



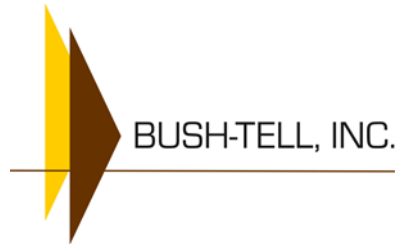
# State of Broadband

October 21, 2020

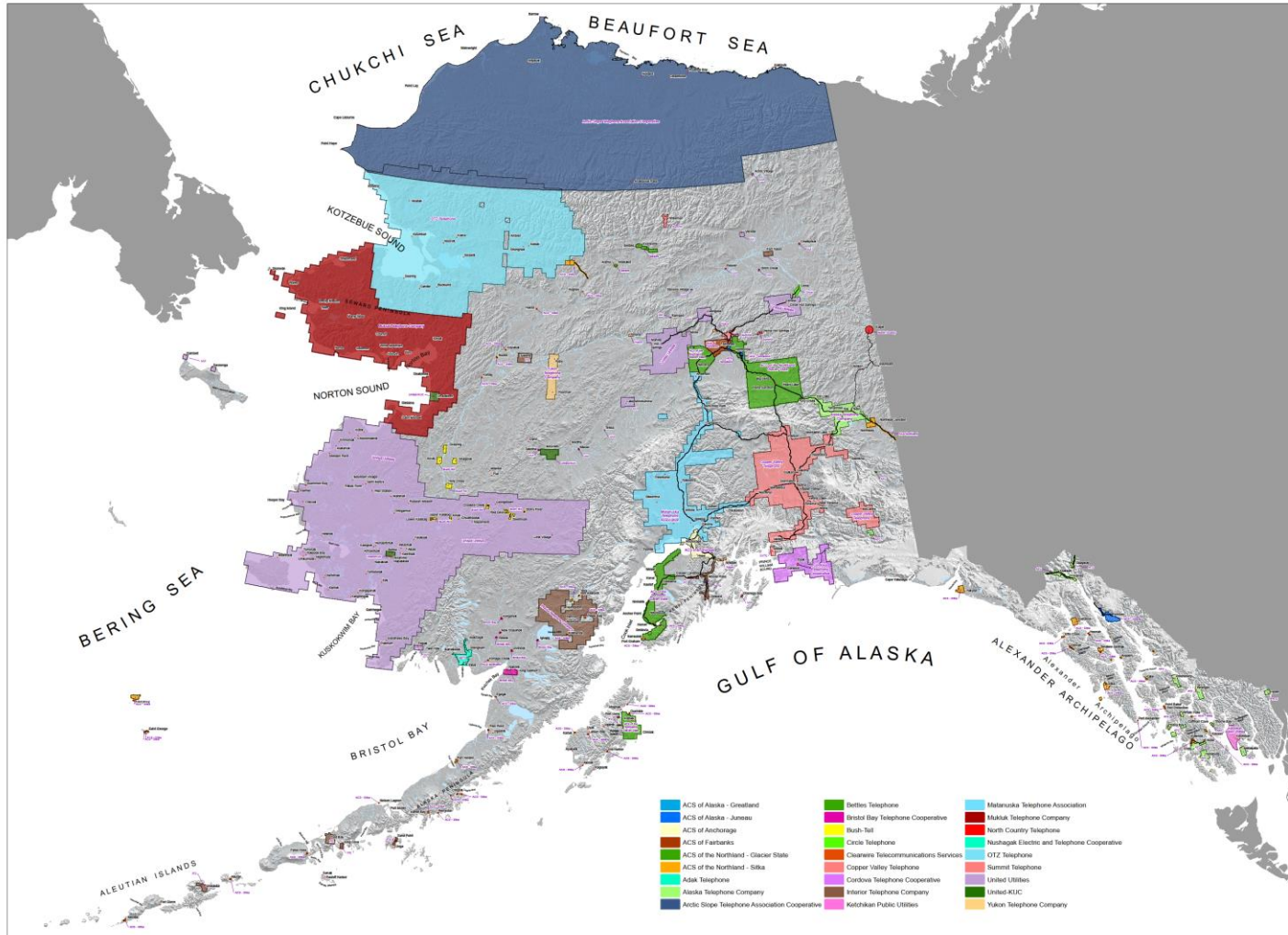
Alaska State Board of Education & Early Development



