



Aquidneck Island  
Broadband Advisory Board  
Request for Information – Broadband Development and Deployment

*October 15, 2013*



## Aquidneck Island Broadband Advisory Board: Request for Information – Broadband Development and Deployment

Aquidneck Island wants to deploy a fiber broadband system to homes and businesses on the island, with equality of access and service in business, commercial, and residential areas of the community. The goal is to deploy fiber optic infrastructure to retain existing businesses on the island and to attract new businesses. The infrastructure should enable new services and enhance work activities in the home. The ideal network architecture for Aquidneck Island would include all of the following:

- Gigabit speed fiber infrastructure offering symmetric bandwidth to all business, government and residential locations in support of HD video conferencing, on demand video streaming, high performance private networking, and other bandwidth intensive applications. Symmetric bandwidth is needed at all residential locations to encourage and support work from home opportunities and support cloud based applications and services.
- A fully integrated network architecture with fiber to all homes and business for high bandwidth services, and wireless services for mobile access to the network throughout the island.
- Aquidneck Island defines broadband as having enough network capacity available to support any and all business, personal, and community services and applications. Internet service will be just one of many services available to the network. The ideal network architecture should allow affordable and easy expansion of network capacity as new services and needs develop.
- A service-oriented architecture supporting a wide range of services beyond today's "bundled" services. The network should be able to include services offerings from a wide range of providers, including local businesses. Services on such a network could include virtual private networks (VPNs), HD videoconferencing, HD videophone, HD video streaming, movies on demand, video on demand, Internet access, public access video on demand, live streaming of community events in HD, peer to peer file sharing, local music and video services, media rich ecommerce, telehealth and remote health services utilizing HD video, climate related management, media rich K12 learning resources, distance learning and online courses, online gaming, home and business IP-based security services, hosted business applications and services, Voice over IP (VoIP) telephone services, virtual office services, and many other media-rich and bandwidth-intensive applications.
- Low cost of entry for service and application providers. The network should support a low cost of market entry for service providers and entrepreneurs.
- The network should be affordable. As much of the United States continues to build out low cost high bandwidth infrastructure Aquidneck Island and Rhode Island in general continue with constraints due to high cost, low bandwidth offerings. Aquidneck Island is prepared to help aggregate the community as a single, unified marketplace to assist with this goal.



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The Towns of Newport, Middletown, and Portsmouth, Rhode Island are located on Aquidneck Island, 184 miles from New York City and 70 miles from Boston. Access to Aquidneck Island is available over three bridges that serve the island.

