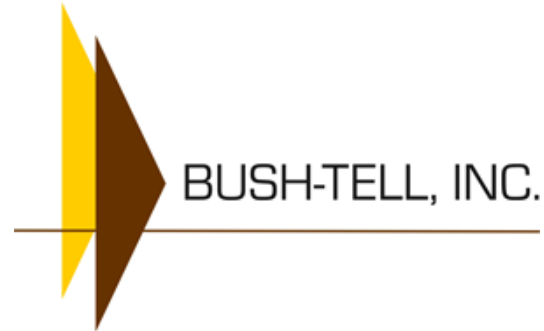




Broadband Momentum

December 7, 2022
Alaska Municipal League



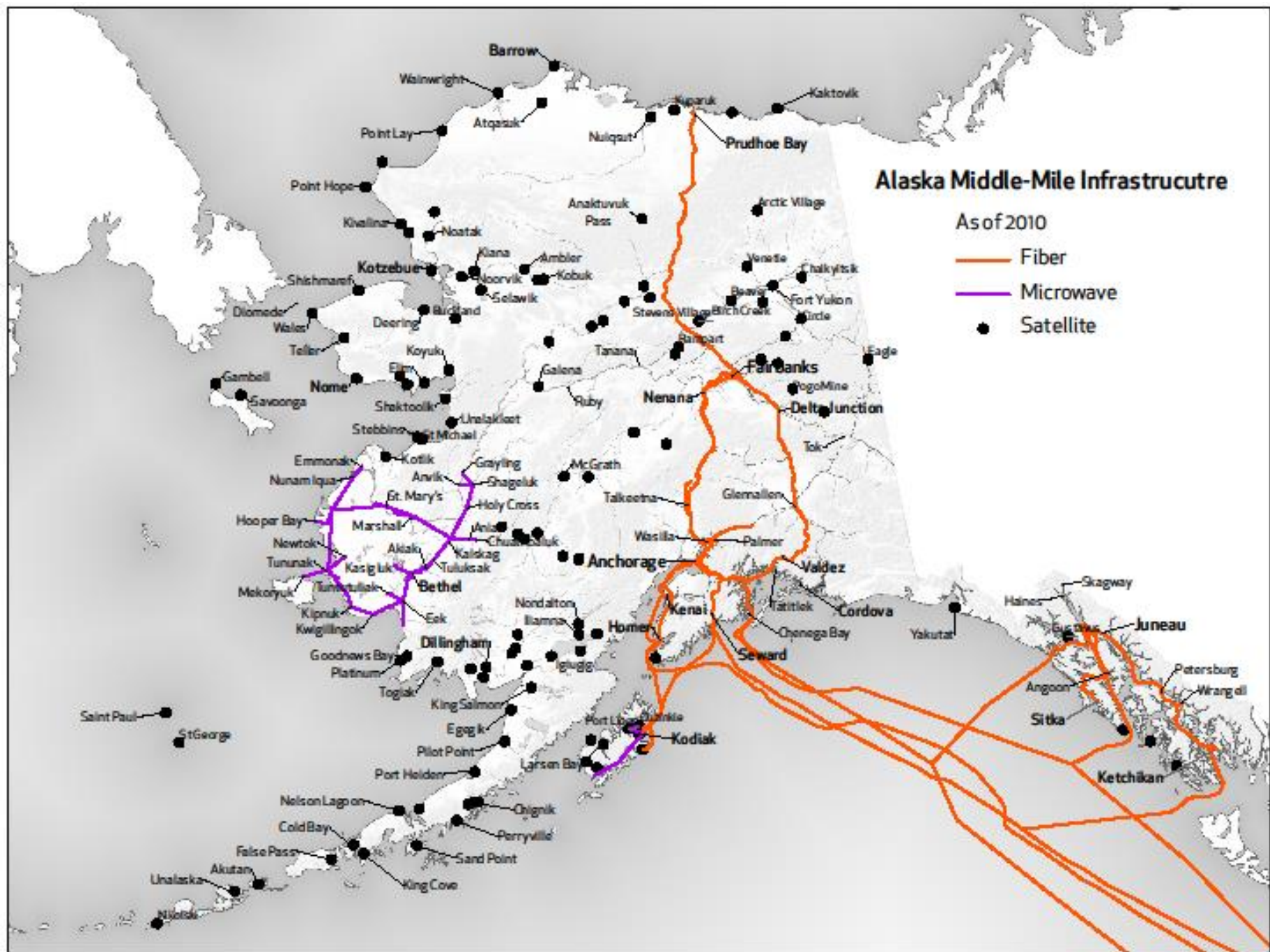


