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**Town of Cranberry Isles  
Request for Information  
Broadband Solution for Three Unbridged Islands**

**December 7, 2016**

The Town of Cranberry Isles is seeking broadband service for three unbridged islands. Attached you'll find a Request for Information (RFI) that will begin the process of finding internet service providers who wish to construct and operate a broadband network. We hope you will respond to the RFI.

The community's goal for the network is competitively-priced broadband service to health facilities, municipal and other community institutions, businesses, and residential premises, in order to serve the current population and in to attract young families to live on these islands. The Town is investigating sources of funding at the private, county, state and federal levels, in addition to possible municipal funding. With a clear vision for its future, an expanding school population, and a strong sense of identity, the community is well poised to achieve its goals of strengthening businesses and attracting new families.

The Town envisions a two-stage development, with the first stage being interim service to Islesford, which currently has no broadband service, and the second stage being completion of long-term service to all three islands. We anticipate receiving responses by 3 January 2017 and having the project completed by end of 2018. We hope to hear from you.

# Town of Cranberry Isles Request for Information

## Broadband Solution for Three Unbridged Islands

December 2016

### 1. Introduction

The Town of Cranberry Isles, hereinafter also referred to as “the Town” and/or “the Islands,” issues this Request for Information (RFI) about providing a broadband solution for three islands: Great Cranberry Island; Little Cranberry Island, hereinafter referred to as “Islesford;” and Sutton Island. “The Town” includes the Town of Cranberry Isles Broadband Communications Working Group, hereinafter also referred to as “the working group,” which has been municipally-authorized.

The Town seeks information in order to help determine the interest of internet service providers (ISP), hereinafter also referred to as “providers,” to construct infrastructure and deploy broadband service on the Islands.

The purpose of the RFI is to obtain information about providing broadband for the health facilities, municipal and other community institutions, businesses, and residential premises on the Islands. The Town's overall goal is to provide broadband service that will meet the needs of the current population and will attract new families to the Islands.

The intended audience of this RFI is internet service providers, hereinafter also referred to as "providers" or "respondents."

The process and timeline for responding to this RFI is outlined in Section 2. Section 3 describes the Town, its goals, and the objective for which information is requested; and includes a timeline. The RFI includes additional information in Section 4 and a business model in Section 5. The Town requests that responses address all information requested in Section 6.

### 2. Response Process

The Town foresees the following RFI schedule:

6 December 2016	RFI issued
9 December 2016	Optional Pre-Response Conference Call
16 December 2016	Questions from Respondents Due
27 December 2016	Answers to Respondent Questions Posted
4 January 2017	Deadline for the Town to Receive Responses

## 2.1. Submission and Deadline

Please submit responses in a sealed envelope to the Town of Cranberry Isles, Board of Selectmen at the address below. Please mark the outside of the envelope with the label, "Town of Cranberry Isles Broadband RFI." Responses may be mailed to:

Denise McCormick, Town Clerk  
Town of Cranberry Isles  
P.O. Box 56,  
Islesford, ME 04646

or delivered by hand or via FedEx or UPS to the Town Office. Responses must be received no later than noon on 2 January 2017. Responses will be publicly opened at the selectmen's monthly meeting on January 3.

## 2.2 Content and Questions

Respondents should provide the information requested in Section 6. Responses will not be considered final or binding; however, respondents are strongly encouraged to submit information that could be used as a basis for negotiating an agreement.

Potential respondents are encouraged to submit questions in writing to: Malcolm Fernald, Selectman, [malcolmfernald@hotmail.com](mailto:malcolmfernald@hotmail.com). You may also contact Jim Fortune at the Cranberry Isles Town Office, [james@cranberryisles-me.gov](mailto:james@cranberryisles-me.gov)

Questions must be received no later than 5:00 P.M. on 16 December 2016. The Town will make a best effort to post answers to written questions at least one week prior to the RFI deadline. Responses will be posted to the Town of Cranberry Isles website: [www.cranberryisles-me.gov](http://www.cranberryisles-me.gov)

## 2.3 Selection Process

The Town will review the responses to this RFI and determine next steps. If there is more than one respondent wishing to be the anchor ISP, then a bid process may be initiated. Next steps may involve the Town selecting one or more provider for in-person meetings where the potential for a public-private partnership will be explored.

Although it is the intention and plan of the Town to proceed with establishing a public-private partnership for implementing a project that meets the objective described in Section 3 below, the Town reserves the right to discontinue these efforts based on the responses to this RFI or other changes in circumstances.

