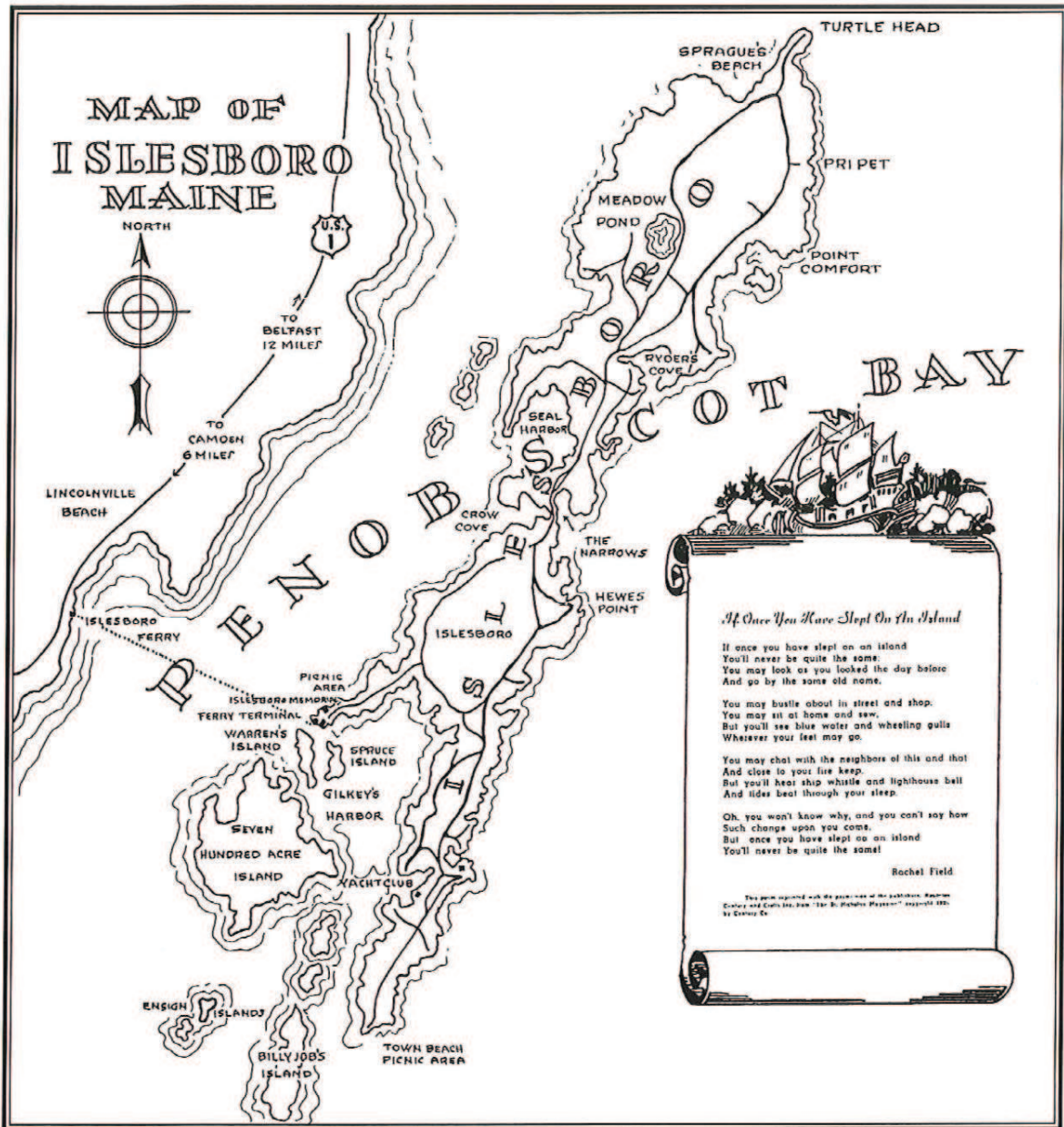


Request for Information

Universal High-Speed Home and Small Business Internet Access

July 25, 2014

Town of Islesboro
150 Main Road
Islesboro, ME 04848



1. Summary

The Town of Islesboro, hereinafter referred to as “the Town”, “Islesboro”, “community” and/or “the Island” is soliciting information from internet service providers, hereinafter referred to as ISPs and or “providers,” for high-speed internet services to homes and small businesses.¹ The purpose of this RFI is to obtain information to help the community determine the interest of the internet service providers in deploying universal high-speed internet service on the Island. The information provided in service provider responses will help guide the community in making decisions in how to meet their broadband objectives. Responses shall describe solutions that achieve three discrete goals.