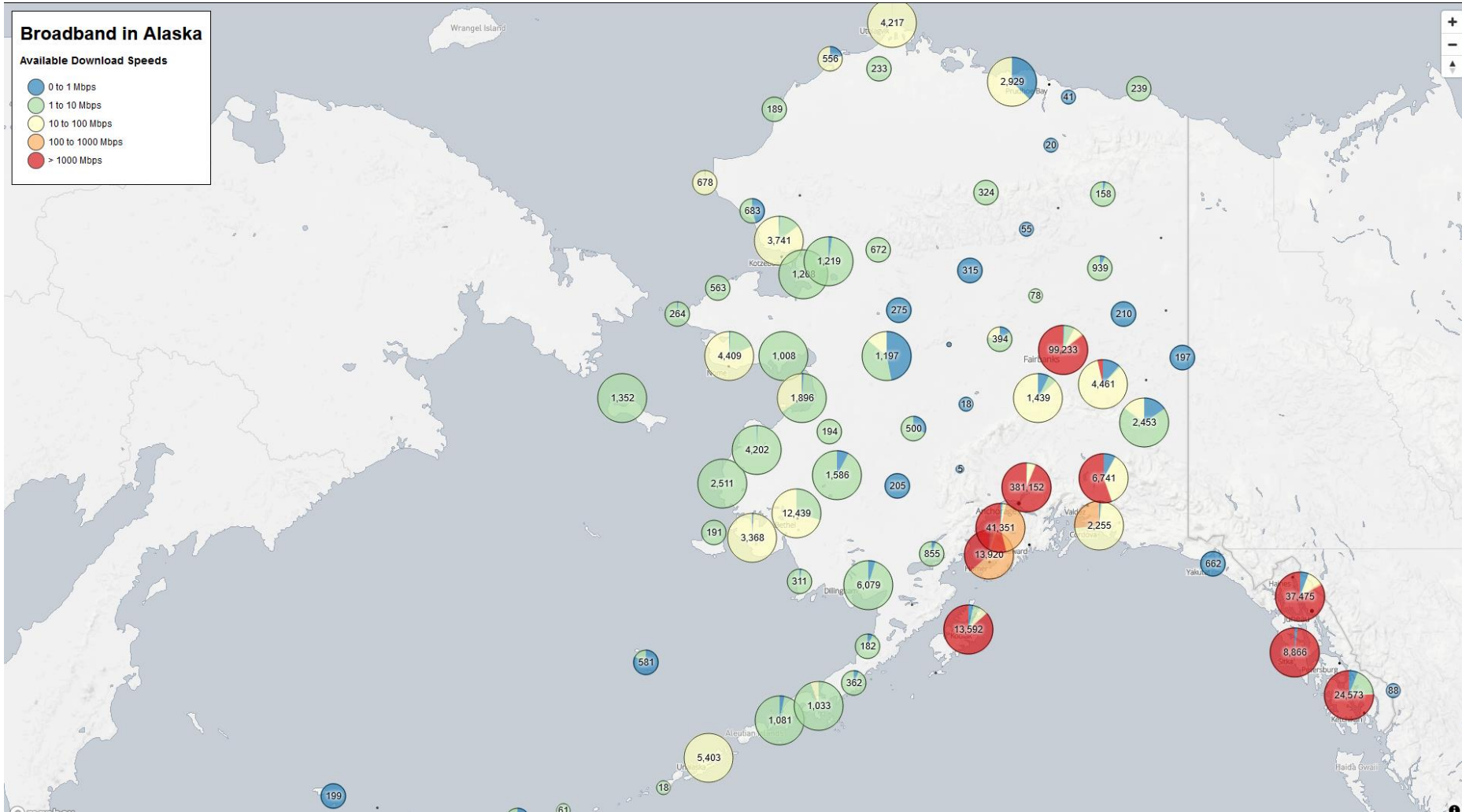
# Alaska Telecom Association



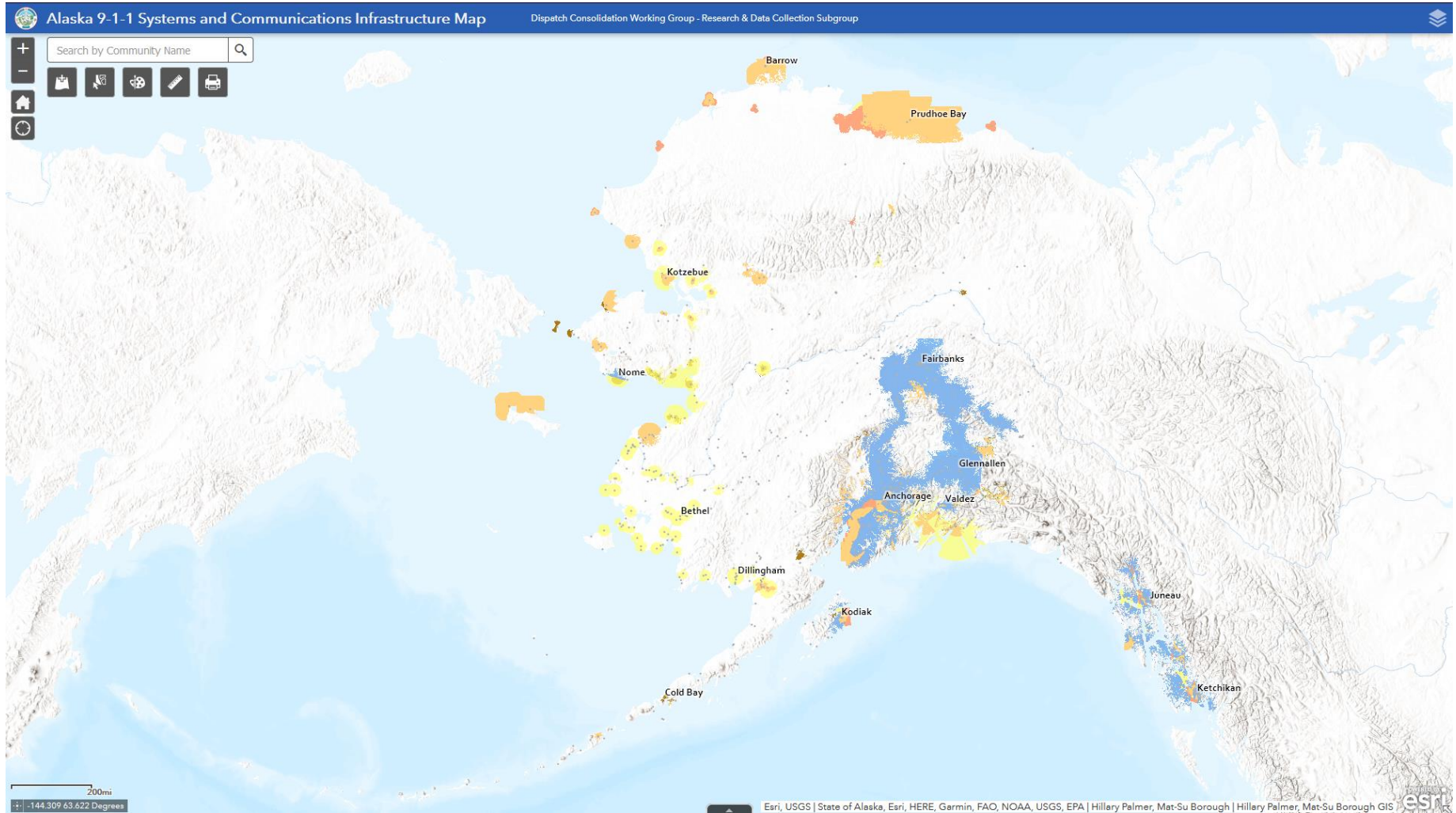