### 3. Goals and Timeline

#### 3.1 Background

The Town of Cranberry Isles is composed of five islands off the coast of Mount Desert Island (MDI). Two of the islands, Great Cranberry Island and Islesford, are inhabited year round. According to the 2010 U.S. Census, the year round population is 141 residents (47 on Great Cranberry Island and 94 on Islesford). Summer population swells to about 250 on Great Cranberry Island and 600 on Islesford. The summer community of Sutton Island is a population of about 26. While there are no commercial businesses on Sutton Island, many telecommute in the warmer months of May through October. While the municipal office is on Islesford, both Islesford and Great Cranberry Island host public libraries and schools. Anchor institutions are further described in Section 4 below.

Great Cranberry Island receives DSL speeds of 3/1 mbps via an undersea cable. There is also a non-LTE legacy Redzone node in the dock area. Islesford has no fiber or DSL running to it. Phone service on Islesford is fed from a voice-only remote terminal, which connects to Great Cranberry Island via a submarine copper cable that may have adequate capacity to provide DSL. Islesford has been relying on non-LTE legacy Redzone service. Telephone and electricity service to Sutton Island is delivered from Northeast Harbor and Seal Harbor on MDI. More details about the existing infrastructure is provided in Section 4 below.

The Town's 2010 Comprehensive Plan supports efforts to pursue broadband for economic development and increasing year-round population. In 2007, residents identified inadequate internet service as a hindrance to employment opportunities, with over 58% surveyed stating that improving high-speed internet service needed attention. In 2008, the Town committed resources to improving internet service on Great Cranberry Island, and at the schools and libraries. The Comprehensive Plan requires the selectmen to periodically assess internet service needs. The results of a 2015 Broadband Feasibility Study by Tilson Technology show that the current internet service is not meeting the needs of residents or the community's goals.

#### 3.2 Community Goals

The Town's current population needs Internet service for applications ranging from email to business operations and telecommuting. The Town's students require broadband speeds to complete assignments at home and in school. For several years the Town has attempted to provide telemedicine through the efforts of the Maine Sea Coast Mission, a service provided currently to Islesford. This service is limited to the T-1 speeds available at the Islesford Neighborhood House. Broadband will help support and potentially expand telehealth access. Additionally, town businesses, such as the Cranberry Isles Fisherman's Coop, are poorly served by substandard Internet connections.

In addition to serving the needs of the current population, broadband internet will attract new families to the Islands.

In sum, current needs are poorly served and the long-range vision seriously jeopardized because of the lack of broadband.

### 3.3 Broadband Objective

The Town seeks reliable, high-speed internet service that has an affordable subscription price. The service must accommodate extreme swings in usage; there will be greater saturation of the network in summer months because of the seasonality of the population. The service must accommodate a great number of users at public WiFi access points, as well as accommodate the anchor institutions (see Section 4 below). The internet service must accommodate the uploading needs associated with future, typical municipal and telehealth facilities including, but not limited to, video conferencing and database sharing. All premises on the Islands should be able to access the network at consistent speeds, and should have reasonable assurance that advertised speeds paid for will match realized speeds. Internet service packages must be affordable, with a price range of \$40 to \$80 per month.

The overall goal, then, is service that meets both the federal and state definitions of broadband (e.g., 25/10); that is consistent and reliable despite seasonality of the community's population; and that serves individual residences, municipal and civic institutions, telecommuters, and town businesses. The Town expects the project to provide a network that is capable of substantially faster speeds in the long-term, in order to provide sufficient internet service for at least ten years.

### 3.4 Timeline

The goal is to have this service in place by the end of 2018. The Town entertains a phased approach to deployment, in priority order:

1. October 2017: Islesford
  - a. Residences
  - b. Community institutions and businesses
  - c. Library, including the telehealth facility
  - d. School
2. October 2018: Great Cranberry Island
  - a. Residences
  - b. Library and school
  - c. Community institutions
  - d. Businesses
3. October 2018: Sutton Island. Residences

## 4. Facilities and Infrastructure

### 4.1 Existing Infrastructure

Islesford has been relying on non-LTE legacy Redzone service, currently housed on private property which makes service vulnerable. Phone service is provided by a voice-only remote terminal, which connects to Great Cranberry Island via an undersea copper cable. Residents also use Verizon Homeconnect for phone service. The undersea cable may have adequate

capacity to provide DSL. The school and library are served via a dedicated T1, which suffers extreme loss of speed due to distance from the carrier-owned equipment that originates that service: speed tests report less than 3/3 mbps. The library tries to offer public WiFi, but it is often oversaturated. The library is housed in a building providing many other community services, including a telehealth facility.