- a. 100% broadband availability to all homes and businesses
- b. 10 mbps symmetrical service available for purchase and a provider plan for maintaining services that meets or exceeds offerings found in the mainland communities of Camden, Lincolnville, and Rockport.
- c. Service availability and support equivalent to that provided by the island transmission and distribution utility Central Maine Power (CMP)

It is hoped that such responses result in the community engaging in negotiations with a provider to partner in a broadband project, but the Town reserves the right to proceed or not proceed with such negotiations at its sole option. Providers are solely responsible for the costs of responding to this RFI, and such a response does not bind the Town to enter into an agreement with any party.

The Town foresees the following RFI schedule. Respondents will have 14 days to submit questions on the RFI documentation. Tilson and the Town will respond within seven days. **Final responses are due via email to Tilson by 5:00 PM on August 7, 2014.**

Aaron Paul
apaul@tilsontech.com

RFI Released	June 25, 2014
Pre-Response Conference Call	July 2, 2014
Tilson and the Town will hold a conference call to answer respondent’s preliminary questions.	
Questions from Respondents Due	July 9, 2014
Respondents will submit remaining questions to the Tilson point of contact by 5:00 PM	
Responses to Respondent Questions	July 16, 2014
Tilson and the Town will provide responses to the respondent questions.	
Responses Due to the Town	August 7, 2014
Respondents will submit their cost and technical proposals to the town by 5:00 PM on this date	

¹ Information on the Town of Islesboro can be found here www.townofislesboro.com

1.1 Background

Islesboro is an island community in Waldo County Maine, located approximately three miles off the coast of Lincolnville in Penobscot Bay (see map below). A population of 566 occupies the 9000-acre island year-round. From June through August, the island hosts a vibrant summer colony that swells the population to as many as 2000 on major holidays. Approximately two-thirds of the island's homes belong to off island residents. The year round and seasonal populations share a strong sense of community. The seasonal population has a long history of impressive commitment, which they have demonstrated through several successful fundraising efforts for community infrastructure in recent years.



Figure 1: Map of Islesboro Maine

TOWN OF ISLESBORO
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In October 2013, the Town engaged Tilson² to assess the availability of fast broadband internet on Islesboro, and help the town assess if gaps existed to meet its future economic development and community goals. The Town Selectmen believe that the existing internet access is insufficient to sustain the Town's year round population, to retain young residents, and to attract new families. The Town's demographics illustrate this need. The median age of Islesboro residents is 52. This is 41% higher than the median age in the United States and 20% higher than the median age in the state of Maine. The proportion of the population over 65 years old is 78% higher than the U.S. at large and 44% higher than the state of Maine. By contrast, the proportion of the population under the age of 18 is 26% lower than the U.S. at large and 14% lower than the state of Maine. Therefore, a key economic development goal of the Town is to attract 20 to 30 new families with school-age children, while maintaining the current population. Tilson's analysis suggests that universally available, high-speed, reliable internet can help meet this goal, and that gaps do exist on island in universal broadband coverage at speeds sufficient to meet current and near term future needs.

Tilson's report illustrated significant variance between reported and realized speeds on the Island. ConnectME Authority Data suggests that 99% of the island has access to Tier 6 download speeds, i.e. between 25 Mbps and 100 Mbps. By contrast, Tilson's survey of Island businesses and residents showed average download and upload speeds of 3.74 Mbps and 620 Kbps respectively. One business located close to a FairPoint remote terminal reported a maximum download speed of 14.2 Mbps, but this was twice as fast as the second fastest reported speed. Notably, no resident or business reported an upload speed in excess of one Mbps. The Town believes that this upload constraint hampers the Island's economic development. The Town believes that such speeds prohibit the town from attracting and retaining the young people necessary to maintain the community.

