



## Welcome to Fibre Alaska Gustavus Network Build Update and Community Connect Grant Public Information Presentation





► The challenge of deploying broadband infrastructure in Gustavus is substantially more costly and logistically problematic than anywhere else in the United States.

Gustavus' geographic features impede travel of wireless networking signals.







Large telecom providers are not interested in bringing the Internet to rural places like Gustavus because of the low number of potential subscribers. The high cost of buildout and delivery makes it uninteresting economically.





# Fibre Alaska



Born as a wild idea of a hard-working kid that dared to dream big...


David Kunat - the boy who refused to listen -that it can't be done.

Using own ingenuity and 100% private capital the test proved to be successful. Building on that initial success Fibre Alaska kept modifying the radio infrastructure.

Against all odds in 2015, Byte Networking, LLC and Fibre Alaska deployed Internet in Gustavus to parts of town as its own test network.





A scenic landscape photograph showing a dirt path leading through tall grass and trees towards a body of water and mountains in the background. The sky is a warm, hazy orange, suggesting a sunset or sunrise. The path is light-colored and leads from the bottom center towards the middle ground. On the left, there is a large, leafy tree with green and yellow foliage. On the right, there are two smaller, conical evergreen trees. The background features a calm body of water and a range of mountains under a soft, orange sky.

In the autumn of 2017, FA started to place fiber optic infrastructure in the ground, by then we knew that this is only way to keep up with the future demand.

The infrastructure we have built so far was funded 100% from private savings, and one family's hard and dedicated work.



Fibre Alaska is investing countless work hours and private funds, but with so few residents, we are not able to create enough income to keep improving, building up, and continuing to pay for extremely expensive middle -mile bandwidth.

Without the constant upgrade, Gustavus will stay on the wrong side of the digital divide.

The need for increased bandwidth is growing as applications and services become more advanced, which means that the divide will only continue to grow.



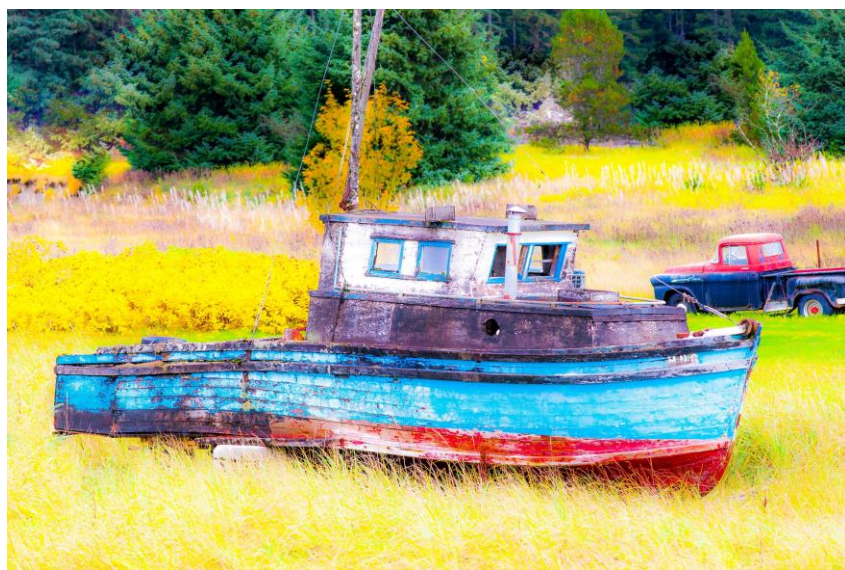




# Fibre Alaska



In the meantime, the need for more and for faster speeds just kept growing and some of the Gustavus continued still impossible to connect.



That is why we are applying for the USDA grant.

Without quick intervention and grant help, we will only fall more behind even when trying our best.

We would like to thank you Gustavus residents, businesses and other organizations for your overwhelming support. We were flooded with so many letters from all of you and it gives us encouragement to continue with the project.

# Project Objectives

The overall objective is to create a continuous, reliable, modern, high-speed connection between Gustavus, and the outside world based primarily on fiber optic technology.

## Phase 1, 2021 to 2022

1. Upgrade the existing 'middle mile' and 'last mile' of the hybrid fiber-wireless network in Gustavus.
2. Replace older equipment with industry standard, modern technology.
3. Install fibre optic cable throughout Gustavus.
4. Upgrade existing backup delivery systems.