# Alaska Telecom Association



# Fixed Broadband Coverage

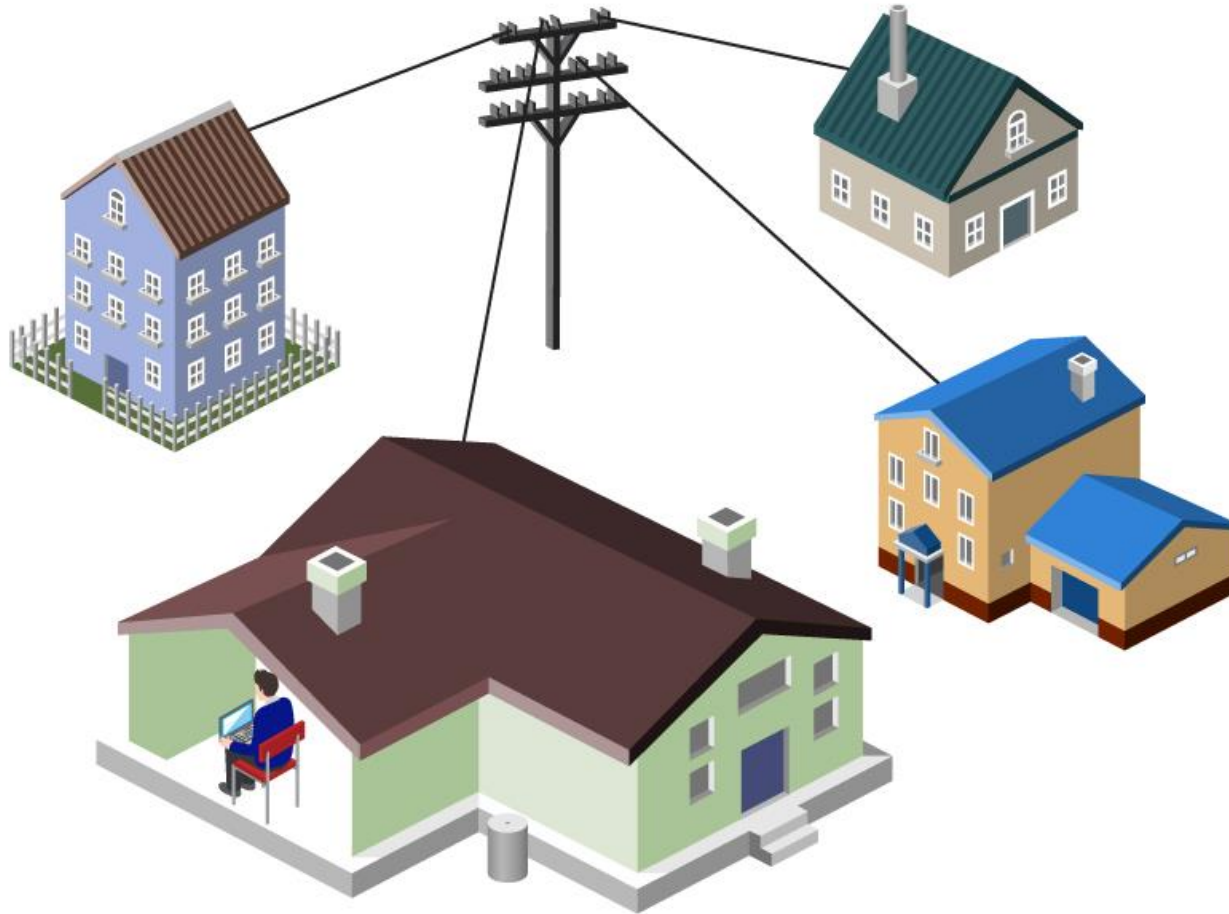


# Alaska Telecom Association



