# high-speed internet for everyone? yes, please!

The Town of Vinalhaven's Fox Islands Broadband Task Force is working to build community consensus to bring high-speed internet to every home on the island.

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#### **Learn More**

townofvinalhaven.org /fox-islands-broadbandtask-force

#### View Broadband Conversation Videos

Conversations highlighting the benefits and challenges of various broadband ownership models townofvinalhaven.org/foxislands-broadband-task-force/pages/broadband-campaign-community-conversations

#### What is the Fox Islands Broadband Task Force?

The Fox Islands Broadband Task Force (FIBTF) was formed by the Town in 2015 to recommend and help implement a broadband solution that will provide affordable, high-speed internet service to all locations on Vinalhaven.

## What is the Task Force doing to help bring high-speed internet to Vinalhaven?

From 2016 to 2018, the Task Force sponsored a series of public meetings and workshops, helped open the "Island Speed Space" downtown, posted weekly informational columns in the Wind and on Facebook, and conducted an island-wide internet satisfaction survey-all in an effort to raise awareness about the benefits of high-speed internet to education, telemedicine, the economy, and quality of life.

The 2018 internet satisfaction survey showed most respondents were displeased with the service offered by the two incumbent Internet Service Providers (ISPs) on the island–Consolidated Communications (CCI) and Spectrum.

CCI offers DSL service using copper phone lines to transmit data. DSL degrades with distance; the longer the distance between the DSL connection point and the user, the slower the service. Speeds for DSL usually top out at 5-7Mbps. Spectrum uses coaxial cables to provide internet over a shared system, meaning the signal strength depends upon the number of users on a line. During peak times and in the summer, this problem is particularly acute and internet speeds are apt to slow down significantly. Both copper and coaxial cables have high maintenance costs and degrade rapidly with age.

In 2019 the Task Force received a grant to hire Axiom Technologies to research what it would take for our community to own and operate a high-speed internet service. Axiom worked with the Task Force to produce the 2020 Broadband Report, which provides a high-level cost estimate to build and operate a municipally-owned broadband network. To read the 2020 Broadband Report go to townofvinalhaven.org/fox-islands-broadband-task-force

In December 2020, the Task Force launched a Community Broadband Campaign sponsored by a grant from the Maine Community Foundation. The purpose of the Campaign is to explore the benefits and challenges of building and operating a broadband network by looking at ownership models used in other towns to help find a solution that best meets Vinalhaven's broadband goals.

Ownership Model	Benefits	Challenges
Private Internet Service Provider (ISP) owned and operated	Town does not have to pay to build a high-speed internet network and has no responsibility for providing broadband to the community	Community has no control over internet options and service available—ISPs make all the decisions—where and when to provide service, how much service will cost, etc.
Public-private Town owns part of the infrastructure, ISP owns the rest	Costs are shared with a private ISP so the burden to build and operate a broadband network is not solely on the	ISP maintains control of the system and levels and quality of service
	Town	Town still has to pay and is essentially subsidizing a private company
Partnering with a Utility In Vinalhaven's case—Fox Islands Electric Cooperative (FIEC)	Costs are shared so the burden to build and operate a broadband network is not solely on the Town	The utility may not have the capacity to partner with the town (as is the case with FIEC)
	FIEC is able to lease fiber strands and pole access even without formally partnering with the Town	
Investor-owned A group of investors owns and operates the system	Town does not have to pay to build a high-speed internet network and has no responsibility for providing broadband to the community	A group of investors makes all the decisions and maintains control of the system and service
Public Municipally-owned (Community-owned) ISP is contracted to operate, according to terms defined by the Town	Town owns the network and has full control over the system and service—rates are affordable, control is local	Most expensive ownership option since there is no cost sharing with partners
	Capital construction cost is paid off in 20 years	Although offset by grants, capital cost to build the network is paid for through taxation

#### A Broadband Solution for Vinalhaven

On February 11, 2021, the Task Force was granted permission by the Select Board to explore the community's willingness to support the construction and operation of a municipally-owned fiber-to-the-home (FTTH) broadband network with capital costs to be paid for through taxation and grants and operating costs to be paid for by subscriber fees. To this end, the Task Force has worked with the Select Board to design the parameters of this proposed project.

The primary goals for a Vinalhaven broadband network are

- to use the fastest, most reliable technology with the longest lifespan (30-40 years) fiber-to-the-home (FTTH)
- to have local control the community defines the terms of an ISP contract
- universal access service to all locations on-island and eventually the outer islands if residents want access
- equitable service all locations will receive 1000/1000Mbps symmetrical speeds, and
- affordability monthly subscriber fees must not exceed \$50.

### What will a municipally-owned broadband network cost?

The 2020 Broadband Report provides a high-level cost estimate of \$3,900,000 to build a FTTH broadband network to all locations on the island. However, this is *not a detailed estimate* and capital costs tend to be higher than originally quoted. Therefore, for the sake of conservative planning, the Task Force and Select Board have agreed to use a cost estimate not to exceed \$5,000,000, although it is highly likely that state and federal grants could reduce this amount by an estimated \$1,500,000 or more.

The Task Force used the operating cost estimates provided in the Report, along with additional information gathered from municipalities that own their own networks, to calculate an estimated annual operating cost of approximately \$400,000.