Momentum 2017-2021

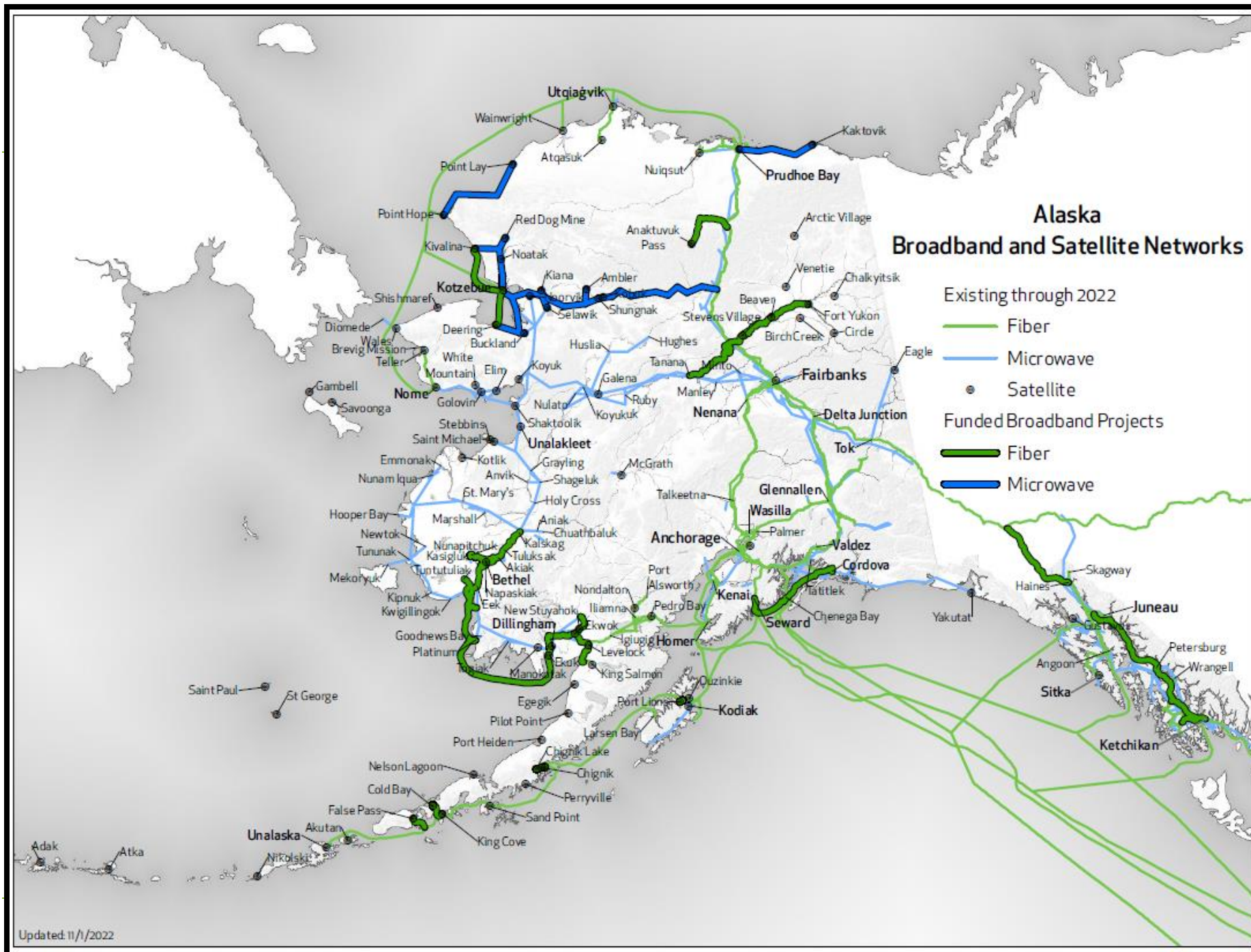
- ▶ 78,000+ locations upgraded/deployed
- ▶ 115,000 Alaskans improved wireless service
- ▶ \$1.4B capex



