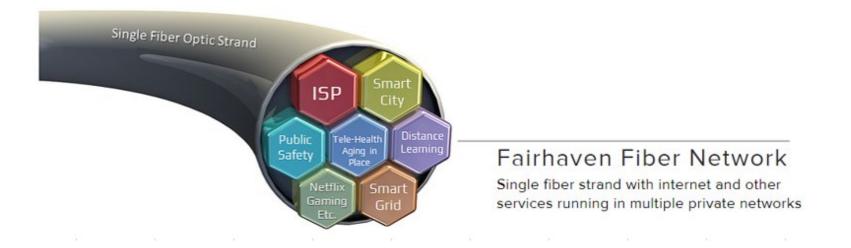
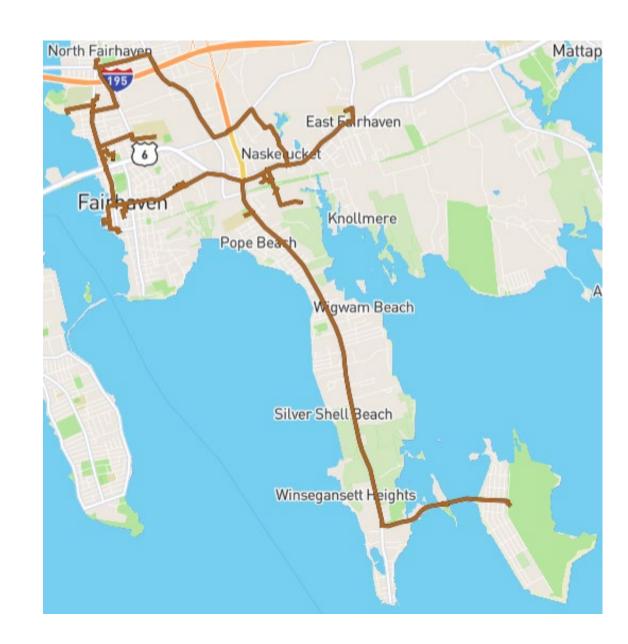
# Why the Town of Fairhaven is interested in a Fiber to the Home/Business solution



- 1) Lower Cost to end users for internet service by 25-30%
- 2) Increase the speed and reliability of Internet Access
- 3) Use an Open Access system that will allow for competition among ISP's
- 4) Provide Economic impact and increased security within the community
- 5) Leverage the existing Municipal Fiber Loop to benefit the entire community.

## Town of Fairhaven Broadband History – What have we done so far?

- Built a Fiber Optic Loop that currently serves all public buildings (Approximate Cost = \$600K)
  - Serves all Schools (Wood, East Fairhaven, Hastings and FHS), Public Safety, Town Hall, COA/REC, Public Works and Hoppy's Landing
  - Owned and operated by the Town (3-4 year payback (Funds formerly paid to Comcast)
  - Existing loop has capacity to support a Fiber to the Home/business network for the entire community.



## Town of Fairhaven Broadband History – What have we done so far?

#### Established a Broadband Study Committee

Hired a consultant with expertise in this area (Entry Point)

- ENTRY
- Surveyed the Community found overwhelming support for Broadband buildout
- Recommended an Open Access system that will foster competition among ISP's
- Brought Town Meeting Article to establish Municipal Light Plant (passed with overwhelming majority)
- Established cost of building Fiber to the Home/Business infrastructure
- Developed model where end user pays for capital investment, pays off investment with long term borrowing (10-15 years)
  - Pricing model allows end user to enjoy benefits of reliable, high speed internet now, with <u>lower</u> monthly costs
  - When borrowing is paid off, additional savings will be realized