The Town recognizes that the low population density on Islesboro and remote location precludes an entirely commercially funded solution, as evidenced by the current lack of a competitive market. The market for internet services on the Island is simply too small to incentivize a carrier to invest all the capital expense necessary to build a more capable network. The community is therefore prepared to raise sufficient capital to overcome this market challenge. The community is evaluating several sources of capital, including, but not limited to, federal, state, foundations, private individuals, and municipal bonds in order to realize a solution that meets its stated goals. The Town has an established record of raising this kind of capital. Specific examples include:

- i. Islesboro Central School - \$8M raised from public and private sources (2010)
- ii. Islesboro Community Center - \$4M raised from private sources (2010)
- iii. Boardman Cottage elder care facility - \$2M raised from private sources (2005)

As the community evaluates potential sources of capital, it hopes to understand how respondents may be able to contribute some matching investment to the community's effort, and under what terms they would be willing to do so. The Town views this solution as a partnership between the community and

² Tilson is a carrier neutral consulting and network deployment firm charged solely with advising the town through the planning process. More info on Tilson at www.tilsontech.com

the service provider. Therefore, the Town encourages respondents to describe their approach to structuring a collaborative partnership.

2. Technical Requirements

The Town would prefer not to own or operate the network. However, it is willing to consider all options in this early stage. Furthermore, the Town prefers that a provider assume the risk of operating the network. Respondents should state their recommended business model, which identifies the owner of the network assets, the entity that bears the operating risk, the network operator, and a plan for allocating network revenue. Providers should note that the community expects that it will have access, at a reasonable price, to dark fiber in a sub-sea power cable that Central Maine Power will install from Islesboro to the mainland in 2015. This cable will come ashore proximate to the Maine Fiber Company's Three Ring Binder, FairPoint, and Time Warner Cable network facilities.

2.1 Operational Requirements

The Town would like to better understand interested provider's capabilities. The respondents should detail their technical and procedural approach to providing network operation services including, but not limited to:

- 1) Network operation
- 2) Service provisioning
- 3) Traffic optimization
- 4) Providing internet connectivity to a tier 1 provider
- 5) Field dispatch
- 6) Performance monitoring
- 7) Customer usage data collection
- 8) Problem troubleshooting
- 9) Customer bill presentment
- 10) Collection and processing of customer payments
- 11) Fielding customer service and technical support calls
- 12) Customer service

Service providers may rely on the Maine State Ferry Service for vehicle access to Islesboro. Ferry service only operates between 7:30 AM and 5:00 PM, which impairs 24-hour access. There is a water taxi with 24-hour service. This could facilitate maintenance if technicians had access to a vehicle on island. The Town recognizes the inherent difficulty associated with maintaining a rural network with such access limitation. Respondents are encouraged to propose novel solutions to this challenge that might enable 24-hour operational support, as well as investigating Central Maine Power and FairPoint's current practices.

2.2 Service Requirements

The Town does not have a specific goal for download and upload speeds. However, the Town does believe that universal symmetrical service at 10 mbps in the short term and substantially faster speeds

in the medium term are necessary to meet the community's economic development goals. Respondents are invited to propose service levels that they deem technologically and economically achievable. However, as a minimum, respondents should propose solutions that meet a threshold of **universal 10 mbps symmetrical speed and plans for increasing that speed over time**. All business and residential customers on Islesboro should be able to access the network at consistent speeds and they should have some reasonable assurance that advertised speed will match realized speed. The Town welcomes solutions rooted in different next generation technologies including, but not limited to, vector DSL, DOCSIS 3.0, LTE, fixed wireless, and fiber to the home offerings. Furthermore, the Town welcomes proposals utilizing any telecommunications services operating structure. Possible operating structures might include monopoly telephone carriers, competitive exchange carriers, cable providers, mobility (cellular), or wireless internet service providers.