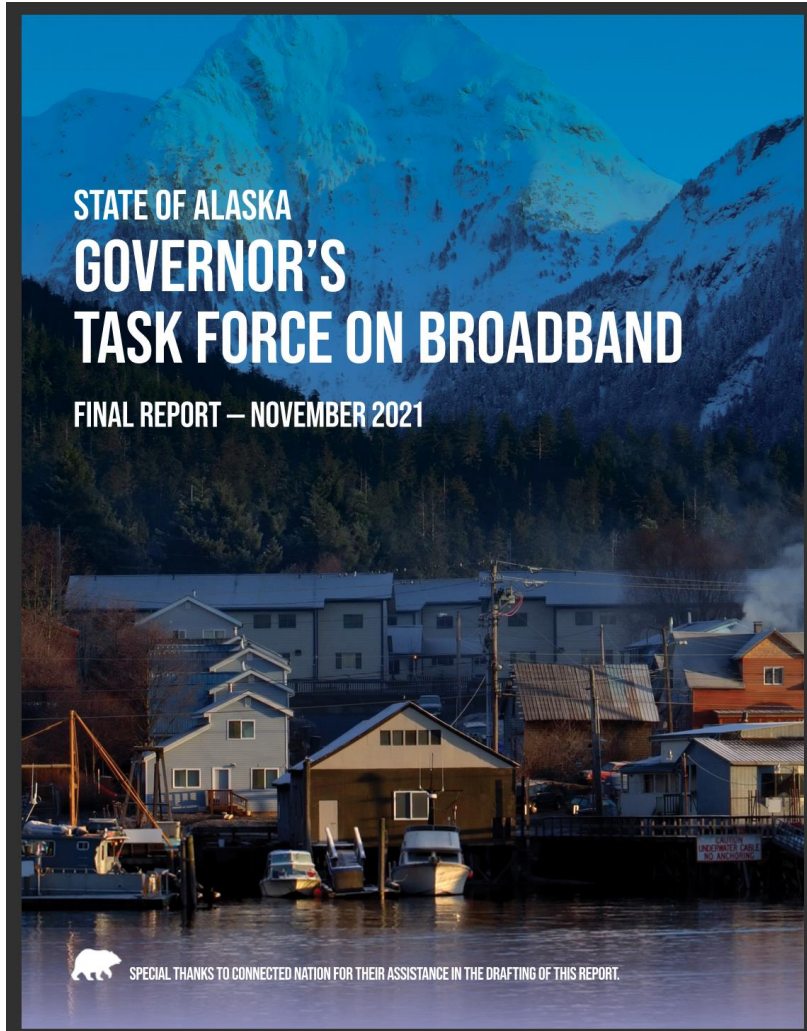
Middle Mile 2010



Middle Mile 2022



Governor's Task Force on Broadband



- ▶ Administrative Order 322
- ▶ Multi-stakeholder
- ▶ 8 Tasks
- ▶ 2 Subgroups
- ▶ 32 Public Meetings
- ▶ 36 Recommendations
- ▶ Notable Document Award
- ▶ gov.alaska.gov/broadband

Define Gaps

- ▶ Speeds:
 - ▶ **25/3Mbps = unserved**
 - ▶ **100/20Mbps = underserved**
- ▶ Latency: less than **100 milliseconds**, sufficient for real-time applications like 2-way video
- ▶ Data usage: comparable to **urban** markets
- ▶ Reliability: **24/7 service** with minimal downtime and resistant to single points of failure



