity.
 - Demonstrate an ability to remain economically viable for a minimum of 10 years and will detail an investment strategy to upgrade the network over time to provide high quality service based on future needs of individuals, businesses and organizations.
- e. If the proposal is submitted with Joint Venture Partners, provide full information concerning the nature and structure of the Joint Venture, including:
- Entity(ies) that will be guaranteeing contract performance.
 - Which entity is responsible for which portion of the work.
 - Date of Joint Venture formation.
 - A statement as to whether the agreement between Joint Venture Partners makes each partner jointly and severally liable for contractual obligations of this project.
- Further regarding joint ventures, if Respondent is a joint venture, attach a copy of the joint venture agreement signed by an authorized officer of each joint venture partner and an Insurance certificate in the name of the joint venture business entity.
- f. Respondent must provide references (preferably at least 3, and preferably from municipalities on contracts of similar scope and magnitude as described in this RFP) performed by your firm including client, reference and telephone numbers, staff members who worked on each project, budget, schedule and project summary.

Descriptions should be limited to one page for each project. If Joint Venture Partners are proposed, provide references for each. Experience will not be considered unless complete reference data is provided. At a minimum, the following information must be included for each client reference:

- Client name, address, contact person name, telephone, and fax number.
- Description of projects similar to the project described in this RFP.
- Nature and extent of Respondent's involvement as the primary contractor. Identify services, if any, subcontracted, and to what other company.
- Total dollar value of the contract.
- Contract term (Start and Expiration).

The Counties may solicit from previous clients, including the Counties, or any available sources, relevant information concerning Respondent's record of past performance.

- g. Describe any strategic changes your firm has undertaken in recent years, such as businesses acquired or divested, reorganizations, etc.
- h. Describe your firm's ownership structure. Identify your firm's board of directors. Respondent must submit a signed and notarized Contractors's/Vendor's Public Disclosure Statement (Suffolk County Form 22). The Contractors's/Vendor's Public Disclosure Statement form is attached to this RFP as Exhibit E.
- i. Describe any and all lawsuits, liens, restraining orders, consent decrees, foreclosures or other legal/financial actions either now pending, in progress or which have been brought against your firm or any of its officers/principals in the past five years. For lawsuits, include date initiated, plaintiff, description, name of court location, docket number, resolution and current status. Regarding product liability issues your firm would typically face during the normal course of business, indicate who would review these issues (e.g. corporate legal counsel, "outside" counsel, etc.) and identify what their opinion is as to your firm's exposure to product liability issues. Also regarding legal actions, Respondent must provide a listing and a brief description of all material legal actions, together with any fines and penalties, for the past 5 years in which (i) Respondent or any division, subsidiary or parent entity of Respondent, or (ii) any member, partner, etc., of Respondent if Respondent is a business entity other than a corporation, has been:
 - A. A debtor in bankruptcy; or
 - B. A plaintiff or defendant in a legal action for deficient performance under a contract or violation of a statute or related to service reliability; or

- C. A Respondent in an administrative action for deficient performance on a project or in violation of a statute or related to service reliability; or
 - D. A defendant in any criminal action; or
 - E. A named insured of an insurance policy for which the insured has paid a claim related to deficient performance under a contract or in violation of a statute or related to service reliability; or
 - F. A principal of a bond for which a surety has provided contract performance or compensation to an obligee of the bond due to deficient performance under a contract or in violation of a statute or related to service reliability; or
 - G. A defendant or Respondent in a governmental inquiry or action regarding accuracy of preparation of financial statements or disclosure documents.
- j. Indicate whether any conflicts of interest would arise if your firm (i.e. management, key employees, large stockholders) entered into this arrangement.
- k. Respondent must provide a summary of the professional qualifications and experience of key personnel who will be dedicated to the services described in this RFP. For each person identified, describe the following information:
- Title and reporting responsibility.
 - Proposed role in this project, including the functions and tasks for which they will have prime responsibility (also indicate areas of secondary responsibility, if appropriate)
 - Pertinent areas of expertise and past experience
 - Base location (local facility, as applicable)
 - Resumes or corporate personnel profiles which describe their overall experience and expertise
- l. Respondent must provide copies of appropriate licenses or certifications required of any individual or entity performing the services described in this RFP in the Counties of Suffolk and Nassau and the State of New York, for itself, its partners and its subcontractors, including evidence that Respondent is authorized by the Secretary of State to do business in the State of New York. Provide copies with the Proposal submission.

C. **Solution Description**

Provide information on your firm's proposed solution to address the following:

1. A description of the solution that is being proposed to meet the Detailed Requirements stated in Section 6.0. Respondent will enumerate their responses according to the outline in this Section.
2. A completed Requirements Compliance Matrix using the template provided as Exhibit D.
3. An estimate of the capital expenses, revenue projections, and operating expenses for the Network over ten years.

D. Deployment Plan

Respondent will provide a deployment plan with high level tasks for deployment over a proposed period of time. Respondent will also describe the project management methodology that will be used to execute on the deployment plan.

The selected Respondent will be expected to execute a proof of concept following the approval of any agreement with the Counties to demonstrate and validate that the solution can meet the requirements in this RFP and all service levels to which agreement may be reached. Please summarize your firm's proposed scope and terms for such a proof of concept.

Respondent must include a comprehensive and detailed description of the process by which it will provide the Services as described in this RFP.

1. Project Timeline

All responses should describe a project timeline that is as rapid as feasible. The Counties desire for the Network to be fully built within two to three years from commencement of construction.

2. Organization Chart

Include an organization chart which clearly illustrates all firms (joint venture partners, if any, subcontractors); their relationship in terms of proposed Services; and key personnel involved and the following information:

- (a) A chart which identifies not only the proposed organizational structure, but also key personnel by name and title. Staffing levels of each organizational unit should be estimated.
- (b) The specific role of each of the firms in a team or joint venture for each task/work activity must be described.

E. Dedicated Resources

- (a) Describe facilities, equipment, personnel, communication technologies and other resources available for implementing any proposed Services.
- (b) Staffing requirements. Provide an assessment of staffing needs for each major activity area by job title and function. The assessment should include full-time equivalents for professional staff and supervisors committed to the project.
- (c) Submit resumes for key personnel that will be committed to this engagement. Correlate team members to the tasks they will be performing during implementation/transition and on-going operations. Along with each resume, Respondent should identify each primary team member working on staff with Respondent, as well as those working in a subcontracting capacity. For each proposed key personnel, describe previous related experience and provide references including: name, address, and telephone number of contact person, and brief description of work history.

F. Value to the Community

To show the value to the community of Respondent's proposal, Respondent will provide detailed information regarding the proposed wholesale rates for all required and optional services that they have the ability and interest to provide and any retail rates offered by the Respondent. Respondent will list the options which will be made available to subscribers. Respondent is responsible for the costs associated with providing the service to subscribers and the Counties will not be responsible for the costs associated with the service, before, during and/or after implementation.

The Counties reserve the right to negotiate pricing which will be offered to subscribers as well as retailers and all contract terms and conditions regarding provision of the service with selected Respondent.

4.0 OVERVIEW OF THE COUNTIES

4.1 Summary

The Counties of Suffolk and Nassau (“Counties”) are municipal corporations of the State of New York. Suffolk County (“Suffolk”) and Nassau County (“Nassau”) are commonly identified jointly as Long Island. The area is known for its high quality of life. As noted in Section 1.4, Long Island is truly a unique place and provides a special opportunity to prospective Respondents.

According to the US Census Bureau, in 2004 the population of Suffolk was 1,449,457. Suffolk is Long Island's eastern most county and covers an area approximately 900 square miles, from 20 miles at its widest part to a length of approximately 86 miles.

According to the US Census Bureau, in 2004 the population of Nassau was 1,317,540. Nassau shares its eastern border with Suffolk and shares its western border with the City of New York. The County is almost 300 square miles. Nassau County is the sixth wealthiest county in the United States on a per capita basis.

Cities across the U.S. and the world are engaging in efforts to study the issues, plan for appropriate business models, review technology options, balance their approach with key policies, solicit input from the community, track regulatory constraints and enablers, understand changes to business processes, inventory and value their assets and understand more fully the potential benefits and cost savings that municipal wireless can bring to their community. These needs can then be used to determine a path forward.

Long Island is well positioned to take advantage of wireless broadband as it is home to 20 colleges and universities, cutting-edge research facilities, and tens of thousands of successful businesses, both large and small. Scientists at Cold Spring Harbor Laboratory, one of the richest wellsprings of the science underlying biotechnology, are making startling strides in the fight against cancer. A company spawned in the Long Island High Technology Incubator at Stony Brook University, where the first MRI image in history was created, has developed the first virtual colonoscopy technology to be approved by the FDA. Brookhaven National Laboratory, where five Nobel Prizes have been won, is developing sensors, antidotes and vaccines in the fight against terrorism.

