

Block Island Takes Responsibility for Universal Fiber Broadband Connectivity

In partnership with Sertex Broadband Solutions, the small island off the coast of Rhode Island is building a universal fiber network.

By Michael A. Solitro / *Sertex Broadband Solutions*

Block Island has long been a community of innovation. Located 15 miles off the Rhode Island coast and accessible only by boat or plane, residents embrace a pioneering spirit found in few other places. The Town of New Shoreham, the island's sole municipality, is home to the nation's first offshore wind farm and soon will host Rhode Island's first municipally owned fiber broadband network.

Block Islanders have struggled for decades with poor telecommunications service. Though the community desired and demanded better connectivity, traditional providers had no interest in serving the small community of 1,000 year-round residents, even though the population swells to 20,000 during the summer season.

Businesses and residents desperate for bandwidth found ways to enhance their dismal 15/3 Mbps download/upload speeds using satellite and other improvised solutions. Those enhancements marginally improved service, but islanders continued to limp along with unreliable DSL, and no one was satisfied.

When the Block Island Wind Farm went live in 2016, it presented an opportunity for the community to solve its connectivity problems with fiber.

Guided by the New Shoreham Broadband Committee, the town tapped into the wind

farm's undersea fiber optic cable to build a community anchor institution (CAI) network connecting the library, safety complex, town hall, and medical center in 2018. The vision to expand the network islandwide was a distant goal until the pandemic hit. Suddenly, the project became an urgent and shared priority.

Rather than waiting for promised federal grant funding – or simply doing nothing – local taxpayers voted in July 2020 to build BroadbandBI, a universal fiber network. It was a considerable risk, but one that taxpayers overwhelmingly approved taking.

The town's partner in building and operating BroadbandBI was Sertex Broadband Solutions, the regional fiber optic deployment expert that had constructed the Block Island CAI.

The BroadbandBI package approved by voters authorized \$8 million in tax-supported bonds backed by New Shoreham's creditworthiness. Voters made the commitment regardless of whether there would be future financial assistance from federal grants.

Similar to public investments in roads and bridges, BroadbandBI infrastructure costs will be recovered through annual property taxes. Once the network is live, expected in late 2022 and early 2023, costs for installation, equipment, transport, administration, operations and



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maintenance will be recovered through monthly subscriber fees.

“As with any utility, our goal is to set rates for a recapture that cover our costs and create a viable, sustainable framework to operate the utility long-term,” explains Amy Lewis Land, finance director of New Shoreham.

Multilevel service tiers created by the town are designed to provide options for Block Islanders and recognize the community’s needs and

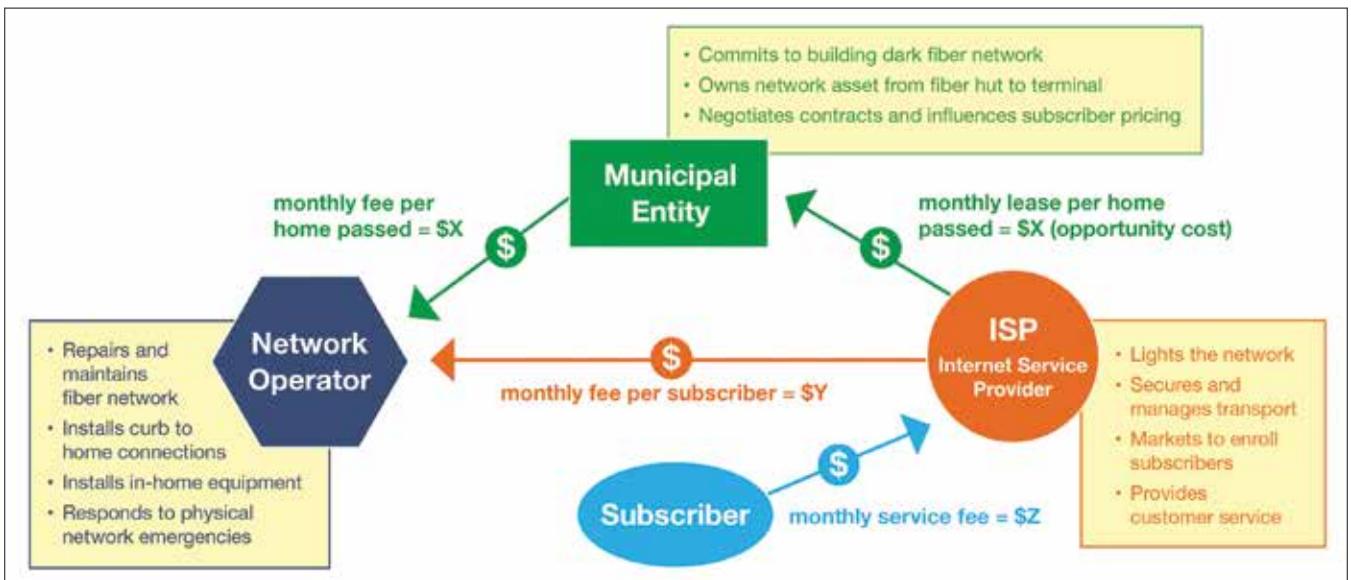
priorities. Even with recovery costs baked in, monthly rates for best-effort plans are significantly less per month than customers typically paid for insufficient legacy services.