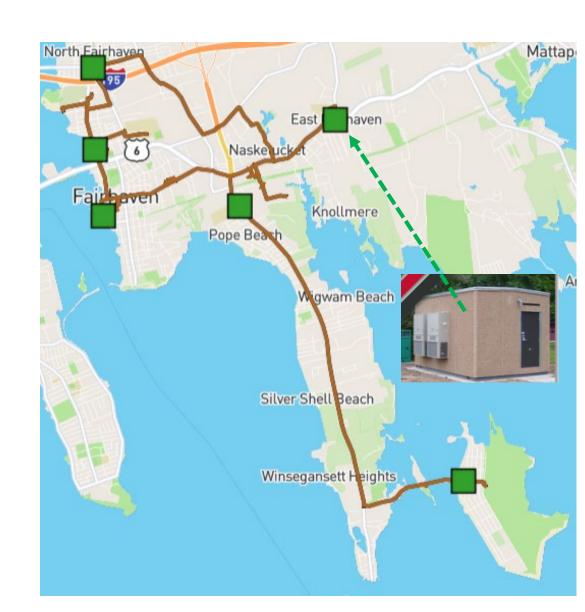
## What is this Grant Opportunity about?

- Build at least three (3) Fiber Access Buildings (Green blocks)
- Tie into existing Municipal Loop
- Connect 50-100 end users.
- Test Open Access system, functionality
- Receive feedback from participants (required for participation)
- Prove Operational and Pricing Assumptions
- Use information to develop pricing / fees for full build out

Project Cost \$750K, Grant Request \$500K (Town match \$250K)

Pilot Project helps build the case for full scale build-out

Each Fiber Access Building will support distribution to 1500 homes/business addresses.



Q: Why is Fairhaven in a great position for a Broadband Grant?

A: We are ahead of the curve;

- 1) Studied for 2+ years
- 2) Completed Broadband Master Plan
- 3) Demonstrated Community Support
- 4) Engaged Town Meeting regarding Municipal Light Approval
- 5) Completed detailed design / Cost Estimating to every premises.
- 6) Ready to hit the ground running (Fiber)

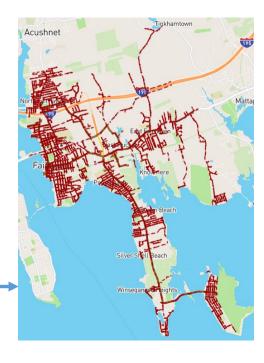


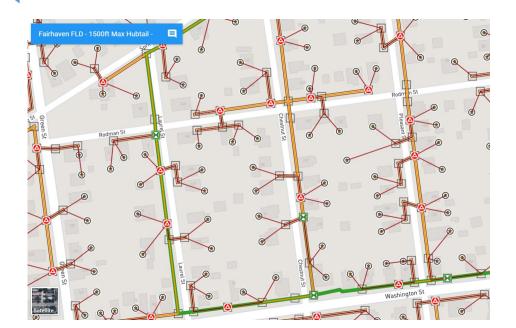
- Improved Internet Speed & Reliability (Work, Education, Health Care)
- Economic Impact
  - > Estimated \$30 per subscriber saved per month

4800 subscribers

\$144K per month savings in Fairhaven

\$1.73 Million annual Savings in Fairhaven





#### Specific goals include:

- 1 Creation of an online signup portal to begin data collection to determine areas for pilot installations.
- 2 Installation of open access hardware/software necessary to support automated marketplace for the initial service providers and subscribers (\$33K 90 days)
- 3 Installation of the initial fiber access locations along the backbone (\$110K each, suggesting 3 would total \$330k 120 days)
- 4 Installation of network switch equipment to include provider edge, core, access top of rack, and access network equipment and out of band management (\$55K 30 days)
- 5 Installation/construction of fiber to selected pilot homes (\$2.5K each, suggesting a minimum of 50 would total \$125K and a maximum of 100 would total \$250K 180 days)

TOTAL BUDGET between \$543K and \$668K which could be modified up or down by adding or subtracting either fiber access locations or pilot participants. All the above activities would run concurrently with total start to finish requiring 6 months.