

Beaver Island, Michigan NTIA Grant Narrative

Executive Summary

This grant request asks for \$13,983,165 from the NTIA to bring broadband to the two Townships that comprise Beaver Island in Lake Michigan. St. James Township at the north end of the island includes the village of St. James, which is the hub of the island and is the terminal for the ferry to the mainland. Peaine Township is the home to the two small airports that serve the island and includes state forests and beautiful beaches. Beaver Island is approximately 13 miles long from north to south and about 6 miles wide, covering 54 square miles.

There are many reasons why we think this grant should be funded:

- Beaver Island is the most remote populated island in the Great Lakes. The island is 32 miles from Charlevoix, Michigan, the port for the ferry that runs to the island. The remote nature and isolation of the island is magnified each winter when the ferry stops running from mid-December until mid-April. We doubt that there are many more towns with more than 500 residents anywhere in the country that are more remote than Beaver Island.
- The 600 year-round residents of the island need better broadband. Many residents work from home, particularly in the winter when the only access to and from the island is by air. Recent speed tests showed that 45% of residents are receiving download speeds under 5 Mbps. More importantly, we found that there are many homes on the island who have no broadband option because their homes are out of the limited range of the DSL service.
- 76% of residents are seeing upload speeds under 3 Mbps, making it exceedingly difficult to work from home. A recent survey of residents showed that 87% of households include somebody works at home using broadband. This includes 25% of homes where somebody works from home full time and 35% that work from home several days per week.
- The local economy is driven by tourism, and between April and December, the population on the island swells to 3,000. Tourists have been complaining in recent years that the broadband isn't good enough for them to stay connected during their visit, and island residents fear that tourism will die over time if the island doesn't have broadband capable of satisfying tourists.
- The island also has a healthy business community that needs better broadband. There are 32 full-year businesses on the island, including three churches, two airline companies, a bank, five grocery/restaurants, two gas & oil companies, three year-round hotels, four retail stores including a hardware store and lumber yard, two boating-related businesses, four construction companies, three realtors, and three community-related businesses including the Chamber of Commerce, the Historical Society, and the Preservation Association. The island also has eighteen seasonal businesses that are reliant on tourism. This includes five hotels, four restaurants, six retail stores, and three recreational businesses including the municipal dock, a golf course, and a boat rental business.
- We believe the partnership offered by this grant is exactly what the NTIA was hoping to see. This is a partnership between two rural Townships and Great Lakes Energy Cooperative (GLE). The NTIA was hoping for partnerships that don't have a profit motive. As a cooperative, GLE is owned and governed by its customer/members and will deliver the highest quality broadband possible.
- GLE is highly qualified to accept this grant, and its wholly owned subsidiary, Trustream will become the ISP on the island – the cooperative and Trustream have already built fiber to pass over 20,000 homes and businesses and is currently serving over 9,000 broadband customers on fiber.
- There is major support on the island for better broadband. A survey of residents showed that 96% support the idea of bringing better broadband. 78% of survey respondents said they would definitely

buy broadband from a new network. Another 14% said they would probably buy broadband. Only 1% of respondents said they would definitely not buy broadband from a new network.

- Finally, the island will never see better broadband without a grant. It costs more to build anything on an island because of the challenge of shuttling crews, materials, and work equipment to and from a remote island. The all-in cost of the grant is \$16,235 per passing – a cost that could never be justified with normal bank borrowing.

The grant is to bring fiber broadband to the island. The project would build just over 200-miles of fiber on the island to pass every home and business. The grant also asks to fund two new microwave towers to bolster the broadband brought to the island from the mainland. The grant covers the cost of connecting homes and businesses to the network.

Great Lakes Energy is uniquely positioned to build the lowest-cost network on the island since the cooperative already owns the utility poles and already has all of the needed rights-of-way.

This grant would improve broadband speeds from slow rural DSL to have the capacity for speeds up to a symmetrical gigabit. This project would bring fast fiber broadband to 900 residences, 50 businesses, and 7 anchor institutions that include a school and a rural health clinic.

We know the network is sustainable because Great Lakes Energy has made a commitment to its owner/members to provide great broadband along with reliable electric service. The cooperative is answerable to its members and will make sure the network is maintained and improved as needed over time.

Trustream, the wholly owned ISP of Great Lakes Energy has affordable broadband prices today and will provide affordable rates on the island. GLE offers discounts to low-income residents and participates in both the Michigan Lifeline program and the FCC Lifeline program.

Great Lakes Energy will provide most of the matching funds for the project and will contribute \$1,523,685 to the project. The Townships will also have skin in the game and will provide \$30,000 in matching and will own the new microwave tower built on the island.

We anticipate the project to begin in January of 2022, or whenever grant funding is available, with completion in December of 2022. GLE has already built a lot of fiber in the region and is prepared to meet that timeline.

Great Lakes Energy pays a living wage today and would plan to pay living wages to any contractors used for the project. The project is scalable in that the network being constructed is robust enough to add broadband to any homes or businesses that are constructed on the island.

Finally, we note that we are aware of an NTIA Tribal grant that would provide a material benefit to this project if awarded. We understand that the Traverse Band of Ottawa and Chippewa will be asking for a project that includes building an underwater fiber to Beaver Island. Our project relies on wireless backhaul, but we know that fiber backhaul will be significantly better. Fiber backhaul means that we could provide gigabit speeds on day one, and more importantly would have enough bandwidth for the future. Backhaul is the biggest concern of our grant filing since we know that broadband usage will continue to grow. We know the NTIA likes synergies between grants, and that if the Tribal grant is awarded, we will gladly reduce our request so that there would be no duplication of costs between the two grants.