“The town should take a great deal of pride in what it is accomplishing with this project – from the unanimous community support to facing down the challenges of a pandemic, including disruptions in workflow and supply chain,” says Maryanne Crawford, New

Shoreham’s town manager. “We’re plowing new ground as one of the few towns in [the U.S.] that has done such a comprehensive project pretty much entirely on its own. It’s extraordinary.”

A NEW MODEL FOR FTTH

The Town of New Shoreham is an outlier in choosing to take on the costs of buildout, activation and operations alone. This risky path to fiber, in which the town assumes all responsibility, is not for everyone.



The dark fiber P3 model is a true partnership with shared risks and responsibilities that allows the municipal entity to own and control network assets and the ISP and network operator to assume the risks of activation and operations.



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For communities that want less risk and universal connectivity *and* ownership control, a new public/private partnership model (P3) that leverages dark fiber to reduce exposure for municipalities has emerged. A true partnership in which all entities assume equal risk, this model is significantly different from Block Island's prototype – it shifts responsibility for network activation, including electronics and transport costs, to a partner ISP.

This approach allows the municipal entity to own and control network assets from the fiber hut to the terminals located on utility poles along roadways. Each home the dark fiber passes represents an opportunity for the ISP to provide service. It pays the municipal entity a monthly fee. The municipality then passes the monthly fee to the network operator to cover ongoing maintenance and emergency services. As new subscribers sign on, the ISP engages the network operator to install curb-to-home connections and in-home equipment.

Dark fiber P3 is analogous to a

public road with no cars or driveways. A public entity commits to build the fiber infrastructure using funds from local taxpayers or grants. Once built, internet traffic is generated and supported by the ISP and network operator.

MUNICIPALITIES MUST MEET THE MOMENT

Broadband is widely acknowledged as an essential utility, as electricity, water and sewer systems are. As an essential service, it must be universally accessible, reliable, affordable and sustainable with future-proof technology that will meet bandwidth requirements for decades. Fiber is the only future-proof solution, and locally controlled FTTH networks are the only way to bring reliable, affordable service to everyone.

Block Islanders recognized the urgent need for change and unified behind the most advantageous solution for their community. Land's ultimate goal is for BroadbandBI to become a natural part of life on Block Island and ultimately be taken for granted. She envisions the island as a place

where connecting to the internet is as predictable and expected as turning on a light or water faucet. "I look forward to the day when connectivity is there when people need it, and no one is spending time and effort and struggling to access the connections they need."

Each town's strategy for achieving universal broadband will differ. Land's advice to municipal leaders? "Don't be afraid of the things you don't know – the most important thing is to know your community's priorities and craft a solution that delivers them. By choosing good partners, that solution will become clear. Your partners will guide you through the learning process." ❖

Michael Solitro is founder and CEO of Sertex Broadband Solutions. He can be reached at msolitro@sertexllc.com.