The capital construction cost to build the network would be paid for through taxation by property owners at a rate of \$5.08 per month (\$60.96 annually) per \$100,000 of assessed ("taxable") real estate property value. This would be paid over a span of 20 years, according to the terms of a municipal bond. After 20 years, the bond would be paid off and property owners would no longer have this debt repayment included as part of their annual tax bill.

Operating costs would be shared equally among subscribers. There are approximately 1400 potential subscribers on Vinalhaven. If 50% subscribed to the proposed service, the monthly subscription fee would be \$46.55. This fee could be reduced if more people subscribe and share the cost of operations.

Use the chart below or the following formula to estimate what the proposed municipally-owned broadband solution would cost you. Formula: Monthly internet cost =  $$46.55 + ((Taxable real estate value \times $5.08) \div $100,000)$ . Keep in mind that \$46.55 covers internet only. However, the proposed broadband solution would allow for internet phone and digital streaming of your favorite channels for additional fees starting at an estimated cost of \$25 per month for phone and \$20+ per month for digital TV.

Based on what you are paying now for cable, satellite, internet, and phone, how would your cost for municipally-owned broadband compare?

Real Estate Property Assessed "Taxable" Value	Monthly Debt Service Paid Through Property Tax	Monthly Internet Subscription Cost	Total Monthly Cost for 1000/1000 Mbps Fiber-to-the-home Broadband (Monthly Debt Service + Monthly Internet Subscription)	Total Annual Cost (Annual Internet Subscription + Annual Debt Service)
\$100,000.00	\$5.08	\$46.55	<b>\$51.63</b>	\$619.56
\$200,000.00	\$10.17	\$46.55	\$56.72	\$680.64
\$300,000.00	\$15.25	\$46.55	\$61.80	\$741.60
\$400,000.00	\$20.33	\$46.55	\$66.88	\$802.56
\$500,000.00	\$25.41	\$46.55	\$71.96	\$863.52

Table 1: Estimated costs for tax payer-subscribers for Vinalhaven's proposed municipal broadband solution

# What's next? How can I share my support or lack of support for this proposed project?

The Task Force and the Select Board need to hear from as many Vinalhaven property owners and residents as possible. To make sharing your opinion simple and easy, the Task Force is requesting everyone complete the 2021 Broadband Survey either online or in paper form.

#### **Broadband Terms Defined**

What's Mbps? What's FTTH?
What's bandwidth? What's an ISP?
Need some help with broadband terms?
Check out the Broadband Glossary at
townofvinalhaven.org/fox-islandsbroadband-task-force

### please take the 2021 Vinalhaven Broadband Survey

Let the Fox Islands Broadband Task Force know if you support a municipally-owned broadband solution for Vinalhaven.

## What is the 2021 Vinalhaven Broadband Survey?

The 2021 Broadband Survey is a fast and easy way for you to let the Fox Islands Broadband Task Force know if you would like the Town to build and operate a municipally-owned high-speed internet network. The survey is a straw poll, not an official voting tool.

Based on the results of this survey, the Select Board and Task Force will determine if and how to move forward with this project. Keep in mind that your survey response is not a conclusive yes or no vote for or against this project. If the majority of survey respondents are in favor of the proposed project, and if the Select Board chooses to proceed accordingly, next steps would include the drafting of a warrant article to borrow the appropriate funds, a public hearing to discuss the article, and a subsequent Special Town Meeting when the community would vote whether or not to approve funding for the project.

The survey will be open through mid-to-late April and is available in paper form as well as online. To ensure the survey results are accurate, the Task Force requests that each person complete one survey only.

The survey is anonymous, however, the online survey includes an integrated internet speed test, which requires participants to enter in their address in order to take the survey. Please be assured your responses will not be affiliated with your address.

To encourage survey participation, the Task Force is offering all survey respondents the chance to enter into a drawing to receive a \$100 cash prize. Instructions for entering the drawing are on the paper survey and at the end of the online survey.

### **Take the Survey Online**

townofvinalhaven.org/fox-islands-broadband-task-force/pages/2021-vinalhaven-broadband-survey

# Learn more about municipally-owned broadband.

Broadband refers to high-speed Internet. Municipally-owned broadband is publicly-owned and controlled internet infrastructure (cables, connections, equipment, etc.) and service.

Many communities with municipal broadband hire an Internet Service Provider (ISP) to manage providing internet service to the community. A contract between the ISP and the Town spells out the rates, levels of service, and other important criteria that have been defined by the community and agreed upon by the ISP.

Under municipal ownership, communities are not beholden to incumbent ISPs. The town hires an ISP that best aligns with the community's goals and may fire the ISP if they fail to meet those goals as defined in their contract. Most communities that invest tax and grant dollars into building municipal broadband, opt to use the best technology (fiber optics) and provide the fastest speeds.

Islesboro is a great example of a community with municipally-owned broadband. Islesboro provides a fiber optic internet connection to all homes on their island that want service. They offer one "tier" of service – a symmetrical speed of 1000/1000Mbps download and upload.

One of Islesboro's broadband goals is equity-providing the same affordable access to all locations on their island. As a result, their community contracts with an ISP to provide broadband service to all subscribers at a rate of \$30 per month.

Learn more about Islesboro municipal broadband. Go to townofislesboro.com/committees/broadband/history