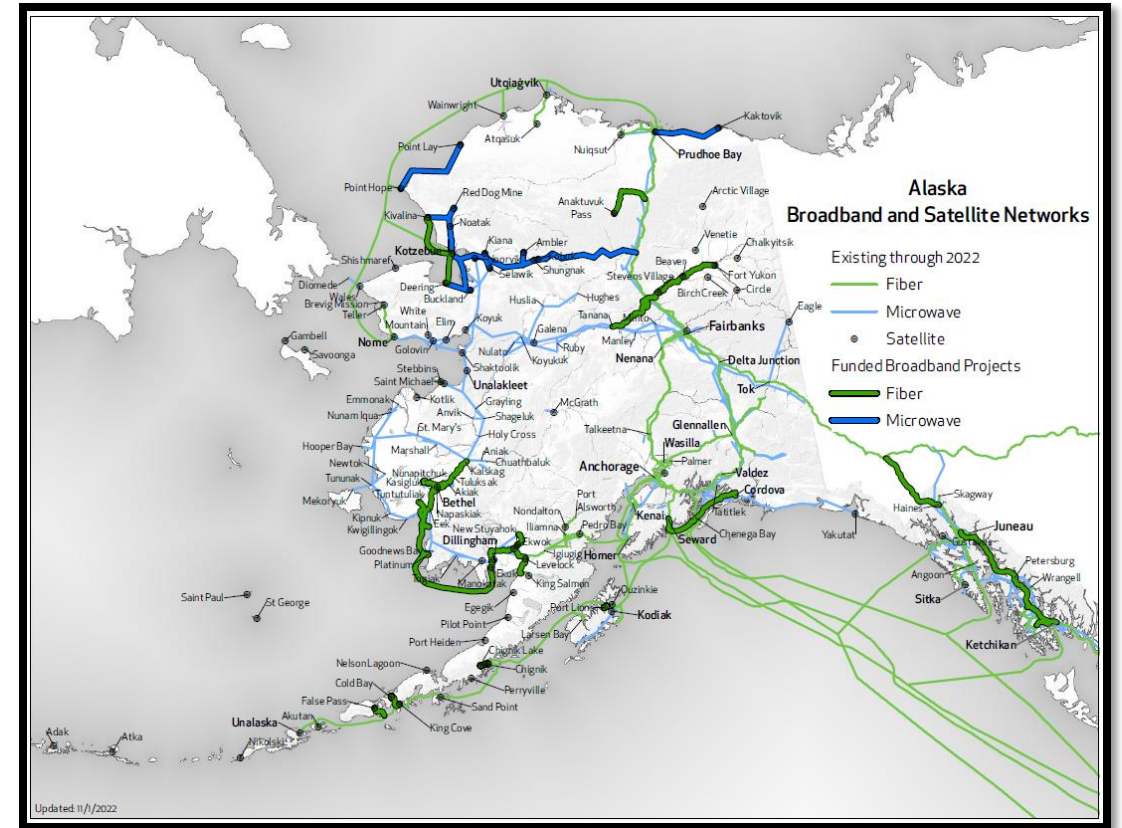
Target the Unserved & Underserved

Robust broadband services should be available to **all Alaskans**. Policymakers should expand buildout objectives to deploy infrastructure to **meet the needs of unserved and underserved locations** across Alaska.



Identify Middle Mile Needs

Broadband policy and program analyses should include data gathering and research to **identify where additional middle-mile capacity is needed** to meet established or potential last-mile service availability speed targets, recognizing that any established **standards will need to evolve** with the growing demands of technology and consumer usage over time.



Give Preference to Fiber Middle Mile

Due to its unparalleled bandwidth, latency, upgradeability, and reliability, **fiber-optic cables** should be deployed wherever feasible and practical to facilitate middle-mile connections.



HB363 – 32nd Legislature

- ▶ Establishes
 - ▶ Office of Broadband
 - ▶ Broadband Parity Adjustment
 - ▶ Statewide Advisory Board
 - ▶ Technical Working Group
- ▶ Prioritizes
 - ▶ Unserved
 - ▶ Underserved
 - ▶ Anchor Institutions