An undersea cable from Southwest Harbor on MDI delivers DSL to Great Cranberry Island. Speeds of 3/1 mbps are not consistently realized, especially during summer months. The undersea cable is owned by FairPoint, and it contains dark fiber. This is also the source of the dedicated line to the library and school, providing nearly 100 mbps symmetrical service, as part of the Maine School and Library Network. At the Town's dock, there is a non-LTE legacy Redzone node. There is a regeneration station next to the Cranberry House. The Cranberry House serves as a community center and cultural resource; public WiFi is currently available. The library also provides public WiFi.

Telephone and electricity service to Sutton Island is delivered from Northeast Harbor and Seal Harbor on Mount Desert Island. There are no roads on Sutton Island. The power and telephone lines generally run along the two walking paths. All land on Sutton Island is private property. The path from the dock to a four-way intersection of the two paths is a public path by way of easement; however, the land associated with the Town dock and this path are privately owned. From there neither path is considered to include public easement; however, there are utility easements for Emera Maine. The copper on Sutton Island is older than that on the other two islands. Residents also access non-LTE legacy Redzone for internet service.

## 4.2 Community Anchor Institutions

Islesford. In addition to the school and municipal office, other anchor institutions include:

- The Neighborhood House, a community center that houses the library, telehealth facility, historical society, and meeting hall often used by the municipality.
- Businesses, including several contractors, the Fishermen's Co-op, two art galleries, a gift shop, pottery shop and the Islesford Dock Restaurant, as well as lodging, graphic design and lobster shipping.
- The Islesford Museum, which is part of Acadia National Park.
- The post office.

Great Cranberry. In addition to the school and library, the anchor institutions include

- The Cranberry House, a community center that houses a Café, media center, and museum.
- The Store and Restaurant.
- Businesses, including transcription services, graphic arts, contractors, and two boatyards
- The Post Office.

Sutton Island. In addition to seasonal residents with telecommuting work or businesses, Sutton Island has a few areas that could be served by public WiFi, including:

- The old schoolhouse.
- The Town Dock.
- Mid-island area near Rogers Dock.

### 4.3 Backhaul Options

There are a number of opportunities for backhaul options. In addition to the undersea cable to Great Cranberry Island being utilized by FairPoint and Emera Maine, there is also opportunity to construct wireless or microwave links between and from the Islands. There is a narrow distance between Great Cranberry Island and Islesford.

### 5. Business Model

It may be advantageous for the network to be owned by the Town in order to access additional funding sources. The Town proposes a town-ownership model and welcomes responses that propose variations on this model including, but not limited to, relinquishing the network at some point in the future, as/if funding sources allow.

The Town also proposes an open-access network although if the network is not owned by the Town, it would not be required to be open-access. The Town entertains responses that propose variations on this model including, but not limited to, limiting access at the time of relinquishing the network, as/if funding sources allow.

The Town proposes that the provider own the risk of operating the network. The provider will include software upgrades as part of the project in order for internet service provided to meet the objective described in Section 3 above. The provider will upgrade or replace hardware as necessary to ensure that the longevity objective is met (Section 3.3).

The Town does not envision a single-payer system. The ISP will be expected to bill individual customers. The Town expects subscription fees to be reasonable and comparable to elsewhere in Maine, with a range of \$40 to \$80 per month, and a take rate of 75-100%. A take rate of near 100% is expected on Islesford following disconnection of the only service currently available, starting October 2017. The Town entertains responses that address how this subscription price could be achieved. The Town will advertise affordability programs to help reduce the subscription cost to residents. Providers are encouraged to describe how they would advertise service. The Town anticipates that the provider will provide advertising materials that can be shared electronically and in hard-copy.

In addition to affordability and to ensure take rates of at least 75% the Town proposes a joint effort. With support from the Island Institute, the Town anticipates hosting digital education workshops to promote training in and use of internet-based tools and activities.

The Town anticipates that the broadband objective will cost less than \$1 million and will provide sufficient internet service for at least ten years. The Town anticipates contributing funds to the total cost of the project. The working group is pursuing funding opportunities at the private, county, state and federal levels, in addition to possible municipal funding.