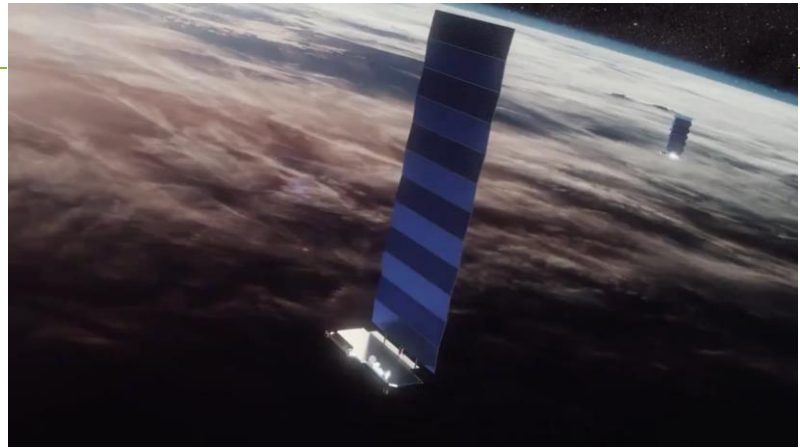
# Last Mile

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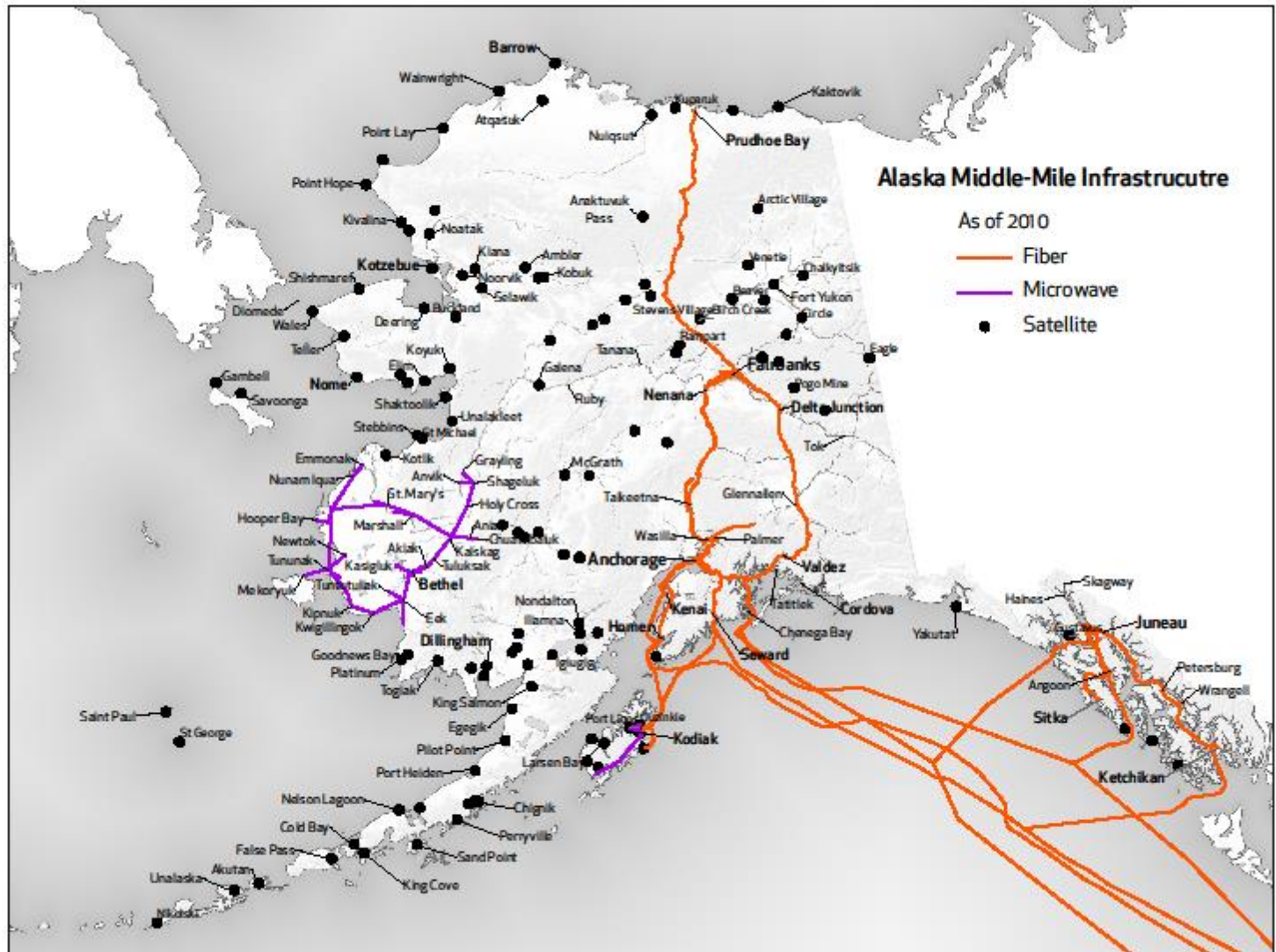