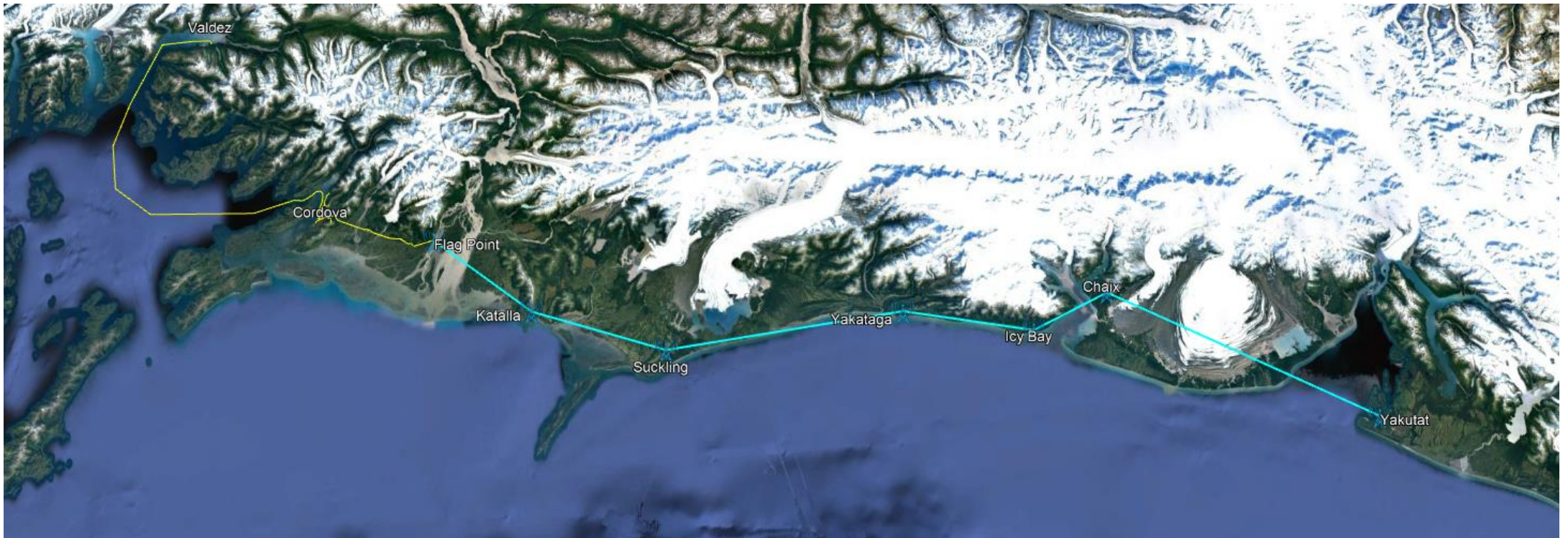
ReConnect Grant Program

- ▶ Loans and grants to provide funds for the costs of construction, improvement, or acquisition of facilities and equipment needed to provide broadband service in eligible rural areas.
- ▶ 14 awards, more likely
- ▶ \$305M grant, \$53M matching
- ▶ 5,000+ households in rural Alaska
- ▶ Fiber and microwave technologies
- ▶ Round 4 applications under review