## 6. Information Requested

In order to help facilitate the Town's review respondents are asked to provide the information requested in an organized manner according to sections 6.1 through 6.6, below. Please do not refer to attachments or other materials or resources. Please include any additional information you would like to share within the appropriate sections (below) of your response. These may include:

- Any outcomes or conditions you consider to be essential or strongly desired in a potential partnership.
- Ways in which your participation could provide value to the Town.
- Any other information that you believe the Town should consider.

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

The

cover letter must include the following:

- A concise summary of the response to the RFI.
- 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.).
- The name, address, email address and telephone number(s) of the principal contact(s) for all communications pertaining to the RFI.

### 6.1 Company Information and Experience

Please describe your company, including:

- How long the company has been in operation.
- How long the company has provided internet service.
- The approximate number of internet customers you serve.
- The approximate number of employees in the company.
- Where the company headquarters are located.
- Where any additional field offices are located.
- Growth of the company over the last 3 years.
- Technical, managerial and operational experience of the team, highlighting any key members as appropriate to this project.

Please describe at least one past project which has provided reliable high-speed internet service to a rural area. This may include building a new network or use of an existing network.

In your description of past performance, please list:

- The number of premises served.
- Description of the physical environment (e.g., density of premises, terrain).
- Description of available speeds at premises.
- Description of the technology employed.
- Timeline of deployment and date of completion.
- Project size (e.g., subscribers and cost).
- Customer (community/client) contact information (name, title, phone, email, physical address), and two references with contact information.



## 6.2 Services Offered

Please describe the current services you now provide, including:

- Overall description of services.
- Business internet services and features.
- Geographic areas where services are provided.
- Speed tiers offered.
- Take rates for your services broken out by speed tiers.
- Pricing, packaging and bundling of services.
- Technologies and equipment employed.

6.3 Customer Installations. Describe how you typically build, manage and maintain customer drops. For example, do you outsource this or manage it in-house?

## 6.4 Customer Service and Marketing

Please describe how you currently provide customer service and market to your subscribers:

- How customer service is handled for business and non-business accounts.
- Whether these services are in-house or out-sourced.
- What approaches and systems are used to trouble-shoot and resolve customer issues.
- Your billing and collections system, including payment options available to subscribers.
- How you market to and recruit new business and non-business subscribers.
- Your retention rates for business and non-business subscribers.

## 6.5 Responses to Broadband Objective

Respondents are invited to provide information on how to meet the objective described in Section 3 above. In the response, please also demonstrate understanding of the community goals and background.

Respondents are invited to propose service levels that they deem technologically and economically achievable; however, respondents should propose solutions that provide the minimum speeds and other requirements for meeting the objective described in Section 3. The Town welcomes use of technologies including, but not limited to, vector DSL, DOCSIS 3.0, LTE, fixed wireless, and fiber to the premise offerings.

Please comment on providing network reliability, network operator service, and responsiveness. Respondents should propose mechanisms to ensure that service providers live up to a reasonable service life agreement. Please demonstrate understanding of the longevity requirement described in Section 3.

The respondent should prepare a detailed technical approach for meeting the objective. This should include, but is not limited to, the following components:

- Necessary hardware.
- High-level geographical and topological network schematics.
- Options for backhaul.

- Quality assurance plan.
- Implementation plan.
- Possible migration paths for future service improvement.

Please identify any infrastructure assets or requirements for taking this technical approach:

- Do you have fiber or other assets in the area that could be leveraged?
- What would be feasible Points of Interconnection with your network and the existing networks in the area?
- What options are available to meet the requirements you've identified for taking this technical approach?
- What other key technical considerations do you wish to highlight for the Town that could improve outcomes under your participation?

Please provide an estimated timeline for meeting the objective, including a proposed start date in response to Section 3 above, and include major project milestones and key achievement dates. Please provide an estimated date for when internet service will be available to premises on Islesford and/or an estimated date for when broadband services will be available to the Islands, whether on an incremental or universal basis.

## 6.6 Response to Business Model

Please comment on the proposed business model in Section 5 above. If there are any variations or exceptions that you would require, please identify and explain them. Please provide an estimated cost for meeting the objective in Section 3 above, and indicate the portion of the cost that you would be willing to provide. Please indicate the percentage of the cost that the Town will need to provide. Respondents are invited to state high-level terms for this business model. Please provide any knowledge or experience of operating this business model under grant funding sources.