Fibre Alaska



**The newly upgraded network will be capable of delivering a range of communication services, including data and voice to each customer in excess of 25 Mbps /second.**

**Service will be available to everyone in the community of Gustavus and capable of broadband speeds without signal latency and dropped service/connection problems.**

**Ultimately, we envision entire network build-up, with fiber optic. That high-performance endpoint will give us an enormous headroom for future upgrades and will prepare us for the phase 2**

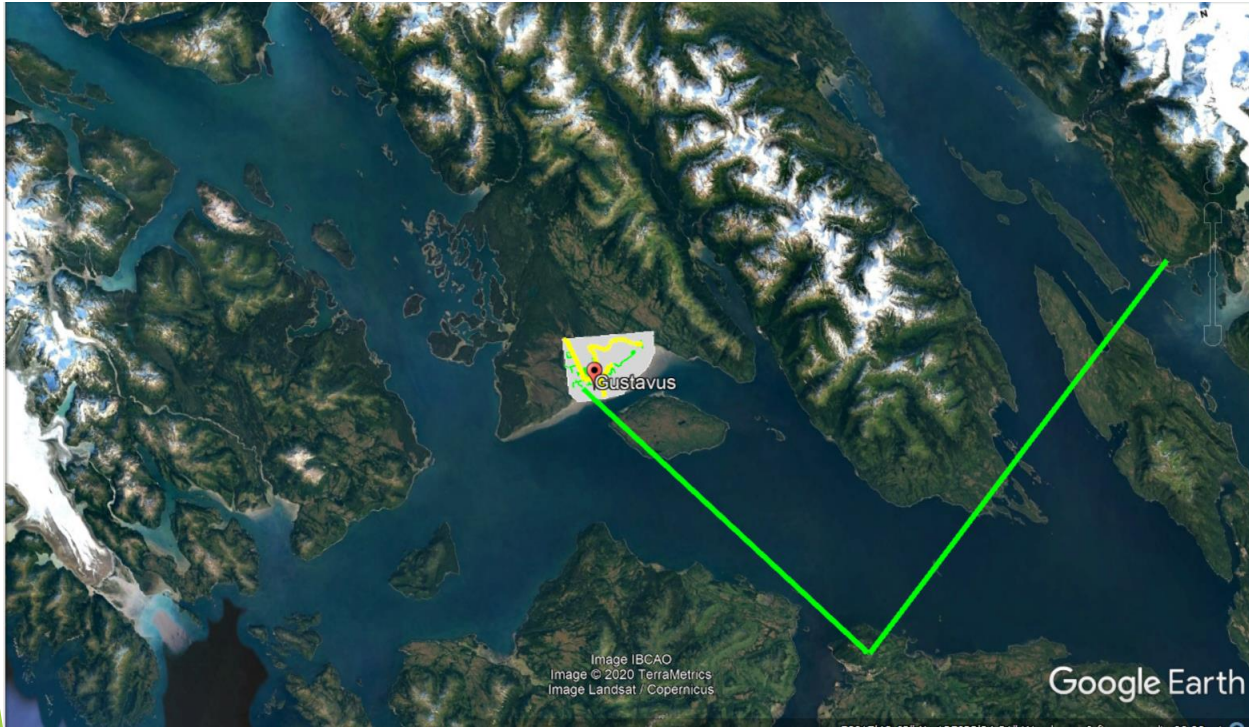
**Phase 2, 2022 and beyond (Most likely New Grant will be needed to continue to phase 2)**

**Connect directly via submarine fiber-optic cable that will make the fastest possible connection with limitless possibilities and technology that will last long time in the future.**