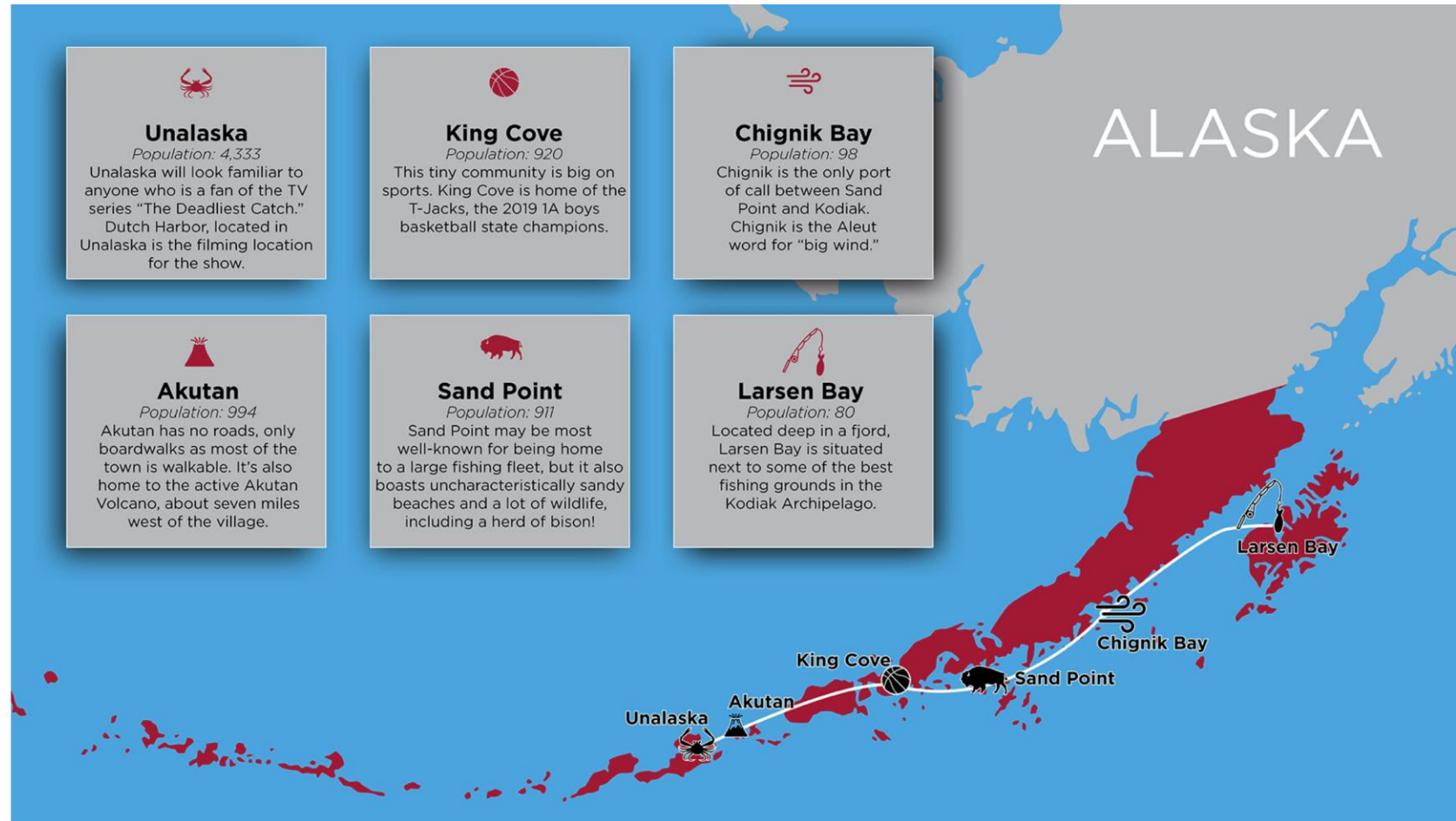


NICEY - Yakutat

- ▶ “New Internet Connection for Everyone in Yakutat”
- ▶ Cordova Telecom \$18.9M grant to connect Yakutat
- ▶ Microwave network



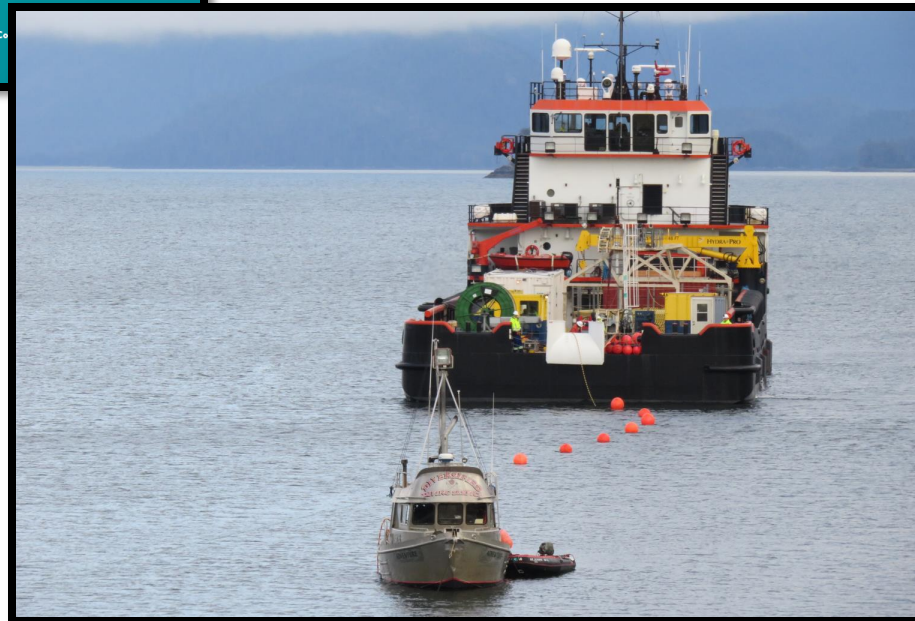
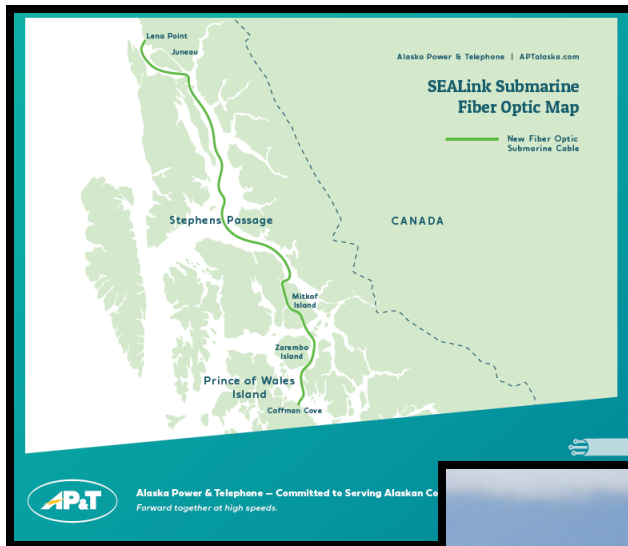
Aleutian Fiber - GCI