Coupled with this technological innovation is a keen business acumen that is leading the charge to use telecommunications as an economic development tool. Investment in emerging telecommunications networks through public private partnership is seen as a crucial strategy to

attract and retain business. The governments of Long Island desire technologically advanced networks that will meet the current and future needs for two-way voice, data, video and interactive multimedia communications. The technology should ensure abundant bandwidth and an open platform to promote Long Island as a high tech center.

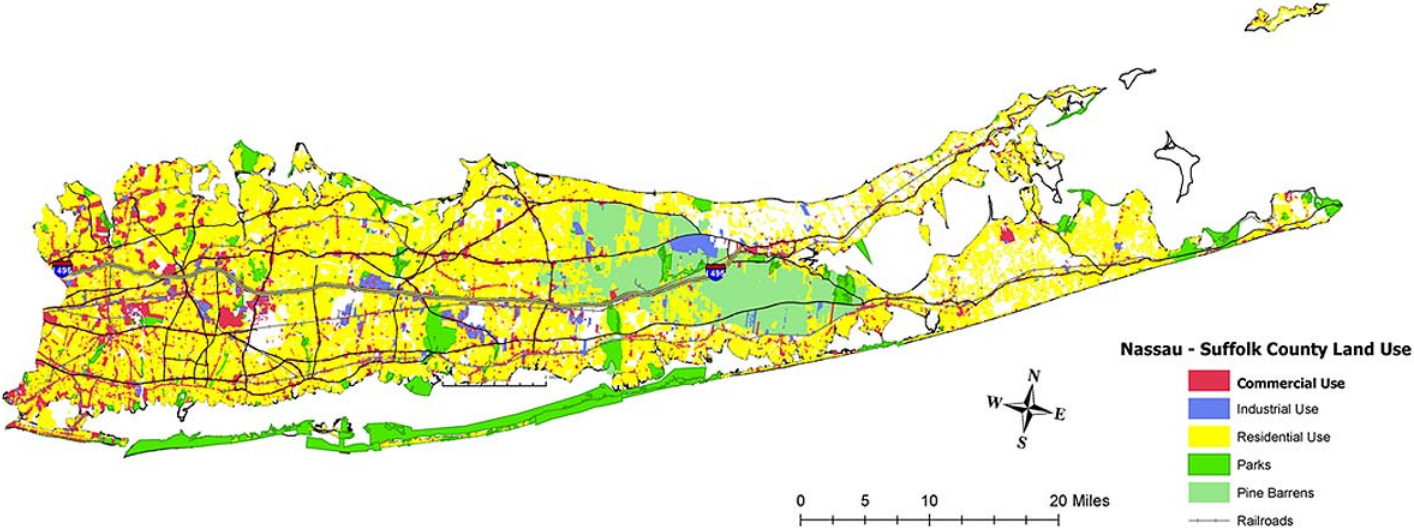
Long Island is exceptional in many other ways that will attract the private sector to partner with Suffolk and Nassau counties to bring ubiquitous, high speed, outdoor broadband to Long Island. The region has one of the lowest unemployment rates in the country, one of the highest per capita incomes and some of the best recreational areas. Money Magazine consistently ranks Long Island as one of the best places to live in the United States and its beaches are consistently named among the top in the nation.

4.2 Geography

Long Island is the largest island adjoining the continental United States, extending approximately 118 miles east-northeast and separated from the mainland on the west by the mouth of the Hudson River as well as the East River. Twenty miles at its widest point, the fish-shaped island is also separated from the mainland on the north by the Long Island Sound and bounded by the Atlantic Ocean on the south and Block Island Sound to the east.

Geographically, Long Island includes the four counties of Kings (Brooklyn), Queens, Nassau and Suffolk. But because Brooklyn and Queens are part of the 5-county City of New York, the Long Island reference is commonly known to mean Nassau and Suffolk Counties exclusively. Long Island (Nassau and Suffolk) measures approximately 100 miles from the Nassau-Queens border to Montauk Point, including 56 miles from the Queens border to Riverhead. From Riverhead, two peninsulas extend eastward separated by the waters of Great Peconic Bay and Gardiner's Bay. The northern peninsula, called the North Fork, ends at Orient Point and is 28 miles in length. The southern peninsula, called the South Fork, ends at Montauk Point, and is 44 miles long. Nestled in the bays between the two forks are Shelter Island and privately owned Gardiner's Island. Nassau-Suffolk's land area is 1,198 square miles (287 square miles in Nassau and 911 square miles in Suffolk) and has a linear shoreline of approximately 1,600 miles. Nassau County is divided into three townships (Hempstead, North Hempstead, and Oyster Bay) containing two cities (Long Beach and Glen Cove), 64 villages and 56 school districts. Suffolk, the larger county is divided into 10 townships which include 31 villages and 72 school districts. Suffolk's 10 townships from west to east include Huntington, Babylon, Islip, Smithtown, Brookhaven, Riverhead, Southampton, Southold, East Hampton and Shelter Island. – *ADVANTAGE LONG ISLAND: An Economic Resource Profile* by Island Publications.

According to the Long Island Regional Planning Board, land within the two Counties is utilized as follows in the image and chart below. All land used for Residential, Commercial, Industrial, Institutional, and Parks must be covered by the Network. Open Spaces, Agriculture, and Vacant land coverage is not required. A larger version of this image is available as well per Appendix C.



**LAND USE, IN SQUARE MILES, 2000
NASSAU AND SUFFOLK COUNTIES, NEW YORK**

	Residential	Commercial	Industrial*	Institutional	Recreation & Open Space	Agriculture	Vacant	TOTAL
City of Glen Cove	4.4	0.4	0.2	0.6	0.4	0.0	0.5	6.5
Town of Hempstead	64.4	8.8	3.4	18.2	18.3	0.0	3.2	116.3
City of Long Beach	1.6	0.1	0.0	0.1	0.1	0.0	0.0	1.8
Town of North Hempstead	36.2	1.9	2.6	2.2	7.1	0.0	1.0	51.0
Town of Oyster Bay	60.3	3.8	2.7	10.2	15.8	1.2	4.7	98.7
Nassau County	166.9	15.0	8.8	31.3	41.7	1.2	9.4	274.3
Town of Babylon	28.5	2.7	3.0	3.9	8.8	0.0	1.2	48.1
Town of Brookhaven	70.8	7.5	7.9	19.2	55.1	8.2	43.6	212.2
Town of East Hampton	22.1	1.0	1.0	0.5	26.6	1.9	14.3	67.3
Town of Huntington	50.4	3.1	5.6	8.1	11.4	1.9	6.6	87.1
Town of Islip	42.0	3.8	3.7	10.1	16.2	0.0	8.0	83.8
Town of Riverhead	12.2	1.7	6.8	0.7	18.0	21.2	3.3	63.8
Town of Shelter Island	4.5	0.3	0.2	0.2	4.3	0.1	1.7	11.2
Town of Smithtown	27.0	2.1	2.3	4.9	8.6	0.2	4.5	49.5
Town of Southampton	49.5	5.2	3.0	5.2	32.1	7.4	21.4	123.8
Town of Southold	17.8	1.6	1.3	2.5	5.8	13.1	8.4	50.5
Suffolk County	324.8	28.8	34.7	55.2	186.9	54.0	112.9	797.4
Total Nassau and Suffolk	491.7	43.8	43.5	86.5	228.6	55.2	122.3	1071.7
Total Residential, Commercial, Industrial, Institutional and Parks across Nassau and Suffolk								750

Note: Land use data does not include roads, highways, bridges, surface waters.

* Industrial use includes utilities and waste disposal facilities.

Source: Long Island Regional Planning Board (SF)

4.3 Demographics

As of the 2000 census, there were 1,317,540 people and 458,151 households in Nassau County with 1,449,457 people and 469,299 households in Suffolk County.

In Nassau County, the population has 24.70% under the age of 18, 7.30% from 18 to 24, 28.90% from 25 to 44, 24.00% from 45 to 64, and 15.00% 65 years of age or older. The median age is 38 years.

In Suffolk County, the population has 26.10% under the age of 18, 7.60% from 18 to 24, 31.20% from 25 to 44, 23.30% from 45 to 64, and 11.80% 65 years of age or older. The median age is 36 years.

The area is an outstanding place to live and has become known for its wealth, particularly along the "Gold Coast" on the North Shore and some areas of the South Shore. The median closing price of newly sold Nassau homes was \$472,300 in October 2006. The comparable Suffolk median was

\$390,000. The median annual household income is \$72,030 in Nassau County and \$65,288 in Suffolk County. Less than 4% of families live below the poverty line in both counties.

Long Island is also known for its strong middle class with a culture of dedication to hard work, suburban homeownership, investment in schools and education and people who are committed to family living and local community events. Many of these are second (or third) generation families who had originally come from New York City, seeking the space and tranquility of the early suburbs.

The Counties are a safe place to live with the second lowest crime rate in the US.

4.4 Economy

The Counties have a diverse economy, some of the highest per capita incomes in the US, and a very low unemployment rate of 3.3%.