# Middle Mile

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# Middle Mile is Key - 2010

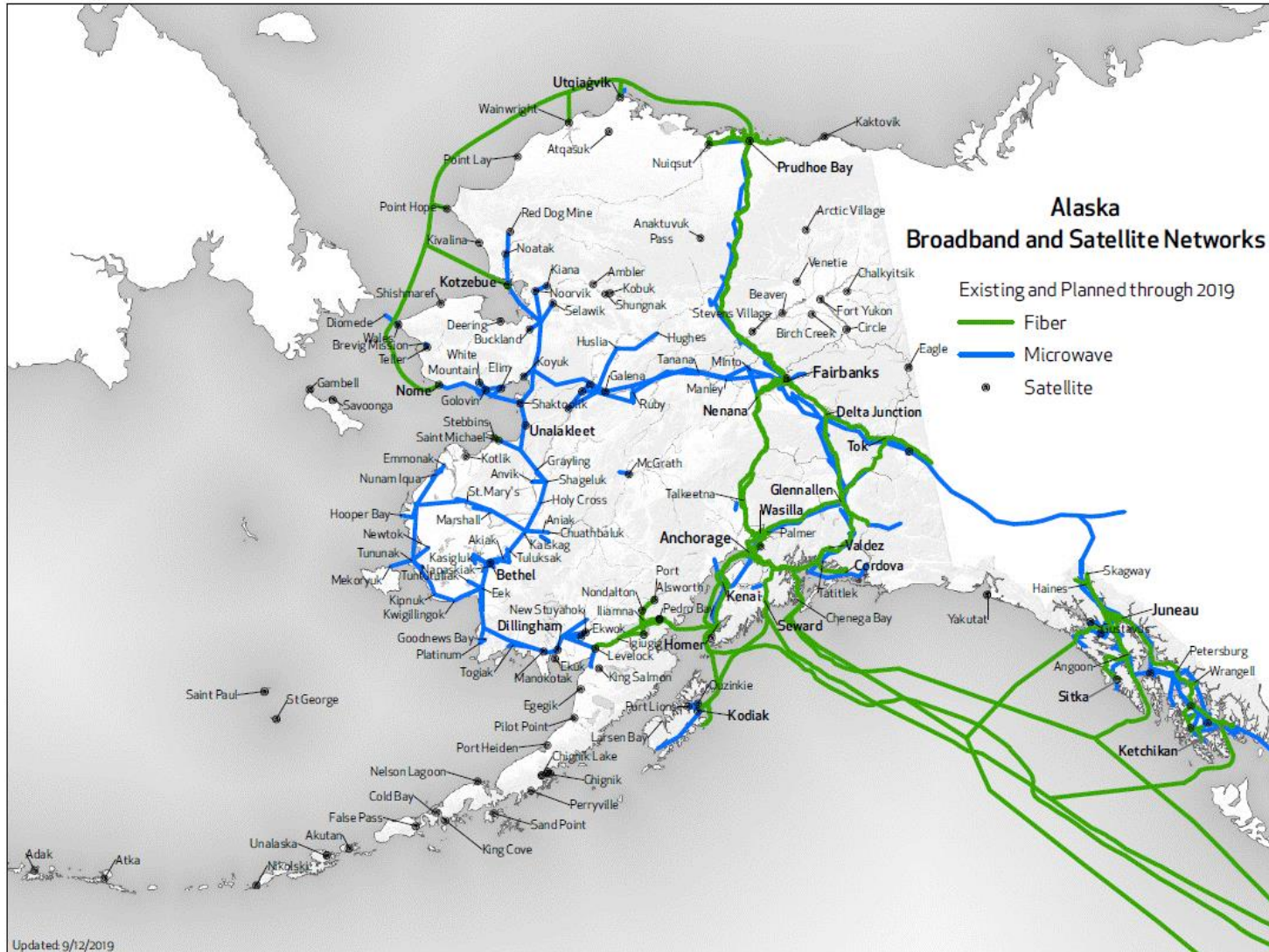


Date: 9/10/2015





# Middle Mile is Key - 2019



# Broadband Expansion

- ▶ 118,813 locations upgraded/new broadband by ATA members since 2015
- ▶ Projects completed in 2020 by:
  - ▶ Copper Valley Telecom
  - ▶ Alaska Communications
  - ▶ GCI



Over 16,000 Rural Alaskans Get Access to High-speed Internet, Thanks to Alaska Communications Broadband Network Expansion



# Broadband Expansion

- ▶ New middle mile projects
  - ▶ KPU Telecom
  - ▶ Matanuska Telephone Association
  - ▶ Nushagak Cooperative
  - ▶ Cordova Telecom

## Nushagak Cooperative announces significant increase to internet capacity for members

By TYLER THOMPSON • AUG 6, 2020

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The co-op's microwave project is complete, and it is now testing data capacity and moving members to the new packages.



## Undersea cable lands at Mountain Point

KPU boosts data capacity with AK's 1st fiber-optic cable connected to Canada

By DANELLE LANDES  
Daily News Staff Writer



Above, a Westpark Electric crew moves between shore and barge on Thursday during installation of a fiber-optic cable at Mountain Point. The barge Empire 45 arrived early Thursday morning with tugs Arctic Tug and Island Tugger. Crews connected the cable from Prince Rupert to Ketchikan at a recently constructed communications hub at Mountain Point. Fiber-optic cable was unraveled from a large orange spool located at mid-ship and was fed off the stern of the barge.

Staff photos by Dustin Saltschik

At around midnight Wednesday the Ketchikan Public Utilities new undersea fiber-optic cable landed at Mountain Point via barge. The cable's installation had begun 100 miles away at Dundas Island, northwest of Prince Rupert, then was laid along the sea floor on its way to Ketchikan. The operation was delayed a few days when it had to bunker in rough weather at Dixon Entrance, but all else ran smoothly, according to KPU Telecommunications Division Manager Ed Cushing.