# Project Area Map



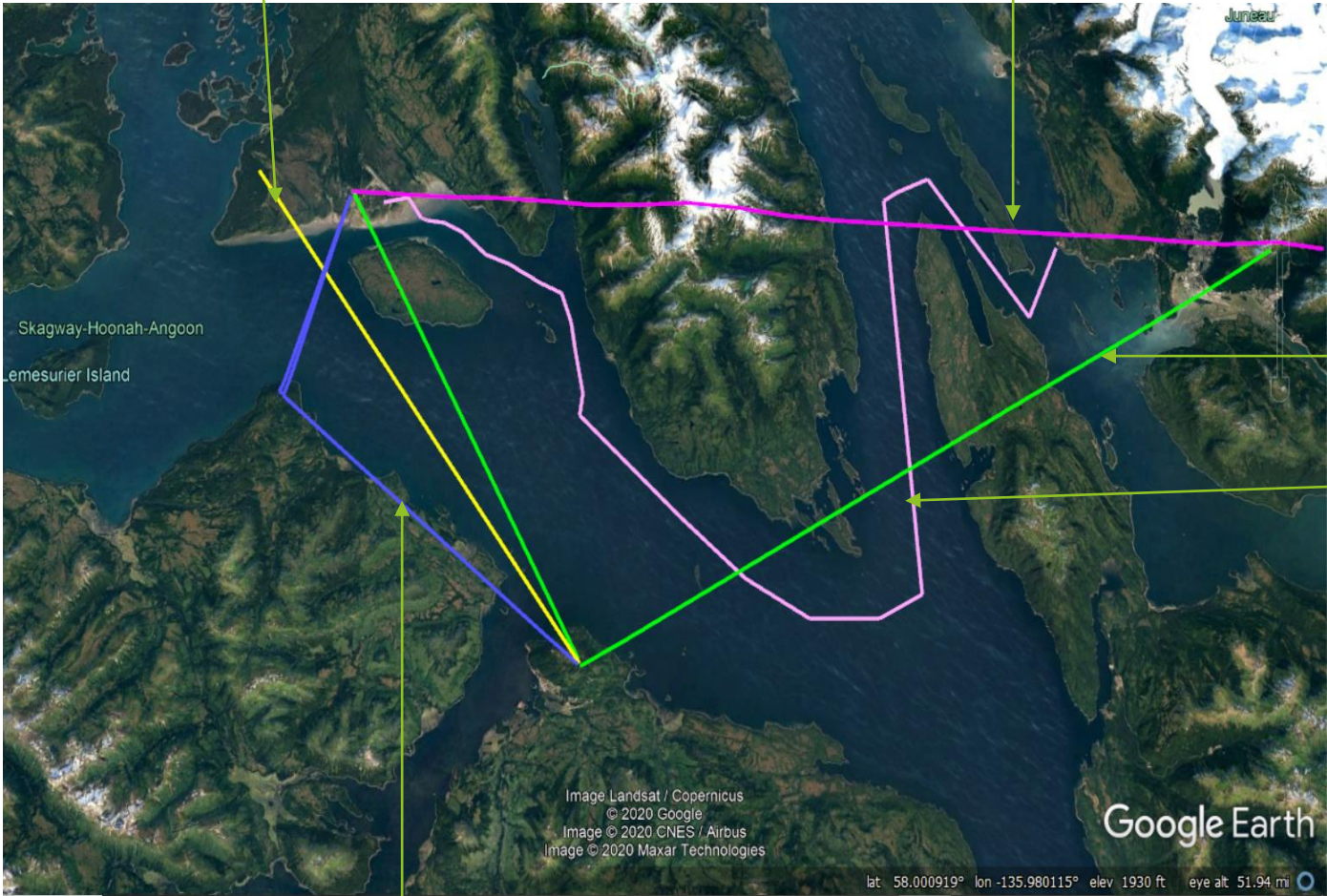
**Fibre Alaska**



Byte Networking Build for  
NPS Microwave Path

LONS (Line of no sight)

Current and future connections to  
Gustavus from Juneau.



Current Test Microwave  
path Juneau to Gustavus

Fiber Optic Cable path  
(Planned for the Future)



Current ATT Microwave Path



Once the middle mile upgrade work is completed

► We would like to complete the build of our "future proof" last-mile fiber optic network to deliver the fastest, most reliable, and most affordable Internet access, voice communications, and entertainment services to all Gustavus and Glacier Bay homes and businesses.

High initial investment will give us future-proofing, as the same fiber can provide decades of useful service.





Congratulations, you made it to the end of our presentation. Please ask questions or comment.



Big Thank you to all community members who helped with this presentation! Special thanks for all talented photographers who donated the great pictures. Thanks to Southeast Conference, Denali Commission and City of Gustavus for help in facilitating our project.