3. Content of Response

3.1 Cover Letter

Respondent(s) must submit a cover letter signed by an authorized representative of the entity. The cover letter must include the following:

- 1) Indicate the number of years the entity has been in business. Provide an overview of the experience and background of the entity and its key personnel.
- 2) 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.).
- 3) Identify the name, address, and telephone number(s) of the principal contact for all communications pertaining to the RFI.

3.2 Executive Summary

Provide an executive summary, which explains your understanding of the Town's intent and objectives and how your proposed solution will achieve the Town's objectives. This summary should discuss the respondent's approach to implementing their solution, their approach to project management, strategies, tools, and safeguards for ensuring performance of all required services. Respondents should include any additional factors they wish considered in the summary.

3.3 Professional Qualifications and Experience to Perform

The respondent shall provide a detailed description of its experience building next generation networks and providing high quality network services in rural areas. The respondent shall provide names and resumes of key personnel to be involved in the project. The respondents are not required to have experience implementing the technology to be utilized in their proposed solution, but should detail their experiences in adoption and deploying new technologies at a similar scale.

3.3.1 Past Performances

The Respondent shall list three (3) past projects where they have provided reliable, next generation, high-speed internet service to a rural area. These past performances may include both instances where

the provider built a new network and instances where the provider utilized pre-existing network infrastructure. In their description of past performance, the respondent shall list:

- 1) Description of the technology employed
- 2) The number of premises served
- 3) Description of the physical environment (urban, rural)
- 4) Description of available speeds at premises
- 5) Dates of performance
- 6) Project size (in subscribers and cost)
- 7) Customer contact information (name, title, phone, email, physical address)

3.4 Technical Approach

The respondent should prepare a detailed technical approach for implementing their solution. This should include, but not be limited to, the following components:

- 1) Necessary hardware
- 2) High level geographical and topological network schematics
- 3) Options for backhaul
- 4) Quality assurance plan
- 5) Implementation plan
- 6) Possible migration paths for future service improvement

3.5 Operational Approach

The respondent shall propose an operational structure and business model for the proposed solution. The Town is not beholden to a single operating structure and welcomes ideas from the internet service provider and network operator community. Possible operating structures might include monopoly telephone carriers, competitive exchange carriers, cable providers, mobility (cellular) or wireless internet service providers.

3.6 Timeline for Completing Work

The respondent shall provide an estimate for time required to implement the proposed solution. For the purposes of this exercise, the respondent can assume a project start date of **April 1st, 2015**. The timeline will list major project milestones and key achievement dates. The respondent shall include a date when next generation network services will be made available to island residents, weather on an incremental or universal basis.

3.7 Performance Expectations

Network reliability and network operator service and responsiveness are important to the Town and Community. Respondents should comment on their approach to customer service, maintenance, and restoration. Respondents shall propose mechanisms to ensure that service providers live up to a reasonable service life agreement.

3.8 Cost Proposal

The respondent should provide a detailed cost proposal for implementing the solution. As this RFI is technologically and business model agnostic, it is difficult to outline specific cost components proscriptively. At a minimum, the respondent should estimate costs for:

- 1) Property, plant, and equipment
- 2) Installation labor
- 3) Make ready
- 4) Permitting
- 5) Quality assurance
- 6) Network engineering and testing
- 7) Project management
- 8) Legal and regulatory

3.7.1 Capital Investment

The Town is committed to successfully completing this project. The Board of Selectmen therefore expect the community to raise some capital to help to fund the project. The respondents shall estimate the percent of the total solution cost that the community will provide. The Town of Islesboro has successfully raised two million dollars or more for three different public projects over the past ten years. In each instance, the Town utilized private donations, grants, and corporate investments to achieve its goals. Three of these projects individually required greater capital expenditure than Tilson estimates this project will require.

3.7.2 Private Contribution

Respondents shall indicate the portion of the solution's total capital cost that they would be willing to provide and under what high-level terms.

4. Questions and Answers

Respondents shall direct all questions, responses, and other correspondence regarding this procurement process to the Town's consulting engineer, Tilson.

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4.1 Pre-Response Conference Call

Date: July 2, 2014

Time: 3:00 PM

Call in Number: 1-603-250-1180

Conference Code: 026444