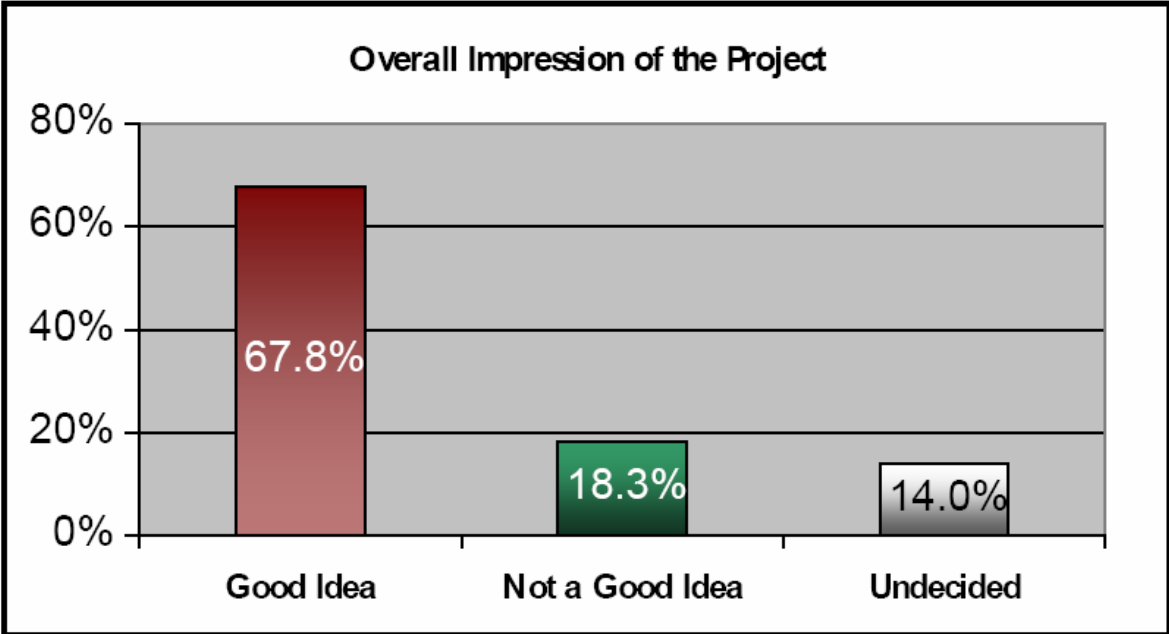
Employment Summary by Industry for Nassau-Suffolk

Industry	Employment, Oct. 2006
Manufacturing	86,100
Construction	69,900
Wholesale Trade	71,500
Retail Trade	162,200
Transportation, Warehousing, Utilities	37,900
Information	29,300
Financial Activities	81,000
Professional & Business Services	164,300
Educational & Health Services	205,300
Leisure & Hospitality Services	97,000
Other Services	53,000
Government	<u>202,000</u>
Total Non-Farm Employment	1,259,500

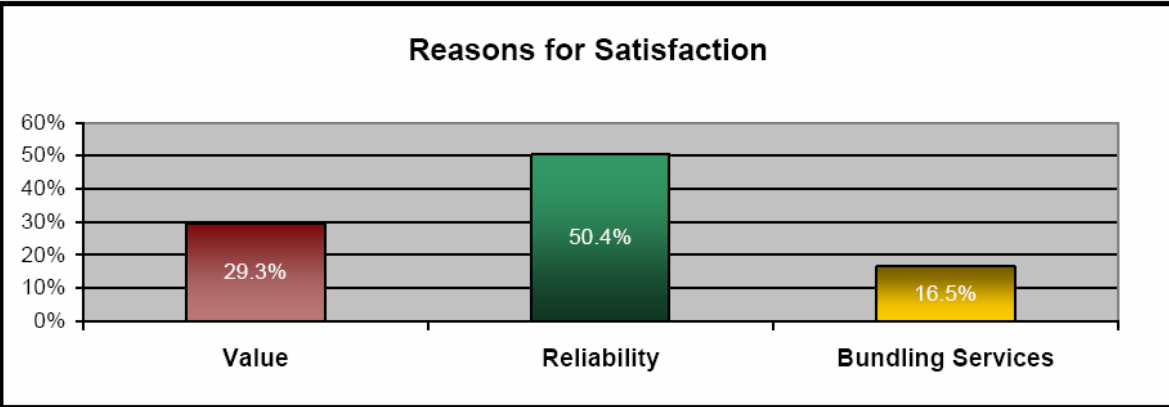
Source: New York State Labor Department

4.5 Internet Access

The Counties commissioned a statistically valid phone survey of 400 interviews of Suffolk and Nassau residents to gauge interest in the project. The study found that residents overwhelmingly support the Wireless Broadband Initiative as shown in the figure below.

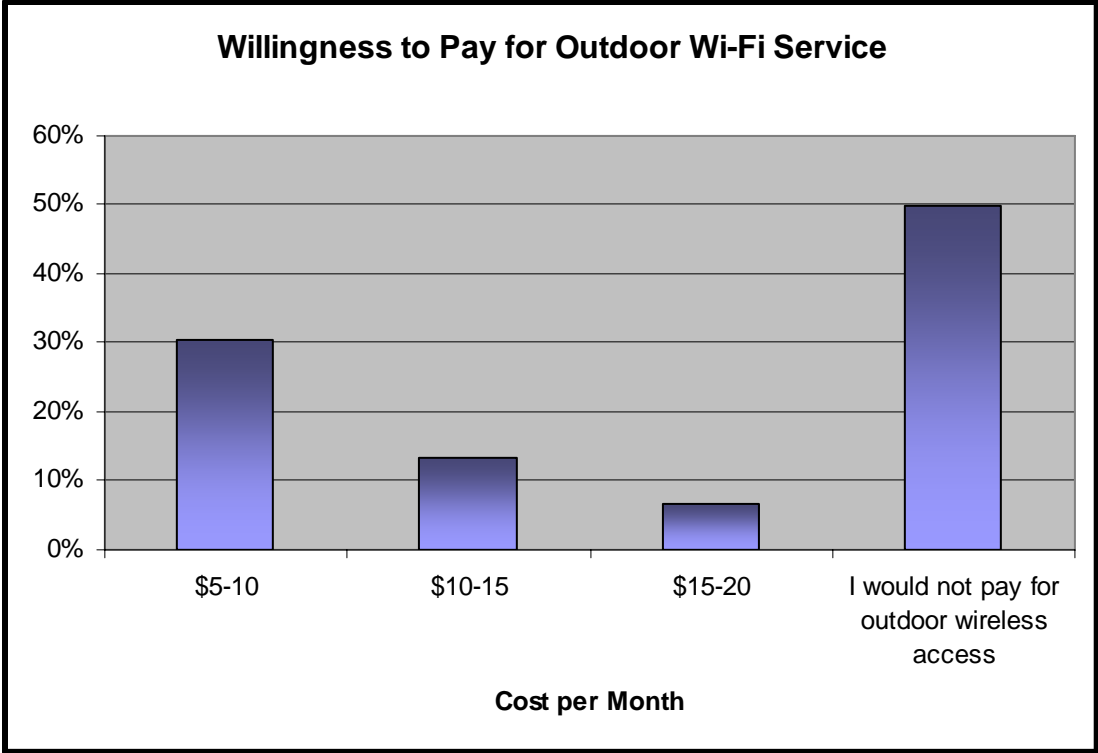


The study also analyzed the rationale for the drivers of satisfaction with Internet service and found reliability is the principle driver.

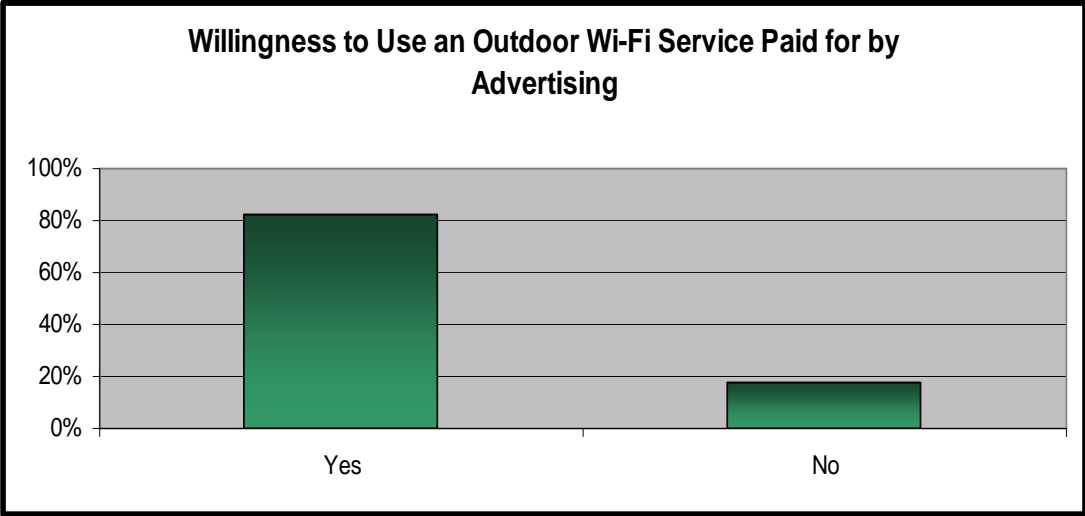


In addition, the Counties conducted an opt-in email survey to understand the likelihood to use a wireless broadband network. This survey is not statistically controlled but had almost 1000 respondents.

