Dear Internet Service Providers and other interested firms:

The Down Bay Technology Task Force is seeking an engineered design for broadband infrastructure to serve three unbridged islands (Chebeague Island, Cliff Island, and Long Island) in Casco Bay, Maine. Attached you'll find a Request for Information that will begin the process of finding internet service providers or other partnering firms who wish to design a broadband network. We hope you will respond to the RFI.

For a more stable year-round community, with great economic and social opportunities, to attract and retain young families, these islands have identified the need for a long-term broadband solution that will last for decades. Broadband will help support economic, telehealth, and education opportunities for our year-round population and also allow summer residents to stay on-island longer. Broadband will also improve municipal services including the ability to video conference and stream meetings, and to access training opportunities remotely.

We have obtained municipal and nonprofit funding, and we continue to investigate future sources of funding for a broadband project, at the private, local, county, state and federal levels. With a high quality of life, a thriving fishing industry, easy access to the Portland area, and great schools, we are well poised to achieve our goal of building a stable year-round community. Broadband will help us attract and retain young families who are already drawn by the way of life and wonderful communities on our islands.

The task force anticipates receiving responses by June 16, 2017, and having an engineered design completed by August 31, 2017. We hope to hear from you.

Please direct your questions about the project to:
Stephenie MacLagan, Island Institute, smaclagan@islandinstitute.org

Sincerely,

Down Bay Technology Task Force

Down Bay Technology Task Force
Request for Information

1 Introduction

The Down Bay Technology Task Force, hereinafter also referred to as "the task force" and/or "the islands," issues this Request for Information (RFI) to obtain information about providing an engineered design for broadband infrastructure to serve three islands in the Casco Bay: Chebeague, Cliff Island, and Long Island; hereinafter referred to individually and/or jointly as "the islands." "The task force" includes the Town of Chebeague Broadband Working Group, Sustainable Cliff Island, and Town of Long Island Broadband Exploratory Committee.

The task force seeks information in order to help determine the interest of internet service providers (ISP) or other firms, hereinafter also referred to as "respondents," to design infrastructure for bringing broadband to the islands. This objective is further described in Section 3 of this RFI.

The purpose of the request is to pursue a long-term broadband solution that will enable telecommuting, provide educational opportunities, support telehealth services, and provide municipal services including the ability to video conference or stream meetings. The islands' vision is a more stable year-round community, with great economic and social opportunities, to attract and retain young families, and improving internet service helps achieve this vision. This RFI further describes the islands and the objective for which information is requested, in Section 3.

The task force proposes a timeline in Section 3 and a business model in Section 4. The task force requests that responses address all information requested in Section 5. The process and timeline for responding to this RFI is outlined in Section 2.

2 Response Process

The task force foresees the following RFI schedule:

5 May 2017	RFI issued
12 May 2017	Questions from Respondents Due
26 May 2017	Answers to Respondent Questions Posted
16 June 2017	Deadline for the Task Force to Receive Responses

Responses must be received no later than 4:00 p.m. on June 16, 2017. Please submit responses:

as a pdf emailed to
smaclagan@islandinstitute.org

or in a sealed envelope to
Island Institute
Attn: Stephenie MacLagan
386 Main Street
Rockland, ME 04841

Respondents interested in designing a broadband network for the islands should provide the information requested in Section 5. 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. By seeking an engineered design from an ISP, the task force is able to entertain the possibility of said ISPs partnering with the task force to construct and operate the network, for delivery of broadband service to these islands. Other firms are welcome to respond, and are encouraged to provide information about partnering with ISP(s). Responses to this RFI will help the task force determine its next steps, which may involve either a bid process or the selection of a respondent for in-person meetings where the potential for a public-private partnership will be explored. All responses will be carefully considered and respondents will be notified shortly of next steps. The task force reserves the right to discontinue these efforts based on the responses to this RFI or other changes in circumstances.

Any questions from potential respondents to this RFI must be received no later than 4:00 p.m. on May 12, 2017. Please direct questions regarding this RFI to: Stephenie MacLagan, Island Institute, smaclagan@islandinstitute.org. The task force will make a best effort to post answers to written questions at least three weeks prior to the RFI deadline. Responses will be posted to some or all of the following websites:
www.islandinstitute.org/blog/economic
www.sustainablecliffisland.org/broadband
http://townoflongisland.us/wp/?page_id=1914
www.chebeague.events/blog-1/

3 Background and Broadband Goals

The Town of Chebeague has a year-round population of 341 according to the 2010 US Census. Cliff Island, which is part of the City of Portland, is inhabited year-round population of around 50. According to the 2010 US Census, the year-round population of Long Island is 230. Summer population of these islands is between 2 and 4 times the year-round population. In addition to the schools and libraries, other anchor institutions include: ferry docks, recreational and community centers, and clinics and developing telehealth facilities. Businesses include: grocery and general stores; lodging businesses; lobster and aquaculture processing and shipping services; restaurants; home-based businesses including photography, jewelry, information technology, and pottery; and bookkeepers for fishermen and other businesses.

Chebeague established its own ISP, which was sold to Axiom Technologies in 2016. This ISP and the island's other incumbent provider, FairPoint, provide DSL speeds of 6/1.5 mbps via an undersea cable. FairPoint provides Cliff Island with quickly diminishing 7/1 mbps via a submarine copper cable from Long Island, and the school and library share a 10/10 mbps connection through MSLN. With an undersea fiber cable from the mainland, FairPoint was recently able to upgrade a portion of the network on Long Island, to provide up to 15/1 in some locations. In 2015, Tilson Technology completed a broadband feasibility study that included the islands. Additional information related to the existing infrastructure is contained in that study, which can be accessed on this website: http://www.islandinstitute.org/resource/broadband-island-and-coastal-sustainability.