City of Ketchikan voters in October approved the sale of up to \$11.5 million in KPU revenue bonds for the project, and the Ketchikan City Council authorized the bond sale in April.

The contract for the project was awarded to Westpark Electric Ltd, which, according to information at westparkelectric.com, is located in Hope, British Columbia.

In a telephone interview Thursday, Cushing described the span and purpose of the operation. The cable itself is 3.5 inches in diameter. Cushing explained, and it's armored with several layers of protective coating. Its inner core is packed with 48 hollow glass fibers that are thinner than a human hair and encased in protective material.

"The purpose of the fiber is to allow a laser on both ends to send data back and forth through the hollow fiber — through the hollow glass tube — and the laser is sending data at the speed of light," Cushing said. "Incredible amounts of data."

On Thursday morning, the contractor's crew was splicing the end of the cable onto the onshore cable, housed in a concrete vault. They then planned to test the cable (to) for continuity at the end of the onshore cable, and if everything tested well, their job would be complete and they would be on their way back to Canada by the early afternoon Thursday.

See 'Fiber-optic cable' page 3



Above, cable is unraveled from a large spool, located topside at mid-ship, before being fed off the stern of the barge and onto the seabed.

At left, a Westpark Electric technician monitors the distribution of a fiber-optic cable on Thursday off the stern of the barge Empire 45 in Re-villagigedo Channel at Mountain Point.

Staff photos by Dustin Saltschik



The submarine fiber-optic cable is shown spooled aboard the barge Empire 45.

Photo courtesy of Ed Cushing

## AICan ONE Completed, Linking Alaska to Canada and U.S.

### Hubs via First Terrestrial Fiber Network

Posted on May 27, 2020 by Carl Weinschenk [Share](#)

Broadband
Fiber Broadband
Regional Fiber Network

Home » AICan ONE Completed, Linking Alaska to Canada and U.S. Hubs via First Terrestrial Fiber Network



MTA Fiber Holdings has finished and fired up the Alaska Canada Overland Network (AICan ONE), which the company says is the only all-terrestrial fiber network connecting Alaska and the United States.

# ReConnect Pilot Program Round 1

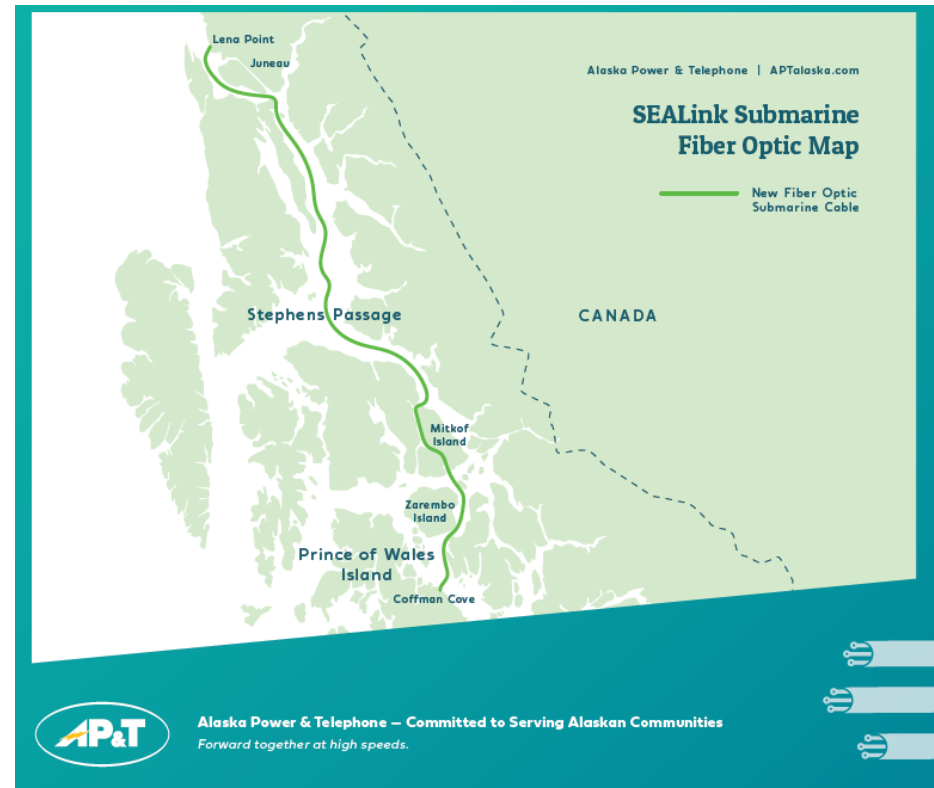
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- ▶ Dec. 3, 2019 USDA awards Cordova Telecom \$18.9M grant to connect Yakutat