One question asked how much residents would be willing to pay for an outdoor Wi-Fi service.



A second question asked about their willingness to use an outdoor Wi-Fi service that was funded through advertising. Respondents are highly likely to use such a service.



4.6 Libraries

The Suffolk County Library System has owned and operated a free dial up service called SuffolkNet to introduce library patrons to the Internet. This service has been live since 1995 and is scheduled to

shut down in 2007. Suffolk County would like to explore how the wireless broadband Network could replace this service with an indoor home service.

4.7 Schools

Schools systems in the Counties are developing one to one laptop initiatives for students. The Counties would like to explore how the Network could support such initiatives, including indoor home service.

4.8 Municipal Demand

The Counties, towns, villages, and hamlets currently rely on various voice and data communications services from private-sector providers. These entities would like to explore how the Network can reduce on-going costs and enabled increased productivity or new services, particularly for field employees and remote devices.

Contemplated uses of the Network include:

- Surveillance cameras
- Vehicle tracking
- District Attorneys and Police Investigators
- Parole Officers
- Pump Stations and waste water treatment plants
- Labor Department on-site presentations, enrollments, and audits as well as youth activities
- Health Services restaurant inspections
- Emergency medical services
- Environmental quality monitoring
- Public health nursing
- Property tax assessment
- GIS
- Board of Cooperative Educational Services

Respondents are encouraged to be creative in defining how the Network could address these and other needs. Specific plans for numbers of accounts and overall anchor tenancy, if any, will not be made until contract negotiations.

4.9 Public Safety

The Counties are interested in how the Network can be used for services such as video cameras, remote access to crime databases, and other applications. Respondents are encouraged to articulate services for public safety.

5.0 ASSETS OF THE COUNTIES

Suffolk has more than 386 miles of highway, almost 1000 traffic signals, and numerous streetlights. There are 62 cellular towers in Suffolk. Suffolk also includes 234 recharge basins, 22 sewer treatment plants and 74 remote pump plant sites. Suffolk also boasts 46,000 acres of parkland.

Nassau has more than 500 miles of highway under its management, approximately 1,530 traffic lights and approximately 586 streetlights. There are approximately 20 cellular towers in Nassau. Nassau also includes 560 storm water basins, 2 major sewer treatment plants and 37 sewage pumping stations. Nassau also boasts 6,100 acres of parkland.

Through this RFP, the Counties seeks to facilitate a public-private-partnership whereby the Counties provide access to certain assets to a private company (or consortium of companies) that will finance, own, design, deploy and manage a citywide wireless broadband infrastructure.

To that end, the Counties are providing a detailed account of assets that it believes may be of value in this public-private partnership. The infrastructure included herein is not intended to be an exhaustive list of useful infrastructure, and proposals will not be evaluated on the basis of having included use of this infrastructure. Respondents should note that one or more of these assets may have restrictions on their use which would preclude their availability for this public-private partnership.

5.1 Overview of Poles

Long Island Power Authority (LIPA) owns a portion of the utility poles throughout the two Counties. LIPA has indicated that it is willing to enter into negotiations regarding the use and fees associated with the use of LIPA's assets.

Across the two counties, there are a total of 142,518 poles with street lights. Of these, over 83,000 are standard fixtures mounted on utility poles with photovoltaic controllers.

Attachments to the street lights are sometimes governed by the local town or village. The Counties expect the LDC to create the proper intergovernmental agreements to facilitate permitting and attachment by the selected Respondent.

Utility poles are on average 35 feet above ground. Standard street lights are typically mounted 25 feet above ground.

In addition, there are 3,978 traffic lights in the two Counties.

5.2 County-Owned Optical Fiber

Nassau County owns a single mode fiber network to control many of its traffic signals. These signals are included in Exhibit C. Suffolk County does not own any long line fiber.

KeySpan Communications owns significant fiber that is available to the project. They provide both dark fiber as well as managed bandwidth solutions (Ethernet, SONET/TDM, wavelength services, etc.) with ~700 route miles (~48,000 fiber-miles) in Nassau and Suffolk Counties. Other fiber from industry may be available as well.

5.3 County-Owned Communications Towers

The Counties own approximately 20 Communications Towers (CTs). These CTs are available for use by the selected Respondent; however specific details about their location, characteristics and use are restricted from broad public release. Heights vary from 50 feet to 350 feet. Details will be provided to finalists.

It should be noted that any engineering on the towers will need to be accompanied by a wind study. Additionally, upon implementation, the Counties will require an interference study at each considered location to ensure that any newly installed equipment will not interfere with existing communications or any new systems being developed.

5.4 County-Owned Buildings

The Suffolk County owns 772 buildings which are distributed throughout the area. Very few of these are more than one story with the exception of the twelve story Dennison Building. Nassau County has 612 municipal buildings, 50 of which are two stories or higher. These mounting locations may be available for use by the selected Respondent. A list of County-owned buildings is included in Exhibit C.

5.5 Transportation

The Counties believe commuter services will be a critical offering for the network and that transportation authorities may be able to provide assets for the project. The Counties do not expect to describe these assets during the RFP process.

5.6 Participating Towns, Villages, and Hamlets and Their Assets

Towns, villages, and hamlets within the Counties' jurisdictions have generally been supportive of the project. Numerous buildings and other facilities may be available, but these facilities should not be counted on by the Respondent.

6.0 DETAILED REQUIREMENTS

The Counties expect Respondents to submit a balanced installation plan that delivers service to various socio-economic neighborhoods in a manner which is fair and consistent. Wireless Internet access will be provided throughout the 750 square miles of developed land of Suffolk and Nassau Counties. Solutions that provide access in only parts of the Counties that are more densely populated or commercially attractive, or that leave entire towns, villages, hamlets, or neighborhoods underserved will not be considered.

The following requirements assume Wi-Fi as the technology of choice for client access given the pervasive and low cost nature of Wi-Fi devices and its free use of spectrum. However, the Counties are open to other wireless broadband open standards such as WiMAX that may suit the large coverage area of the two Counties. Alternative proposals that otherwise meet the requirements below are welcomed.

6.1 Coverage

- a. Outdoor coverage will be provided for a minimum of 95% of all developed areas of the Counties. An area is considered covered under this requirement if a laptop, handheld or other personal computing device - equipped with a minimum of a built-in 802.11b/g (Wi-Fi) interface - can access the network at the provisioned service level with no additional hardware required beyond the device's standard wireless interface. In addition, the Network's signal level should be at or above -65 dBm as measured with a 0 dBi antenna.

6.2 Multi-Use

- a. The Network will support concurrent usage by Counties' agencies, residents, businesses, institutions and visitors to the Counties.
- b. The Network will support the logical segmentation of different "domains" of users (e.g. secure and/or open access for public users, residential users, business users, etc.). This will include the ability to define and manage different profiles (e.g. VLANs) for authentication, encryption and other service characteristics based on the requirements of each user-domain.

- c. The Network will support the ability to prioritize traffic for government usage as required by the Counties. Respondents will define the methods that will be used to prioritize traffic for certain users and applications, including municipal employees, VoIP, multimedia, or in emergency situations.

6.3 Open Access

- a. The selected Respondent will facilitate use of its wireless broadband Internet access and transport services by multiple unaffiliated Service Providers.
- b. The Network will support unilateral, inbound roaming relationships whereby subscribers to other Wi-Fi roaming services may gain access to the Network.
- c. The Network will support unilateral, outbound roaming relationships whereby subscribers to the Network may gain access to other fee-based Wi-Fi roaming services.
- d. The selected Respondent, and any Service Provider affiliated with the selected Respondent, may also provide retail-branded services over the Network.
- e. No client software that is specific to the Network Operator or Service Provider(s) shall be required on PCs, laptops, or other mobile devices in order to use the Network.

6.4 Services and Provisioning

The following services are required services that all Respondents must provide.

- a. The Network will provide a level of free service throughout the Counties. This free service may be unlimited or may be constrained by factors such as time, data volume, application, and/or other criteria and may be funded by advertising or other means. This service must support 802.11 b/g devices and the Counties prefer a best-effort minimum 1 Mbps symmetric data transmission rate per user, a dynamic IP address and other Core ISP Services.
- b. The Network will provide a Basic Data Broadband service without advertising. This service must support 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services.

- c. The Network will provide a Multimedia Broadband service without advertising, supporting 802.11 b/g devices at a best-effort minimum 3 Mbps downlink and 1 Mbps uplink data transmission rate per user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services.

The following services are optional services that the Counties believe are in the best interest of the Counties' residents and businesses. The Counties request that all Respondents describe their ability and interest to provide these services. Respondents may also propose additional services.