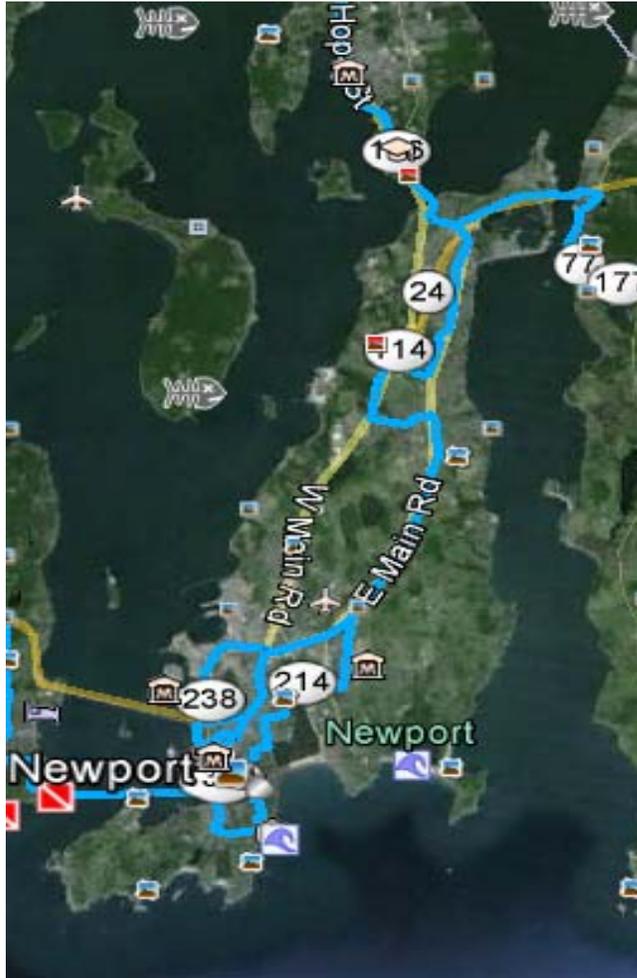


Figure 1 Map of OSHEAN network resources on Aquidneck Island

Citizens of the island have limited access to broadband infrastructure, mainly consisting of a single provider cable service, DSL, satellite service, cellular telephone or dial-up with typical speeds in the single digit Mbps range. The island is also served by the OSHEAN network, a BTOP funded middle mile fiber network that has been deployed on the island but is currently underutilized and capable of connecting the island to the Internet through the OSHEAN network operations center in North Kingston, Rhode Island (OSHEAN is a non-profit coalition of universities, hospitals, government agencies, and other non-profit organizations dedicated to providing innovative Internet-based technology solutions for its member institutions and the communities they serve.)

While the OSHEAN network currently is not being utilized by existing providers on the island, respondents to this RFI could choose to partner with OSHEAN as part of their proposal to deliver Internet backhaul services using their existing connections to the Internet on the mainland or use other backhaul services to reach the island.

No policy decision has been made by the three governing bodies (individual town councils) Councils on the island about whether it is best achieved via private sector alone, by the municipalities themselves, or as a public/private partnership between the Aquidneck Island municipalities and the private sector. Aquidneck Island is looking to leverage better broadband infrastructure to promote economic development, improve quality of life and is seeking innovative and complete solutions to incubate work-related, personal, and community opportunities.

This effort will result in the development of a master plan for improving broadband infrastructure island-wide, including finance options, grants, and policies for the installation of high speed fiber optic broadband.



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Therefore, the Aquidneck Island Broadband Advisory Group is distributing the Request for Information to groups to perform an initial design effort. The Advisory Board is looking for suggestions that will allow them to better inform their respective Town and City Council's regarding an appropriate approach and structure of a potential "first mile" provider solutions. The Request for Information is an opportunity for outside groups to suggest overviews of how they envision benchmarked "best practices" for similar efforts in other communities. By spring of 2014 Aquidneck Island intends to select an approach to improving its broadband infrastructure by evaluating responses to this RFI and using specific criteria including, in no particular order:

- Risks associated with the proposed solution
- Scope of solution proposed
- Experience with municipal and regional broadband network design, operations and construction
- Operating structure, financial costs, and potential funding sources
- Type of business model proposed
- Type of business model proposed

After receiving the responses from this RFI a recommendation will be made to the three island Councils on specific ways to proceed to achieve its goal of pursuing world class gigabit speed broadband capacity, connectivity, and access to all Aquidneck Island residents and businesses.

Aquidneck Island seeks information from private sector firms which would consider assisting the island in determining appropriate structures with the long-term potential goal of implementing gigabit speed broadband island-wide. The information requested in this RFI is a preliminary step that will help inform the communities and serve as a base to begin the potential process to identify potential partners and respective approaches to bringing world class infrastructure and broadband services to the island.

### **How to Respond**

All responses are due by November 15, 2013. Three paper responses are required in addition to a single PDF file emailed to the address below. Please return all responses to Middletown's purchasing agent Lynne Dible at [purchasing@middletownri.com](mailto:purchasing@middletownri.com).

Respondents need not be a network operator or existing service provider; however they must demonstrate significant experience in broadband network design, construction implementation or operations. Innovative business proposals and multi-company partnerships are encouraged. Proposals could be submitted as a partnership among several companies willing to jointly provide a complete solution.