Atqasuk Fiber Build - ASTAC



SEALink - Alaska Power & Telephone



USDA Rural Development Alaska
@RD_Alaska · Follow



A \$21M Round 2 @usdaRD ReConnect grant helps Alaska Power & Telephone lay the submarine cable that will bring high speed internet to Kasaan and Coffman Cove!
#FiberToTheHome #ConnectAlaska #RainbowConnection
#KermitToEndingTheDigitalDivide



1:03 PM · Oct 26, 2022



Mukluk Telephone dba Fastwyre Broadband - Teller

- ▶ \$4.1M for fiber to the home network
 - ▶ Brevig Mission
 - ▶ Teller
- ▶ 70 miles fiber
- ▶ Microwave



Tanana Chiefs Conference

- ▶ Huslia, Alatna, and Allakaket Alaska Native Village Statistical Areas as well as the socially vulnerable communities of Yukon-Koyukuk Census Area.
- ▶ \$30.3M
- ▶ Fiber network



Alaska Power & Telephone

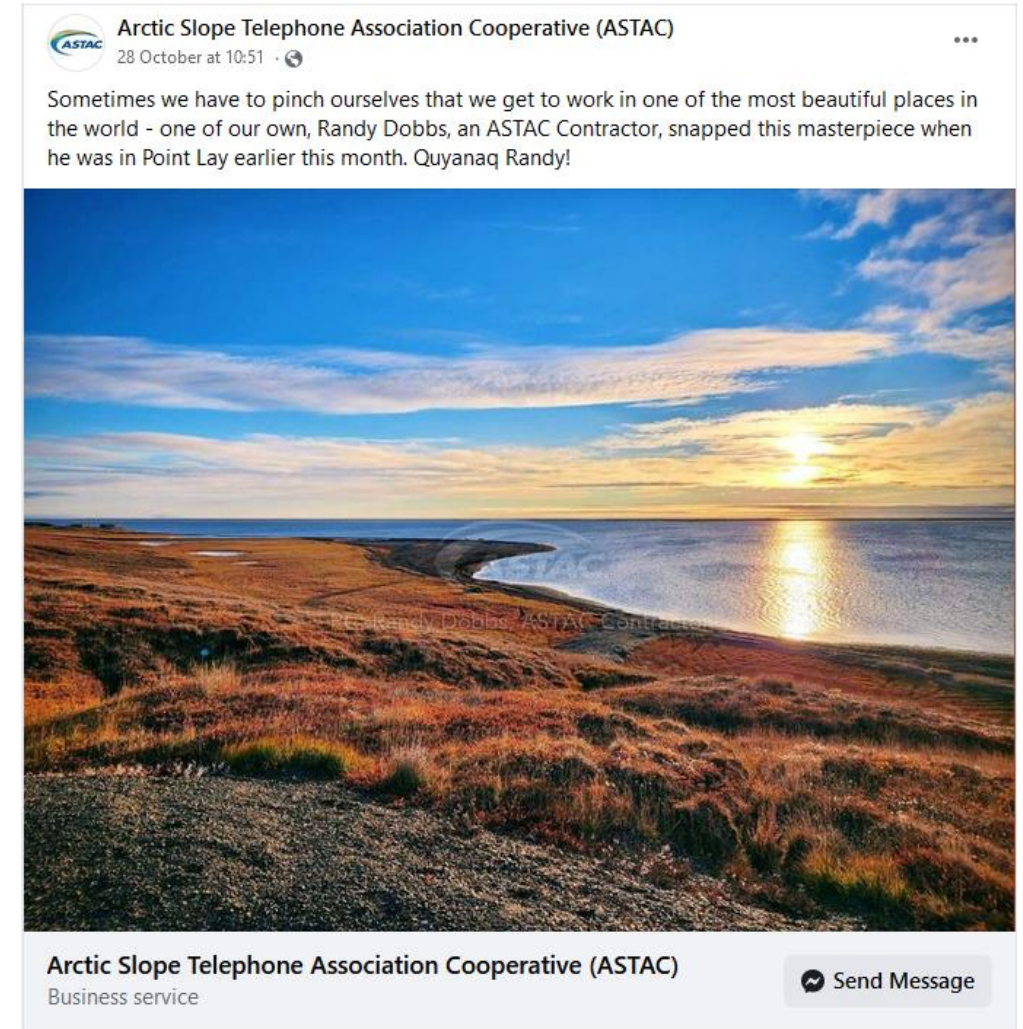


- ▶ Alaska Power & Telephone
- ▶ #1
 - ▶ \$33M grant, \$11M match
 - ▶ Fiber project to serve Klukwan and Skagway
- ▶ #2
 - ▶ \$29M grant, \$9.8M match
 - ▶ Fiber project to serve Klawock, Craig, and Hyder