- d. The Network will provide a Portable Broadband service. This service should support 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services. Session-level connectivity should be maintained for in-motion subscribers at a minimum speed of 45 MPH and higher speed mobility in the future (60 MPH and greater).
- e. The Network will provide a Commuter Broadband service for public transit, supporting passengers with 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services.
- f. The Network will provide an outdoor and indoor, in home service with CPE for students in educational initiatives such as One Laptop per Child as well as continuing education or replacement of the dial up library service, SuffolkNet. This service should support 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services. Indoor, Perimeter Room coverage may be achieved by using a Wi-Fi interface built into a user's device, a signal amplifier, a high-gain antenna and/or a dedicated Wi-Fi bridge or other type of CPE.
- g. The Network will provide a VoIP service with toll quality voice.
- Are the following metrics possible: a Mean Opinion Score (MOS) of 3.6 or better, a roaming delay less than 50ms, and a maximum one way end-to-end delay of 150ms?
 - What are the bottlenecks on call volumes? How many calls can each access point support? How are these call volume limitations managed to ensure

service does not degrade for existing calls? Can 802.11a provide relief from congestion?

- Is UMA (Unlicensed Mobile Access) supported or other similar means?

Respondents must offer the following attributes of service.

- h. The selected Respondent will allow subscribers to purchase services on a monthly, weekly and daily basis.
- i. Payment methods for all residential services must include credit and debit card. Other methods must be proposed for users who do not have the ability or do not wish to pay with credit or debit cards (e.g. pre-paid vouchers, top-off cards, etc.).
- j. Respondents will include in their proposal the expected costs of any required CPE for each Coverage Requirement and Service defined above. Respondents will also state who will be responsible for CPE costs during the provisioning process and under what conditions CPE discounts and/or subsidies may be provided for subscribers. Respondents will specify the process that will be required for subscribers who self-acquire a CPE and for subscribers who require a new CPE in order to provision service.
- k. The Network will support a wide variety of devices (e.g. personal computers, laptop computers, handheld devices, smart phones, etc.) as well as proprietary, standards-based and open source operating systems (e.g. Microsoft Windows, Apple Macintosh, Linux, etc.).
- l. The Network will provide location-based services and local information (e.g., trailers of movies playing at a local theatre, train schedule near metro stations, etc.) to users that explicitly opt-in.
- m. The Network will enable content providers to offer location-based services on an equal opportunity basis.
- n. The Network will be capable of supporting at least 20 percent of the Counties' population at typical over subscription rates and typical service mix. Assumptions and estimates for the capacity proposed by the Respondent, oversubscription rates, and service penetration rates should be described. Capacity information should include the number of simultaneous users supported within a given area using a variety of services

on the Network. In particular, Respondents should specify how the free level of service will not be negatively impacted by the delivery of paid services including VoIP.

- o. The Network will provide optional parental control filtering to manage access by minors to inappropriate material on the Internet. Respondents should describe the types of controls used to restrict minors access to materials deemed harmful to minors.
- p. The Network will not interfere with the provision of broadband in public libraries.

In addition to the specifications above, the Counties ask Respondents to address:

- q. The Network build-out, phasing and timeline for geographic reach.
- r. The Respondent's recommended initial offering of services, levels and speeds of technologies.
- s. How the Network will be upgraded over time to be "future proof" for the next 10 years. It is anticipated that users will require approximately 100 times more broadband bandwidth than current practices in the next 10 years.
- t. Issues of Radio Frequency (RF) interference.
 - The 802.11b/g standard has only three non-overlapping channels. Given that there are already many hot spots and many residential and business users of WLAN in Long Island, how will the Network interact with existing WLAN users?
 - How will the Respondent coordinate unlicensed spectrum usage and minimize RF interference with members of the community including other wireless internet service providers?

6.5 Service Pricing

- a. Respondents will propose specific wholesale rates for each required service and those optional services for which they have ability and interest to provide. All rates, terms and conditions for Service Providers not affiliated with the selected Respondent shall be as favorable as those provided to any Service Providers affiliated with the selected Respondent.

- b. Respondents will propose estimated rates for any retail services to be marketed to the public.
- c. Respondents will propose discounted rates for government services offered.

6.6 Marketing Plan

- a. Respondents will effectively market the network and services. Describe how the marketing plan will encompass small, medium and large businesses throughout the Counties; non-profit organizations and institutions; residents; and other telecommunications carriers (as wholesale customers) all on a fair, reasonable and non-discriminatory basis.

6.7 Network Infrastructure

- a. The Network will include a wireless Access Tier that supports connectivity from Wi-Fi enabled 802.11b/g devices throughout the Counties with possible migration to 802.11n in the future.
- b. The Network may include a fixed wireless point-to-multipoint solution such as a Backhaul Tier for aggregating Wi-Fi traffic from the Access Tier. Other technologies (wired or wireless) may be proposed for this Backhaul Tier if they are demonstrated to be more suitable and/or cost effective.
- c. The Network may include a fixed wireless point-to-point solution, potentially using licensed or leased spectrum, as a Distribution Tier for aggregating traffic from the Backhaul Tier back to an Internet POP. Optical fiber may be used as an alternative to wireless technology for this Distribution Tier if it is demonstrated to be more suitable and/or cost-effective.
- d. All Network traffic will be aggregated back to a high-speed Internet backbone service at a POP, which will support layer-three network transit for registered Service Providers. Provisions will be made for redundancy throughout the solution.
- e. The Network will support fault tolerance mechanisms to mitigate and/or eliminate single points of failure and ensure high reliability. Respondents will state the reliability levels they will commit to for each tier of the Network. The Network should support reliability levels of 99.9% for the Access Tier and 99.999% for the Backhaul Tier, Distribution Tier and POP are highly desirable.

- f. The Network will support contingency mechanisms to ensure operation during a natural or other disaster. Respondents will describe their proposed disaster recovery plan for the Network as well as the level of disaster preparedness included in the system such as battery backup.
- g. The Network will be easily scaled and upgraded in a modular fashion to support additional subscribers, new applications and new requirements, in order to meet evolving user demands. Respondents will estimate the percentage of the initial Network capital cost that will be invested in upgrades during the contract term and will describe the technology roadmap for any planned upgrades.
- h. The Network will use state of the art equipment which may include advanced antenna systems and mesh technologies. Respondent should elaborate on these advancements and their reliability.
- i. All Network equipment will comply with all relevant electrical, environmental and safety standards and all applicable local ordinances.
- j. Network infrastructure will support Simple Networking Management Protocol (“SNMP”) Version 2.0 and higher.
- k. The Network will be capable of supporting TCP/IP Network protocols including but not limited to Internet Protocol Version 6 (“IPv6”); VPN tunneling; VoIP; and Quality of Service with Wi-Fi Multimedia (“WMM”).

6.8 Customer Service and Network Support

- a. Tier 1 Customer Service for all services will be provided by all registered Service Providers (including the selected Respondent if they are also providing retail services). Tier 1 Support will provide subscribers with phone, web, e-mail and instant messaging support options. If retail services are provided, explain the processes and response times. Respondents should specify the hours of support and include support for the free tier of service.
- b. Tier 2 Customer Service and Support will be provided by the selected Respondent for all registered Service Providers. Tier 2 support should be provided 24 hours a day, 7 days a week. Tier 2 Support must provide Service Providers with phone and email support options. Please explain the processes and response times.

- c. The Network must be monitored and supported 24 hours a day, 7 days a week continuously.
- d. The Counties appreciate the size and scope of managing such infrastructure. The Respondent should explain the tools and processes employed including but not limited to management software and alert functions, NOC locations and monitoring processes, and available real time and historical reporting to the Counties.

6.9 Security

The Network will support multi-layered security protocols and methods, to include at a minimum the following:

- a. All users irrespective of service type will be authenticated. For example, authentication may involve using a login name and/or password to sign in to the Network.
- b. Mechanisms to prevent or mitigate the risk of hackers, spammers, denial of service and other forms of malicious attacks on or through the Network. These mechanisms should balance the need to prevent these attacks, while at the same time not punishing or burdening unnecessarily all users of the Network.
- c. Support for Media Access Control ("MAC") address filtering.
- d. Support for Wired Equivalent Privacy ("WEP") encryption, including, 64, 128, and 196 bit keys.
- e. Support for Temporal Key Integrity Protocol ("TKIP") encryption.
- f. Support for Advanced Encryption Standard ("AES") encryption.
- g. Support for Wi-Fi Protected Access ("WPA") and ("WPA2") and 802.11i.
- h. Support for 802.1x authentication using Extensible Authentication Protocol ("EAP") and Remote Authentication Dial-In User Service ("RADIUS").
- i. Support for the suppression of Extended Service Set Identifier ("ESSID") broadcasts.

- j. Support for multiple ESSIDs and the ability to map ESSIDs individually to Virtual LANs (“VLANs”).
- k. Support for filtering of traffic based on Internet Protocol (“IP”) addresses, subnets and Transmission Control Protocol (“TCP”) ports.
- l. Support for VPN tunneling using Internet Protocol Security (“IPSec”). This VPN support must support true end-to-end encryption, regardless of the point in the Network users elect to terminate their session.
- m. Support for encryption of all control and Network management traffic.
- n. Physical security for all critical Network equipment components via secured facilities.