Our vision is a more stable year-round community, with great economic and social opportunities, to attract and retain young families. In 2015, community input was taken to develop broadband-related community goals for the islands: increasing the year-round population and extending the stay of

seasonal residents, by enabling telecommuting and improving other economic opportunities; and providing educational opportunities, telehealth services, and municipal services. These uses are extremely limited or even impossible with the current lack of broadband.

The task force is in pursuit of a broadband solution that will last for decades, not just a few years. The task force anticipates a broadband project will likely be expensive and require a long-term payment structure; therefore, the islands expect that the solution will last just as long if not longer without additional, substantial hardware upgrades. For the purposes of this RFI, "broadband" means internet service that meets both the federal and state definitions of broadband (e.g., 25/10), and is consistent and reliable despite seasonality of the islands' populations. The broadband network must accommodate extreme swings in usage, greater saturation of the network in summer months. The network must have the capacity for the uploading needs associated with future, typical municipal and telehealth facilities including, but not limited to, video conferencing, streaming meetings, and secure database sharing. The broadband network must reach all premises with consistent and reliable speeds regardless of location on the islands. We have a strong preference for technology that is primiarly a fiber-to-the-premise network, but we will consider a hybridized solution that could cut costs and still provide equivalently reliable, high-speed internet service. We are intending to "build once" and will not consider proposed design(s) of technology that cannot be upgraded for increasingly higher speeds as our needs change in the next 10-40 years.

The task force expects to obtain an engineered design by August 31, 2017.

4 Business Model

The task force will support the chosen respondent with travel coordination to the islands for on-the-ground assessments as part of the engineering. The islands have contributed funds, and the task force has obtain grant funding, to cover the cost of an engineered design of the broadband network. It may be advantageous for the cost of the engineered design to be rolled into the cost of building the broadband network.

By seeking an engineered design from an ISP or other firm, the task force expects to obtain a broadband infrastructure design that said respondent or other ISP may use to construct and operate a network, for delivery of broadband service to these islands. The islands are interested in opportunities to work on the install, as this aligns well with the islands' history and culture of providing for themselves.

The task force has already convened and decided on our joint broadband goals (Section 3) and will not need to work with the respondent on goal identification. We have also ready deployed digital education workshops through the Island Institute and secured funding for future digital literacy work; we do not need this process to address digital literacy. We would like the chosen respondent to be available after the engineered design completion date, in order to work with the task force on presenting the results in community meetings and/or to town government authorities.

The task force entertains responses that propose variations on this model. For the eventual build-out, the task force is investigating sources of funding, at the private, local, county, state and federal levels.

5 Information Requested

Please provide information requested in an organized and formatted manner, by following the outline of this Section 5, in order to help facilitate the task force's review. Please do not refer to attachments or other materials or resources. To facilitate the task force's review, please include any additional information you would like to share within the appropriate sections (below) of your response. This additional information may include:

- Any outcomes or conditions you consider to be essential or strongly desired in a potential partnership that you would like to highlight
- Any particular ways that your participation could provide value to the islands
- Any information that you believe the task force should consider

5.1 The respondent 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 for all communications pertaining to the RFI

5.2 Please provide a point of contact for your response, including a name, address, e-mail address, and phone number.

5.3 Please describe your company, including:

- How long the company has been in operation
- How long the company engineered internet infrastructure networks
- Where the company headquarters is located, and where any field offices are located
- Technical, managerial and operational experience of the team, highlighting any key members as appropriate to this project

5.4 Please describe at least one past project where you have engineered designs of broadband networks for a rural area. In your description of past performance, please list:

- The number of premises included
- Description of the physical environment (e.g., density of premises, terrain)
- Description of the network capacity (speeds, reliability, etc.)
- Description of the technology proposed
- Timeline of engineering and date of completion of the design
- Cost of the engineered design, and whether it was rolled into the cost of building the network
- Customer (community/client) contact information (name, title, phone, email, physical address)

5.5 Please provide one additional reference with contact information.

5.6 The respondent is invited to provide information on how to meet the broadband goals described in Section 3 above. In the response, please also demonstrate understanding of the community goals and background. Please provide an estimated timeline, including a proposed start date and a response to completion date for an engineered design proposed in Section 3 above.

5.7 Please indicate whether engineered design(s) would target speeds of 25/10, 100/100, and/or 1000/1000 mbps, and whether the cost of said design(s) would vary based on the speeds. Please provide an estimated cost for the engineered design(s). The respondent is invited to propose service levels that they deem technologically and economically achievable; however, respondents should propose solutions that at least meet the minimum speeds and other broadband goals described in Section 3.

5.8 The respondent should prepare a detailed description of what the engineered design(s) would include. This should include, but is not limited to, the following components:

- Implementation plan
- Synthesis of current assets and potential leverage points
- Necessary hardware and facilities
- Geographical and topological network schematics
- Options for backhaul
- A plan that includes all elements of possible deployment rationale, cost, and operations of designed network, including a pro-forma of revenue and expenses expected from the network
- Quality assurance plan
- Possible upgrades for increased speeds, capacity, etc. for the future

5.9 Please comment on the proposed business model in Section 4 above, including availability and willingness post completion date for community presentations, but please do not include proposed goal-setting or digital literacy as part of the response to this RFI. If there are any variations or exceptions that you would require to participate, please identify and explain them. The respondent is invited to state high-level terms for this business model. Please provide any knowledge or experience of operating this business model.