Questions about this RFI may be emailed to [AIN@middletownri.com](mailto:AIN@middletownri.com). All questions and answers will be distributed to all firms providing appropriate contact information (e.g., contact name, email, and phone number).



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### **Response Organization**

All questions should be answered concisely, and limits on response and length should be observed.

### **Company Overview**

Provide a concise overview of your firm, its technical capabilities, experience with design, construction, implementation or operations of fiber broadband networks, size, staffing, financial strength, and any other relevant information. (Limit: 1000 words or less)

### **Business Model**

Aquidneck Island will consider and evaluate a variety of business models that will bring gigabit speed broadband to Aquidneck Island, and is interested in understanding which investments in infrastructure might be needed to attract service providers and network operators. Describe your business model concisely, and be specific about your expectations for investment for passive and active infrastructure (if any), marketing costs, operating expenditures, and revenue sharing. (Limit: 1000 words or less)

### **Network Architecture**

Provide a concise description of the high level network architecture. Be specific about capacity and characteristics of the infrastructure solution proposed (e.g., active, passive, fiber, copper, wireless, etc.). Include the kind of capacity available to large businesses, small businesses, institutions (government, education, healthcare, etc.), residents, and any mobile or wireless access. Provide estimated costs for core, distribution, and access portions of the network, as well as an estimated per premise cost. (Limit: 1000 words or less plus diagrams and illustrations as needed).

### **Network Buildout**

Describe how the network would be built, with special attention to island responsibilities (e.g., financial, rights of way, construction oversight). Provide an estimate of the time needed to service 90% of homes and businesses. (Limit: 500 words or less plus diagrams and Gantt charts as needed).

### **Services and Service Providers**

Please provide an overview of what types of service would be available within the first two years of operation and provide estimates of the price structure for typical voice, video content and entertainment services, and Internet access services. Describe what firm or firms would provide the services, whether the system, would be operated as an open or closed network, and how service providers would be qualified to offer services (if required). (Limit: 750 words or less)

### **Network Operations**

Describe who would provide day to day operation of the network, including typical network operations, levels of staffing, and Aquidneck Island responsibilities if any, and problem escalation procedures for both users and service providers. Please describe what operations center facilities would be needed on the island to host and manage the network infrastructure. (Limit: 500 words or less)



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### **Network Maintenance**

Describe how maintenance of the physical network (active and passive components) would be managed. Describe Aquidneck Island responsibilities, if any. (Limit 250 words)

### **Financing**

Describe the expected financing plan. This should include your expectations for Aquidneck Island's financial commitment to this effort. Be specific and indicate the kind and type of financial support (e.g. private investments of cash, revenue bonds, physical infrastructure improvements, easements, maintenance, etc.). If your firm can bring additional investors or funding solutions as part of your solution, include information on those options. (Limit: 1000 words or less)

### **Capacity**

1. In your system, will every business location be offered the same base level of bandwidth capacity and quality of service (QoS)?
2. In your system, will every service provider with equipment attached to the system (a local connection or remote connection to a local switch or router) be able to obtain the same QoS and traffic management that your own services would receive? Would you charge competing service providers more than your internal chargeback fees to achieve specific QoS levels needed to support services such as voice or videoconferencing and bandwidth intensive streaming services?
3. Will your system, be capable of providing symmetric bandwidth to business customers?
4. Will there be an extra charge to provide symmetric bandwidth to business customers
5. Will your system be capable of providing symmetric bandwidth to residential customers?
6. Will there be an extra charge to provide symmetric bandwidth to residential customers?
7. What is the maximum guaranteed speed of the access network that will be offered to residential customers?
8. What is the maximum guaranteed speed of the access network that will be offered to business customers?



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### **Confidentiality Statement**

The undersigned, on behalf of \_\_\_\_\_ (“Respondent”), executes this Confidentiality Statement (“Statement”) as of the \_\_\_\_\_ day of \_\_\_\_\_, 2013/2014.