6.10 Privacy

- a. Respondents must submit a full disclosure of their privacy policy. This privacy policy will adhere to all laws, including, without limitation, all federal and state laws, and will be communicated to all users on the Network and will require users’ explicit acceptance before any service is provisioned.
- b. Users must be required to explicitly opt-in to any service that tracks information about the user’s physical location.
- c. Respondents must submit a full disclosure of any and all privacy and retention policies pertaining to location based services.

6.11 Non Discrimination

- a. The selected Respondent will adhere to the Federal Communications Commission’s (“FCC”) policy position outlining four principles to encourage broadband deployment and preserve and promote the open and interconnected nature of public Internet. These principles are:
 - Consumers are entitled to access the lawful Internet content of their choice;
 - Consumers are entitled to run applications and services of their choice, subject to the needs of law enforcement;

- Consumers are entitled to connect their choice of legal devices that do not harm the network; and
- Consumers are entitled to competition among network providers, application and service providers, and content providers.

6.12 Pilot Network

- a. If selected as a finalist in the RFP process, the Counties reserve the right to request the Respondent to construct and operate a pilot project in a specified area to demonstrate the ability to meet the requirements of the RFP.

7.0 GOVERNING LAW

It is the Counties' position that this RFP intends to create certain obligations and rights and other associated terms and conditions, in the event a contract is executed, regarding ownership and control of the network, the proposed business model, and use of the Counties' assets that are consistent with state and federal communications law. To the extent that applicable laws are amended, new laws are enacted or current laws are interpreted differently by binding authority, the rights/obligations and associated terms and conditions of this RFP and any contract resulting from this RFP process may require reassessment and potential modification.

This RFP shall be governed by and construed in accordance with the laws of the State of New York, without regard to conflict of laws. Venues shall be designated in Suffolk County, New York or the United States District Court for the Eastern District of New York.

EXHIBIT A – DEFINITION OF TERMS

Capture Portal refers to the web page that unauthenticated users will be redirected to when their computing device first attaches to the Network.

CBO refers to Community Based Organizations such as nonprofits, churches, faith-based organizations, social service organizations and community technology centers.

Committee refers to the Wireless Broadband Committee of Suffolk and Nassau County.

Core ISP Services refers to value added features which are bundled with Internet access by Service Providers such as email accounts, newsgroup access and virus and/or spam protection.

Counties refers to the Counties of Suffolk and Nassau, NY.

CPE refers to Customer Premise Equipment.

CT will refer to Communications Tower.

Interior Room refers to a room within a building that does NOT have at least one wall directly facing a public street.

Joint Venture Partner refers to any organization proposing to provide products or services in response to this RFP through a partnership with the Respondent.

LIPA refers to Long Island Power Authority.

Mbps refers to Megabits per second.

MPH refers to Miles Per Hour.

MTBF refers to Mean Time Between Failures.

M/WBE refers to Minority/Women Businesses Enterprises.

Network refers to a community wireless broadband Internet access system that is deployed throughout the Counties.

Network Operator refers to the selected Respondent to this RFP who is responsible for the financing and management of the Network.

NOC refers to Network Operations Center.

Open Access refers to the selected Respondent's commitment to provide access to its wireless broadband Internet access transport services to multiple unaffiliated Service Providers.

Perimeter Room refers to a room within a building that has at least one wall facing a public street.

POP refers to an Internet Point of Presence.

Portable Broadband refers to a service that provides Internet access for an in-motion subscriber at a variety of locations throughout the Counties.

Respondent refers to a prime bidder to this RFP.

Retail Access refers to Network access provisioned to end consumers and businesses

RFP refers to Request for Proposal.

Requirements refer to items defined in Section 6.0 of the RFP.

Service Provider refers to any organization, whether affiliated with the selected Respondent or not, who markets, sells and/or supports services over the Network.

SLP refers to Street Light Poles.

Tier 1 Support refers to the process of responding to, diagnosing and attempting to resolve issues reported by users of the Network.

Tier 2 Support refers to the process of responding to issues escalated by Tier 1 Support representatives who are unable to resolve issues reported by users of the Network.

Tier 3 Support refers to the process of responding to issues escalated by Tier 2 Support representatives who are unable to resolve issues escalated from Tier 1 Support representatives.

TSP refers to Traffic Signal Poles.

VPN refers to Virtual Private Network.

VLAN refers to Virtual Local Area Network.

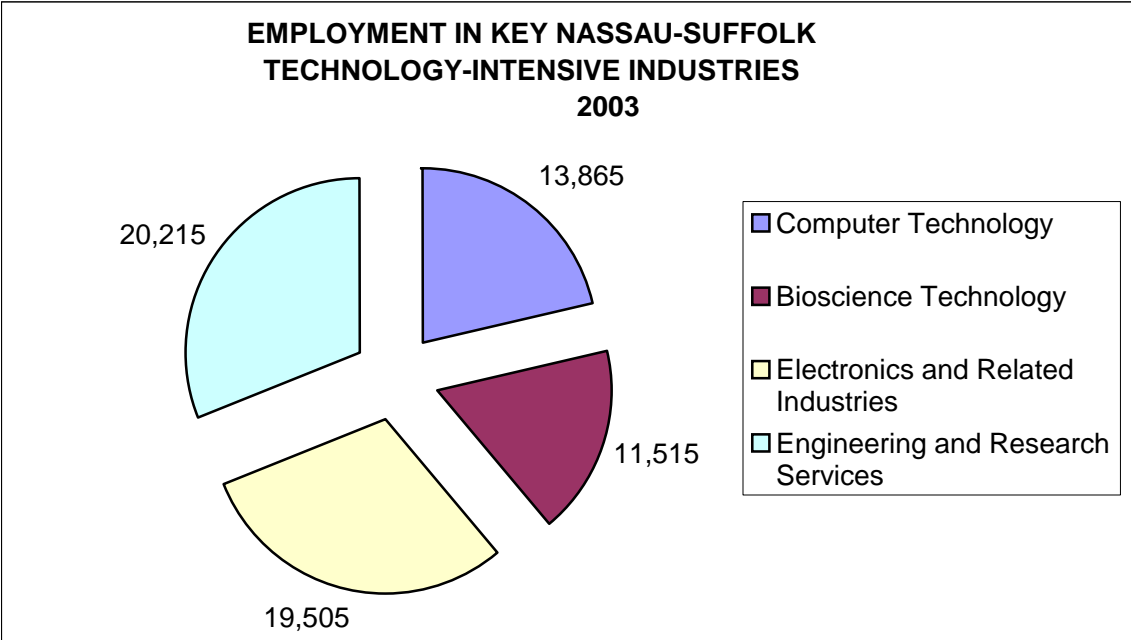
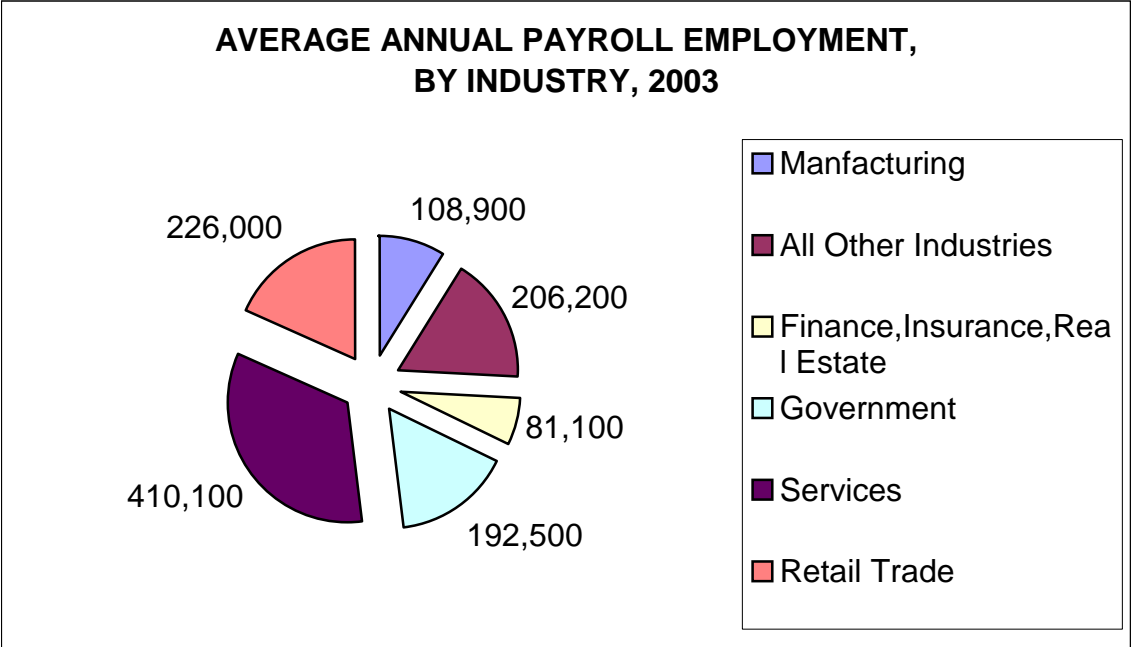
Wholesale Access refers to Network access provisioned to retailers, institutions, or other entities in bulk for resale or consumption.