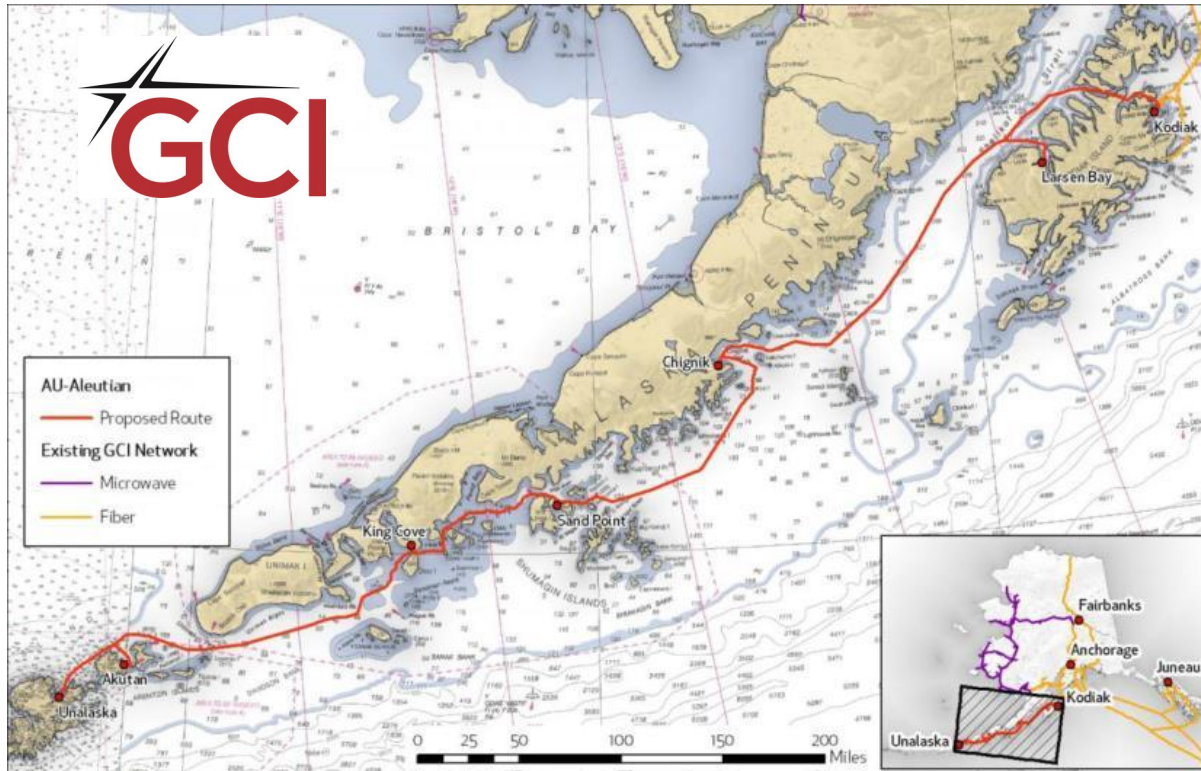
# ReConnect Pilot Program Round 2

- ▶ October 12, 2020 USDA awards \$21.5M grant to Alaska Power & Telephone to connect Coffman Cove and Kasaan on Prince of Wales Island.



# ReConnect Pilot Program Round 2

- ▶ October 12, 2020 USDA awards \$25M grant to GCI to build an undersea fiber connecting Unalaska, Akutan, King Cove, Sand Point, Chignik, & Larsen Bay



# School Broadband Assistance Grants

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*Helping Students by Helping  
Schools Reach ~~10~~ **25** Mbps*

- ▶ SB74 signed March 26, 2020
- ▶ Emergency regulations adopted to support increase in FY21



# What's next?

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- ▶ Private investment
- ▶ Federal Programs
- ▶ State
- ▶ New initiatives