### **Background**

Respondent is considering whether to respond to the Request for Information (“RFI”) issued by the Towns of Newport, Middletown, and Portsmouth (“Aquidneck Island”), regarding the construction and operation of a broadband fiber-optic network. In order to assist Respondent in its preparation of its response to the RFI the, Aquidneck Island will provide Respondent with certain non-public information (“Confidential Information”) about Aquidneck Island infrastructure.

Aquidneck Island is providing the Confidential Information with the understanding that it will be used only for the purpose of responding to the RFI, and will under no circumstances be distributed publically without the express written permission of the Aquidneck Island Broadband Advisory Board.

In recognition of the benefits to Respondent of receiving Confidential Information Aquidneck Island, Respondent will undertake the following obligations with respect to the Confidential Information:

1. Respondent will maintain the confidentiality of the Confidential Information whether transmitted in writing, verbally, or electronically.
2. Respondent will only have a duty to protect Confidential Information if it is disclosed in a manner in which Aquidneck Island reasonably communicated, or Respondent should reasonably have understood under the circumstances, that the disclosure should be treated as confidential, whether or not the specific designation “confidential” or any similar designation is used.
3. Respondent may use Confidential Information only for the purpose of responding to the RFI. Respondent will use reasonable degree of care to protect Confidential Information and to prevent any unauthorized use or disclosure of Confidential Information. Respondent may share the Confidential Information with its employees, directors, agents or third party contractors who need to know it and if they have agreed with the Respondent in writing to keep the information confidential. Respondent will promptly notify Aquidneck Island of an unauthorized access to Confidential Information of which Respondent becomes aware.
4. Respondent shall: (a) protect all Confidential Information using the same practices it uses to protect trade secrets; (b) notify Aquidneck Island immediately upon receipt of a request if Respondent believes a response to a request requires the disclosure of Confidential Information; and (c) immediately provide Aquidneck Island with a copy of any request by a third party seeking inspection and copies of such Confidential Information from Respondent. Respondent may disclose Confidential Information by subpoena or otherwise when compelled to do so by law if it provides reasonable prior notice to Aquidneck Island, unless a court orders that Aquidneck Island not be given notice. However, Aquidneck Island may oppose release, at



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- Aquidneck Island’s expense. Respondent must provide reasonable assistance to Aquidneck Island in opposing the subpoena or request.
5. Confidential Information does not include information that (a) was known to Respondent without restriction before receipt from Aquidneck Island; (b) is publicly available through no fault of Respondent; (c) is rightfully received by Respondent from a third party without a duty or confidentiality; or (d) is independently developed by the Respondent.
  6. Respondent will make copies of the Confidential Information only as reasonably necessary for Respondent to engage in the purpose of responding to the RFI. Because the Confidential Information is confidential for public safety or security reasons, all copies of such information including the original(s) must be returned to Aquidneck Island or destroyed when no longer needed for the purpose of responding to the RFI. However, in no event are copies to be retained longer than one year from the date of this Statement unless otherwise permitted by Aquidneck Island in writing.
  7. Respondent understands that Aquidneck Island is under no obligation to proceed with any business transaction with it.
  8. Respondent understands that it does not acquire any intellectual property rights to the Confidential Information except the limited rights necessary to use the Confidential Information for the purpose of responding to the RFI.
  9. By accepting the Confidential Information, Respondent understands and acknowledges that the exclusive venue for any dispute relating to it shall be Aquidneck Island, and that its obligations with respect to the Confidential Information will be governed by the laws of the State of Rhode Island.
  10. Respondent represents and warrants that its undersigned officer has full authority and capacity to execute this Statement on its behalf:

Signature: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Signed and sworn before me this \_\_\_\_\_ day of \_\_\_\_\_, 2013

\_\_\_\_\_  
Notary Public