Wi-Fi (Wireless Fidelity) refers to wireless technologies adhering to the IEEE 802.11b and 802.11g technical standards.

WiMAX (Wireless Interoperability for Microwave Access) refers to wireless technologies adhering to the IEEE 802.16 technical standards.

WPA2 (Wireless Protected Access 2) the follow on security method to WPA for wireless networks. Based on the ratified IEEE 802.11i standard, WPA2 provides government-grade security by implementing the National Institute of Standards and Technology (NIST) FIPS 140-2 compliant AES encryption algorithm and 802.1X-based authentication.

EXHIBIT B – DETAILED DEMOGRAPHICS



Leading High-Tech Firms on LI

Ranked by # of Employees

Rank	Co Name	# of Employees
1	Cablevision	20,000
2	Verizon Communications	4,500
3	KeySpan Corporation	4,287
4	Brookhaven National Laboratory	2,900
5	Computer Associates International, Inc.	2,450
6	Symbol Technologies	2,100
7	Northrop Grumman Integrated Systems	1,800
8	Telephonics Corporation	1,150
9	Photocircuits	1,130
10	BAE Systems CNIR	1,000
11	Arrow Electronics	1,000
12	AT&T	1,000
13	Pall	900
14	Canon USA	865
15	Olympus America Inc	840
16	Cold Spring Harbor Laboratory	825
17	Honeywell Security Group	767
18	MITEQ Inc.	650
19	EDO Electronic Systems Group	600
20	MSC Industrial Direct	590
21	Underwriters Laboratories	510
22	Lightpath, A Cablevision Company	500
23	Verizon Wireless	500
24	Data Device Corp.	460
25	Aeroflex Laboratories, subsidiary of Aeroflex	450
26	Slant/Fin	425

Long Island is home to over 2-dozen Industrial Parks, including the Hauppauge Industrial Park, the Nassau Crossways Int'l Plaza/Gateways Plaza, Roslyn Industrial Park, Westbury Industrial Park and Tri-Harbor Industrial Park. These Industrial Parks are home to many industry-leading corporations, including the following:

Standard Microsystems	OSI	Audiovox
Sprint	Globecom Systems	Reuters

Reckson Associates	State Farm	Forest Labs
Aramis Inc.	Cablevision	Comverse Technology
Seaman's Furniture	Hitachi	Weight Watcher's Int'l
NPD Research	Henry Schein	Pall
Global Equipment	DHL	Allied Digital Technology
Austin Travel	Parker Hannifin ESD	Uniflex
Danka	Koch International	SC Trading

EXHIBIT C – DETAILED COUNTY ASSETS AND COVERAGE AREA

Attachment: List of all High Sites commercially and publicly owned (XLS)

Attachment: Map of Nassau County Cell Towers (PDF)

Attachment: Nassau County Traffic Signals Map (PDF)

Attachment: Nassau and Suffolk County Land Use (JPG) –

Note: this image is approximate

EXHIBIT D – REQUIREMENTS COMPLIANCE MATRIX

Category	Spec No	Description	Specification	Comply	Partially Comply	Do Not Comply	Notes
Coverage	1(a)	Outdoor coverage	Outdoor coverage provided for a minimum of 95% of all developed areas of the Counties. An area is considered covered under this requirement if a laptop, handheld or other personal computing device - equipped with a minimum of an 802.11b/g (Wi-Fi) interface - can access the network at the provisioned service level with no additional hardware required beyond the device's standard wireless interface. In addition, the Network's signal level should be at or above -65 dBm as measured with a 0 dBi antenna.				
Multi-Use	2(a)	Concurrent usage	Network supports concurrent usage by Counties' agencies, residents, businesses, institutions and visitors.				
Multi-Use	2(b)	Segmentation	Network supports the logical segmentation of different "domains" of users (e.g. secure and/or open access for public users, residential users, business users, etc.). This includes the ability to define and manage different profiles (e.g. VLANs) for authentication, encryption and other service characteristics based on the requirements of each user-domain.				
Multi-Use	2(c)	Quality of Service ("QoS")	Network supports the ability to prioritize traffic for government usage as required by the Counties. Respondents will define the methods that will be used to prioritize traffic for certain users and applications, including municipal employees, VoIP, multimedia, or in emergency situations.				
Open Access	3(a)	Wholesale access to other providers	Selected Respondent facilitates use its wireless broadband Internet access transport services by multiple unaffiliated Service Providers.				
Open Access	3(b)	Inbound roaming relationships	Network supports unilateral, inbound roaming relationships whereby subscribers to other Wi-Fi roaming services may gain access to the Network.				
Open Access	3(c)	Outbound roaming relationships	Network supports unilateral, outbound roaming relationships whereby subscribers to the Network may gain access to other fee-based Wi-Fi roaming services.				

Category	Spec No	Description	Specification	Comply	Partially Comply	Do Not Comply	Notes
Open Access	3(d)	Respondent may offer retail services	Selected Respondent, and any Service Provider affiliated with the selected Respondent, may also provide retail-branded services over the Network.				
Open Access	3(e)	No client software required	No client software that is specific to the Network Operator or Service Provider(s) shall be required on PCs, laptops, or other mobile devices in order to use the Network.				
Services and Provisioning	4(a)	Free service	The Network provides a level of free service throughout the Counties. This free service may be unlimited or may be constrained by factors such as time, data volume, application, and/or other criteria and may be funded by advertising or other means. This service must support 802.11 b/g devices and the Counties prefer a best-effort minimum 1 Mbps symmetric data transmission rate per user, a dynamic IP address and other Core ISP Services.				
Services and Provisioning	4(b)	Basic data	The Network provides a Basic Data Broadband service without advertising. This service must support 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services.				
Services and Provisioning	4(c)	Multimedia	Network provides a Multimedia Broadband service without advertising, supporting 802.11 b/g devices at a best-effort minimum 3 Mbps downlink and 1 Mbps uplink data transmission rate per user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services.				
Services and Provisioning	4(d)	Portable - Optional	Network provides a Portable Broadband service. This service should support 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user user that provides unlimited usage, no port blocking, QoS, a dynamic IP address and other Core ISP Services. Session-level connectivity maintained for in-motion subscribers at a minimum speed of 45 MPH and higher speed mobility in the future (60 MPH and				

Category	Spec No	Description	Specification	Comply	Partially Comply	Do Not Comply	Notes
			greater).				
Services and Provisioning	4(e)	Commuter - Optional	Network provides a Commuter Broadband service for public transit, supporting passengers with 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user user that provides unlimited usage, no port blocking, QoS,,a dynamic IP address and other Core ISP Services.				
Services and Provisioning	4(f)	Education - Optional	Network provides an outdoor and indoor, in home service with CPE for students in educational initiatives such as One Laptop per Child as well as continuing education or replacement of the dial up library service, SuffolkNet. This service should support 802.11 b/g devices at a best-effort minimum 1 Mbps symmetric data transmission rate per user, a dynamic IP address and other Core ISP Services. Indoor, Perimeter Room coverage may be provided to residential and commercial buildings throughout the Counties. Indoor, Perimeter Room coverage may be achieved by using a Wi-Fi interface built into a user's device, a signal amplifier, a high-gain antenna and/or a dedicated Wi-Fi bridge or other type of CPE.				
Services and Provisioning	4(g)	VoIP - Optional	Network provides a VoIP service with toll quality voice.				
Services and Provisioning	4(h)	Monthly, weekly and daily access	Selected Respondent allows subscribers to purchase services on a monthly, weekly and daily basis.				
Services and Provisioning	4(i)	Payment methods	Payment methods for all residents include credit and debit card. Other methods must be proposed for users who do not have the ability or do not wish to pay with credit or debit cards (e.g., pre-paid vouchers, top-off cards, etc.).				
Services and Provisioning	4(j)	CPE costs	Respondent includes in its proposal the expected costs of any required CPE for each Coverage Requirement and Service defined above. Respondent states who is responsible for CPE costs during the provisioning process and under				

