

**Letter to the People of the Cranberry Islands about the Broadband Initiative
February 2017**

To: All members of the Town of Cranberry Isles
From: The Broadband Communications Working Group: Malcolm Fernald, Jim Fortune, Ingrid Gaither, Rosalie Kell, Skip Stevens
Re: Status of Broadband for the Cranberry Isles

The Broadband Communications Working Group (BCWG) would like to take this opportunity to update you on the progress of our work to explore options for improved internet service for the Cranberry Isles. The BCWG is a town committee, commissioned by the Board of Selectmen in December 2015 in response to the increasing need for improved internet service, broadband in particular. Broadband is defined by the FCC in terms of speed as at least 25mbps download, and 3mbps upload and by the State of Maine as 10mpbs download and 10mpbs upload. The BCWG is using 25mbps/10mbps as a combination of both the state and federal definitions. The Cranberry Isles at present has a varying level of internet service but nothing approaching broadband. GCI has DSL which provides approximately 2/1. Islesford has RedZone which provides roughly half that. Satellite companies such as Exede provide faster speeds but are expensive and have data limits that make such services impractical for virtually all purposes except email and web browsing. The goal of the BCWG is to establish reliable broadband service.

Why don't we have good service already?

We have worked with incumbent service providers over the past year to explore options for private investment and have been told by multiple providers that the town does not provide a business case strong enough to invite private investment sufficient to improve speeds above the service we now have. That service is well below the national average and cannot meet our current as well as future needs.

After months of research and consultation with service providers, consultants, non-profits, and policy makers, we have come to the informed conclusion that we need to pursue a public-private partnership with a service provider in order to improve our internet service.

Why broadband?

We know that our survival as a year-round community depends not only on maintaining but also on increasing our population. Doing this depends on many factors, such as affordable housing, jobs, education, and reliable services. One of the services people have come to expect is broadband.

In today's culture broadband is no longer discretionary, a nice-to-have service for entertainment, shopping and casual communication. This may seem to go without saying, but it needs to be said in the context of island life. We, as a town, must meet the demands of students to complete assignments at home, and of adults to take online courses. We must meet the demands of telecommuters for service fast enough to do their work and meet their employers' internet requirements. We must meet the needs of small businesses, of town government, and of services such as fire and rescue, and telemedicine.

Our geographic remoteness does not mean we need broadband less than do our mainland neighbors; we need it more simply because we have reached a point at which people cannot live in this beautiful, remote location without it. We know that without broadband some

people will move away. We know that with broadband, people can and will move to the Cranberries. Broadband is therefore essential to our survival.

Consider what people say:

Education, College:

“This affects me taking my online courses to get my CTE teaching certification since the speed to get through the courses is so slow. It also affects my ability to open my programs for grading and curriculum data.” Summer Resident

“Would love to take courses from Muskie School, have everything ready but internet capability on the island.... Logistics make good internet capabilities a must for islanders...” Year-round Islesford Resident

Education, High School:

“I can’t access the Google Docs homework system from home because it uses too much data. Sometimes I have to watch videos, answer, write responses. So I go to the library. At night it isn’t open, so I sit in the car to work. This can be cold, so I keep the car running...” Year-round Great Cranberry Resident

Living in the Cranberry Isles:

“If we had faster internet our whole family would spend more time on Islesford in the summer and also come for long visits in the fall, winter and spring. I've considered living on the island and working remote for a year but I can't with no/slow internet.” Summer Resident

“How do we keep population without something that has become so essential? This is not just for year-round but for summer residents also. They rely quite often on keeping in touch with their offices and work.” Year-round Islesford Resident

“I tried both RedZone and dish when I first moved here; both were expensive and unreliable.” Year-round Islesford Resident

Working in the Cranberry Isles

“I can’t work on my software development projects because of the slow speeds. Forget doing any other work. Not only is it slow but often crashes, requiring a trip upstairs to reboot the router. Unacceptable!” Summer Resident

“I had to stop work, i.e., my telecommuting job, yesterday because my download speed was only .60 meg, upload .10 meg.” Year-round Islesford Resident

“My brother works for a company that is phasing out some of its on-site offices. He already works from home and plans to be completely off site in the near future. He tells me often that if the island could get true broadband he would consider moving here. Once his employer phases out on-site office space altogether, employees are free to live wherever they want, as long as they have internet speed to support their work from home. This is an opportunity for Maine island and coastal towns to attract new, young people by assuring them that they arrive financially and economically secure. It also shows an opportunity for current residents to switch careers to good paying jobs they can work from home. I know that’s my plan!” Year-round Great Cranberry Resident

What technology is required for broadband?

There are two components, the internet signal to the islands, or “backhaul,” and distribution of the signal to locations on the islands. There are various ways of establishing these. The model we are working with is a high speed microwave backhaul from a mainland location such as Harbor Ridge in Southwest Harbor, and distribution to locations via fiber optic cable. Such a system is a long-term broadband solution because it creates a permanent on-island infrastructure with long-life equipment and a modular structure, meaning easy replacement of damaged units without interruption of service.

Any purely wireless or DSL solution would not meet the 25/10 mbps requirement and would need to be replaced in a few years, causing the community to spend money on infrastructure twice. If we do this correctly with future technological considerations in mind, using fiber on the islands, we will have a system that will continue to work effectively and reliably into the long term. A patchwork solution, although possibly cheaper in the short term, would cost the community substantially more money over a ten-year period.

How do we go about implementing such a plan?

In December 2016 the town issued a Request For Information (RFI) to potential internet companies. From the responses received, we have chosen Axiom as our provider. Axiom is in the process of detailing a finalized budget and technical design which should be available by Town Meeting. It will provide all the information we need about cost, infrastructure, and service to pursue public funding and construct the service. Public funding in this case includes possible grants from the Department of Agriculture (USDA), the Northern Border Regional Commission (NBRC), and ConnectME. And we have been awarded a planning grant from the Island Institute to help with financial and technical design as well as with grant writing.

Once created, the network will provide broadband (minimum of 25/10) for a cost to individual customers in the range of \$40-80 a month. This may include a bundle for TV/phone & internet depending on the outcome of our negotiations with a provider. A bundle will substantially reduce the total cost to the user for all services.

What will it cost?

The anticipated cost of the entire project is \$1,173,000.00. An article in the warrant for town meeting asks the voters to spend up to \$1.2 million. We expect the total cost to be met by a combination of capital investment on the part of the service provider, grants, private donations, and town funding.

In Conclusion

We hope the people of the town will consider the value of an asset that will make the Cranberry Isles attractive to new families and significantly improve the quality of life for all. Think of this as a long-term investment in our future and please be prepared to vote in favor of broadband.