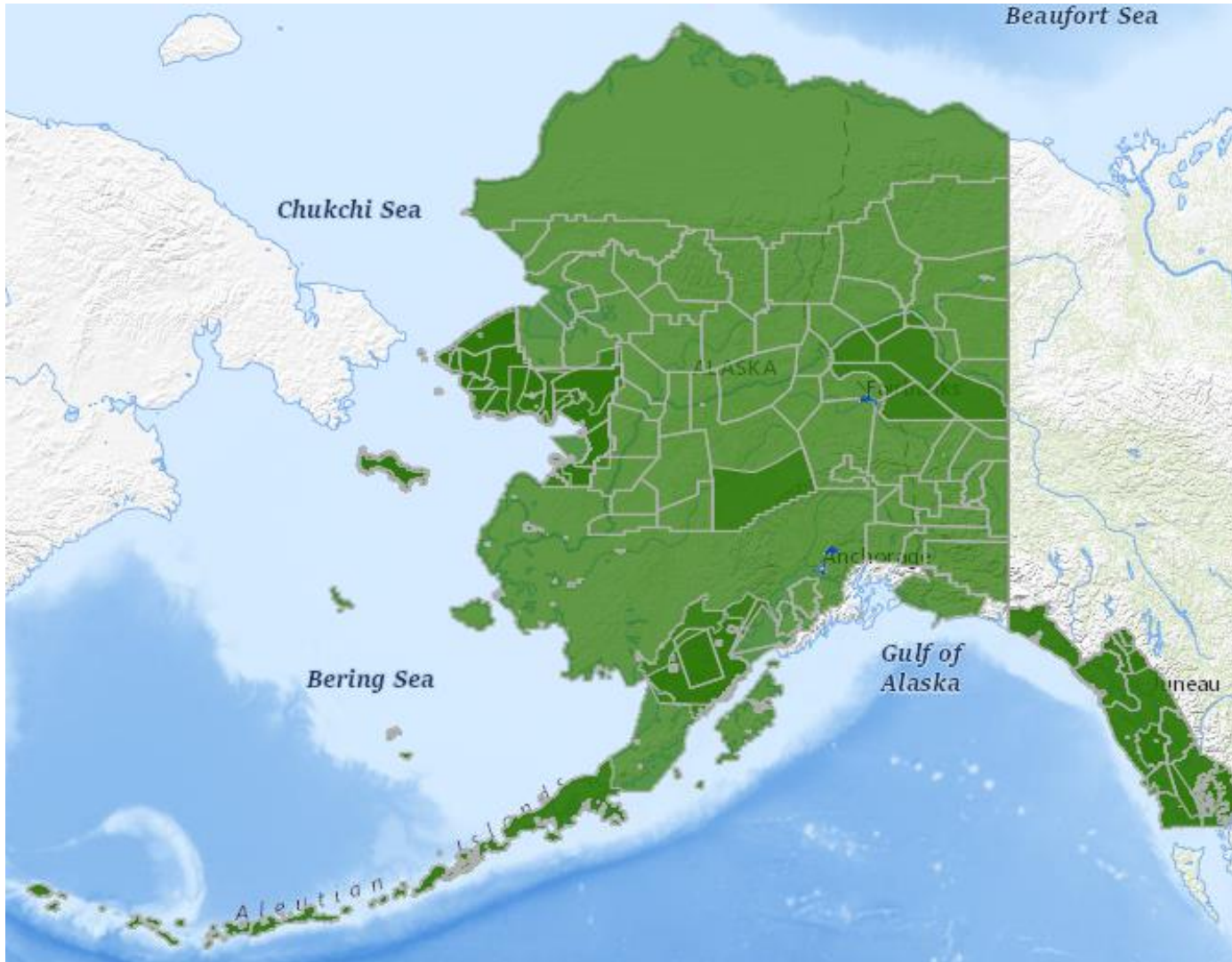
# Low Earth Orbit Satellites - LEOS

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- ▶ One Web
- ▶ Starlink
- ▶ Project Kuiper
- ▶ Telesat

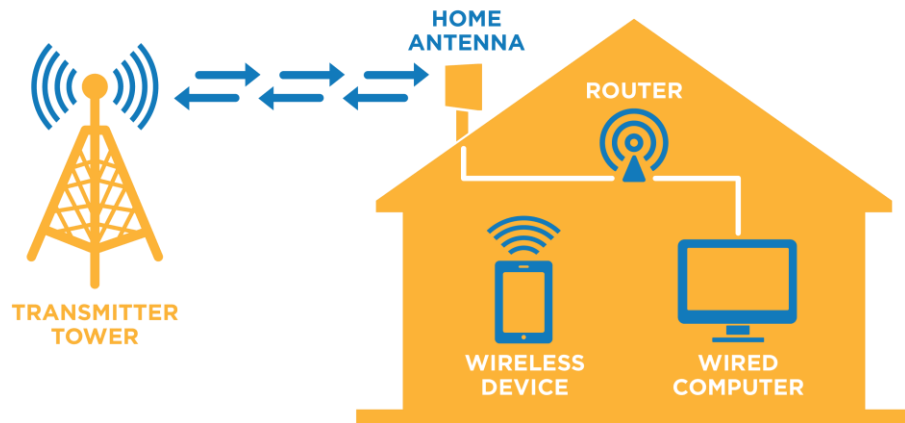


# 2.5GHz Rural Tribal Spectrum



# How can we use 2.5GHz in Alaska?

## — FIXED-POINT HIGH SPEED WIRELESS INTERNET —



# USDA

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- ▶ Community Connect
- ▶ ReConnect Pilot Program Round 3
- ▶ Distance Learning & Telemedicine
- ▶ Denali Commission

# Congress

**ars TECHNICA** BIZ & IT TECH SCIENCE POLICY CARS GAMING & CULTURE

UNIVERSAL BROADBAND—  
**\$100 billion “universal fiber” plan proposed by Democrats in Congress**

Ambitious legislation would deploy 100Mbps symmetrical broadband throughout US.

JON BRODWIN · 6/25/2020, 10:00 AM



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LANDED IN THE RIGHT PLACE AT THE RIGHT TIME

future tense

## Broadband Internet Is an Imperative, Not a Luxury

We need a national investment to bring internet to millions of Americans. \$100 billion is a good place to start.

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## Bullish on Broadband: Time to Get Your Grant Proposals Ready

At least 15 federal agencies provide grants to support better broadband. It's time for communities to get moving if they want to claim their share.

THE AGENDA

OPINION | TECHNOLOGY

### A Game Plan to—Finally—Connect Every American to Broadband

We've struggled for years to bring high-speed Internet to rural and low-income Americans. Here's how to get the job done.



House appropriators this year propose expanding USDA's ReConnect broadband program, clearing legislation through the chamber to give the department hundreds of millions of dollars. | Michael Boehner/Getty Images

By JOHN STANKEY  
07/08/2020 04:30 AM EDT

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## Pandemic Builds Momentum for Broadband Infrastructure Upgrade

Coronavirus crisis shows need for widespread high-speed internet in U.S. homes

**The Washington Post**  
Democracy Dies in Darkness

D.C., Md. & Va. Opinions Cape Up Post Opinion

Opinions

# America's digital divide is an emergency

# Contact

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