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			what conditions CPE discounts and/or subsidies may be provided for subscribers. Respondents will specify the process required for subscribers who self-acquire a CPE and for subscribers who require a new CPE in order to provision service.				
Services and Provisioning	4(k)	Variety of devices and operating systems	Network supports a wide variety of devices (e.g. personal computers, laptop computers, handheld devices, smart phones, etc.) as well as proprietary, standards-based and open source operating systems (e.g. Microsoft Windows, Apple Macintosh, Linux, etc.).				
Services and Provisioning	4(l)	Location-based services	Network provides location-based services and local information (e.g., trailers of movies playing at a local theatre, train schedule near metro stations, etc.) to users that explicitly opt-in.				
Services and Provisioning	4(m)	Location-based services	Network enables content providers to offer location-based services on an equal opportunity basis.				
Services and Provisioning	4(n)	Oversubscription and service penetration	Network is capable of supporting at least 20 percent of the Counties' population at typical over subscription rates and typical service mix. Assumptions and estimates for the capacity proposed by the Respondent, oversubscription rates, and service penetration rates are described.				
Services and Provisioning	4(o)	Filtering	The Network provides optional parental control filtering for access by minors to inappropriate material on the Internet. Respondent describes the types of controls used to restrict minors access to materials deemed harmful to minors.				
Services and Provisioning	4(p)	Noninterference with libraries	The Network does not interfere with the provision of broadband in public libraries.				
Services and Provisioning	4(q)	Build Out	Respondent addresses the Network build-out, phasing, and timeline for geographic reach				
Services and Provisioning	4(r)	Initial Offerings	Respondent addresses its recommended initial offering of services, levels and speeds of technologies.				
Services and Provisioning	4(s)	Upgrade	Respondent addresses how the Network will be upgraded over time to be "future proof" for the next 10 years. It is anticipated that users will require				

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			approximately 100 times more broadband bandwidth than current practices in the next 10 years.				
Services and Provisioning	4(t)	Interference	Respondent addresses issues of Radio Frequency (RF) interference.				
Service Pricing	5(a)	Wholesale rates	Respondent proposes specific wholesale rates in its proposal for each required service and those optional services for which they have the ability and interest to provide. All rates, terms and conditions for Service Providers not affiliated with the selected Respondent shall be as favorable as those provided to any Service Provider affiliated with the selected Respondent.				
Service Pricing	5(b)	Retail rates	Respondent provides estimated rates for any retail services to be marketed to the public by the selected Respondent.				
Service Pricing	5(c)	Retail rates	Respondent proposes discounted rates for government services proposed by the Respondent.				
Marketing Plan	6(a)	Marketing	Respondent explains how it will effectively market the network and services. Respondent describes how the marketing plan will encompass small, medium and large businesses throughout the Counties; non-profit organizations and institutions; residents; and other telecommunications carriers (as wholesale customers) all on a fair, reasonable and non-discriminatory basis.				
Network Infrastructure	7(a)	Preferred technology	Network includes a wireless Access Tier that supports connectivity from Wi-Fi enabled 802.11b/g devices throughout the Counties with possible migration to 802.11n in the future.				
Network Infrastructure	7(b)	Backhaul throughput	Network includes a fixed wireless point-to-multipoint solution such as a Backhaul Tier for aggregating Wi-Fi traffic from the Access Tier. Other technologies (wired or wireless) may be proposed for this Backhaul Tier if they are demonstrated to be more suitable and/or cost effective.				
Network	7(c)	Distribution tier	Network includes a fixed wireless point-to-point				

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Infrastructure			solution, potentially using licensed or leased spectrum, as a Distribution Tier for aggregating traffic from the Backhaul Tier back to an Internet POP. Optical fiber may be used as an alternative to wireless technology for this Distribution Tier if it is demonstrated to be more suitable and/or cost-effective.				
Network Infrastructure	7(d)	Internet backbone	All Network traffic is aggregated back to a high-speed Internet backbone service at a POP, which supports layer-three Network transit for registered Service Providers. Provisions will be made for redundancy throughout the solution.				
Network Infrastructure	7(e)	Network reliability	Network supports fault tolerance mechanisms to mitigate and/or eliminate single points of failure and ensure high reliability. Respondent states the reliability levels committed to for each tier of the Network. Reliability levels of 99.9% for the Access Tier and 99.999% for the Backhaul Tier, Distribution Tier and POP are highly desirable.				
Network Infrastructure	7(f)	Disaster planning	The Network supports contingency mechanisms to ensure operation during a natural or other disaster. Respondent describes its proposed disaster recovery plan for the Network as well as the level of disaster preparedness included in the system such as battery backup.				
Network Infrastructure	7(g)	Scalability	Network is easily scaled and upgraded in a modular fashion to support additional subscribers, new applications and new requirements, in order to meet evolving user demands. Respondent estimates the percentage of the initial Network capital cost that will be invested in upgrades during the contract term and describes the technology roadmap for any planned upgrades.				
Network Infrastructure	7(h)	State of the Art	The Network uses state of the art equipment which may include advanced antenna systems and mesh technologies. Respondent elaborates on these advancements and their reliability.				
Network	7(i)	Compliance with	All Network equipment complies with all relevant				

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Infrastructure		safety standards	electrical, environmental and safety standards and all applicable local ordinances.				
Network Infrastructure	7(j)	SNMP v2	Network infrastructure supports Simple Networking Management Protocol ("SNMP") Version 2.0 and higher.				
Network Infrastructure	7(k)	TCP/IP support	The Network is capable of supporting TCP/IP Network protocols including but not limited to Internet Protocol Version 6 ("IPv6"); VPN tunneling; VoIP; and Quality of Service with Wi-Fi Multimedia ("WMM").				
Customer Service and Support	8(a)	Tier 1 Support	Tier 1 Customer Service for all services is provided by all registered Service Providers (including the selected Respondent if they are also providing retail services). Tier 1 Support provides subscribers with phone, web, e-mail and instant messaging support options. If retail services are provided, Respondent explains the processes and response times. Respondent specifies the hours of support and includes support for the free tier of service.				
Customer Service and Support	8(b)	Tier 2 Support	Tier 2 Customer Service and Support is provided by the selected Respondent for all registered Service Providers. Tier 2 support is provided 24 hours a day, 7 days a week. Tier 2 Support provides Service Providers with phone and email support options. Respondent explains the processes and response times.				
Customer Service and Support	8(c)	Monitor Network 24x7	The wireless Network must be monitored and supported 24 hours a day, 7 days a week continuously.				
Customer Service and Support	8(d)	Management Processes	The Respondent explains the tools and processes employed including but not limited to management software and alert functions, NOC locations and monitoring processes, and available real time and historical reporting to the Counties.				
Security	9(a)	User authentication	All users irrespective of service type will be authenticated. For example, authentication may involve using a login name and/or password to sign				

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			in to the Network.				
Security	9(b)	Protect against attacks	Mechanisms provided to prevent or mitigate the risk of hackers, spammers, denial of service and other forms of malicious attacks on or through the Network. These mechanisms balance the need to prevent these attacks, while at the same time not punishing or burdening unnecessarily all users of the Network.				
Security	9(c)	MAC address filtering	Support for Media Access Control ("MAC") address filtering.				
Security	9(d)	WEP support	Support for Wired Equivalent Privacy ("WEP") encryption, including both 64, 128 and 196 bit keys.				
Security	9(e)	TKIP support	Support for Temporal Key Integrity Protocol ("TKIP") encryption.				
Security	9(f)	AES support	Support for Advanced Encryption Standard ("AES") encryption.				
Security	9(g)	WPA support	Support for Wi-Fi Protected Access ("WPA") and ("WPA2") and 802.11i.				
Security	9(h)	802.1x authentication	Support for 802.1x authentication using Extensible Authentication Protocol ("EAP") and Remote Authentication Dial-In User Service ("RADIUS").				
Security	9(i)	ESSID support	Support for the suppression of Extended Service Set Identifier ("ESSID") broadcasts.				
Security	9(j)	VLAN support	Support for multiple ESSIDs and the ability to map ESSIDs individually to Virtual LANs ("VLANs").				
Security	9(k)	Filtering based on IP addresses, subnets and TCP ports	Support for filtering of traffic based on Internet Protocol ("IP") addresses, subnets and Transmission Control Protocol ("TCP") ports.				
Security	9(l)	Support for VPN	Support for VPN tunneling using Internet Protocol Security ("IPSec"). VPN support includes true end-to-end encryption, regardless of the point in the Network users elect to terminate their session.				
Security	9(m)	Encrypt Network traffic	Support for encryption of all control and Network management traffic.				
Security	9(n)	Physical security	Physical security for all critical Network equipment components via secured facilities.				
Privacy	10(a)	Privacy policies	Respondent submitted a full disclosure of its privacy policy. The Privacy policy adheres to all				

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			laws, including, without limitation, all federal and state laws, and will be communicated to all users on the Network and will require users' explicit acceptance before any service is provisioned.				
Privacy	10(b)	Opt-in	Network requires users to explicitly opt-in to any service that tracks information about the user's physical location.				
Privacy	10(c)	Privacy policies regarding location based-services	Respondent submitted a full disclosure of any and all privacy and retention policies pertaining to location based services.				
Non Discrimination	11(a)	Four freedoms	Respondent adheres to the Federal Communications Commission's ("FCC") policy position outlining four principles to encourage broadband deployment and preserve and promote the open and interconnected nature of public Internet.				
Pilot Network	12(a)	Pilot Network	If selected as a finalist in the RFP process, the Counties reserve the right to request the Respondent to construct and operate a pilot project in a specified area to demonstrate the ability to meet the requirements of the RFP.				

EXHIBIT E – REQUIRED FORMS

Attachment: Public Disclosure Statement (WORD)