ASTAC

- ▶ \$31M for fiber project to Anaktuvuk Pass and Point Lay
- ▶ Replace satellite backhaul with fiber



Cordova Telephone Cooperative

- ▶ \$21M grant, \$7M match
- ▶ Fiber project to Eyak and the Valdez-Cordova census area.
- ▶ Subsea fiber Cordova-Seward
- ▶ Village of Chenega



Cordova Telecom Cooperative

28 July · 🌐

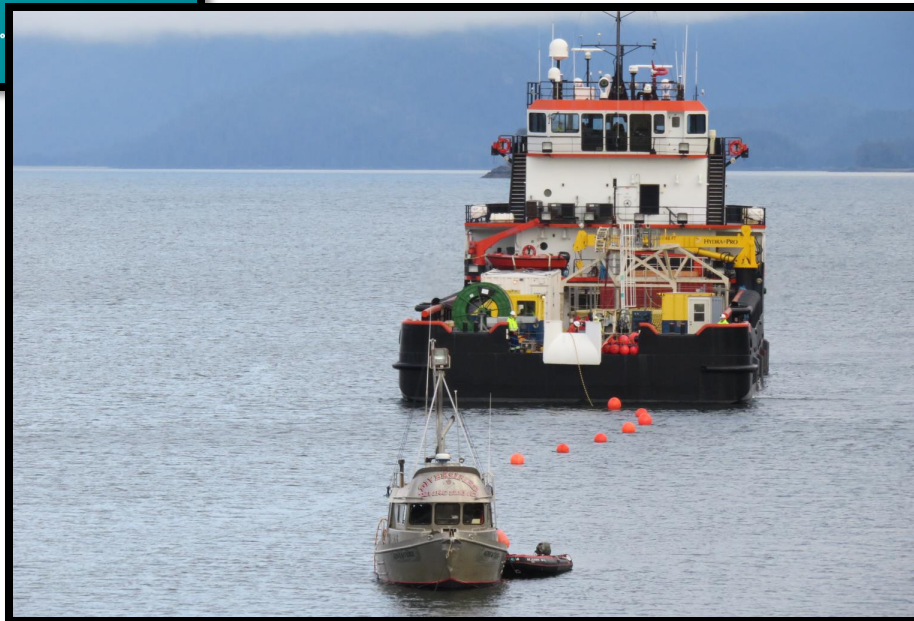
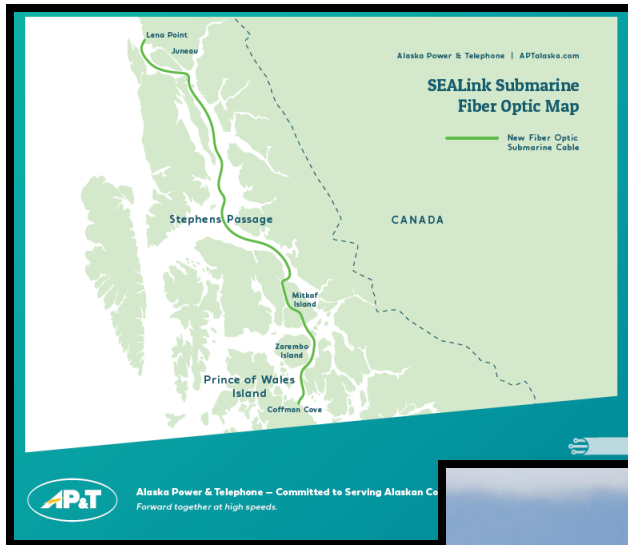
Exciting news Cordova!

Cordova Telecom Cooperative (CTC) is pleased to announce it has been awarded \$21,404,940.00 in grant funding from the USDA's Rural Utility Service ReConnect Round 3 program to deliver Fiber-To-The-Home in Cordova, Alaska, and a submarine fiber line from Cordova to Seward with strategic branches to the FAA Johnstone Point site and the Village of Chenega.

ASTAC – Atqasuk Fiber Build



SEALink - Alaska Power & Telephone



USDA Rural Development Alaska
@RD_Alaska · Follow



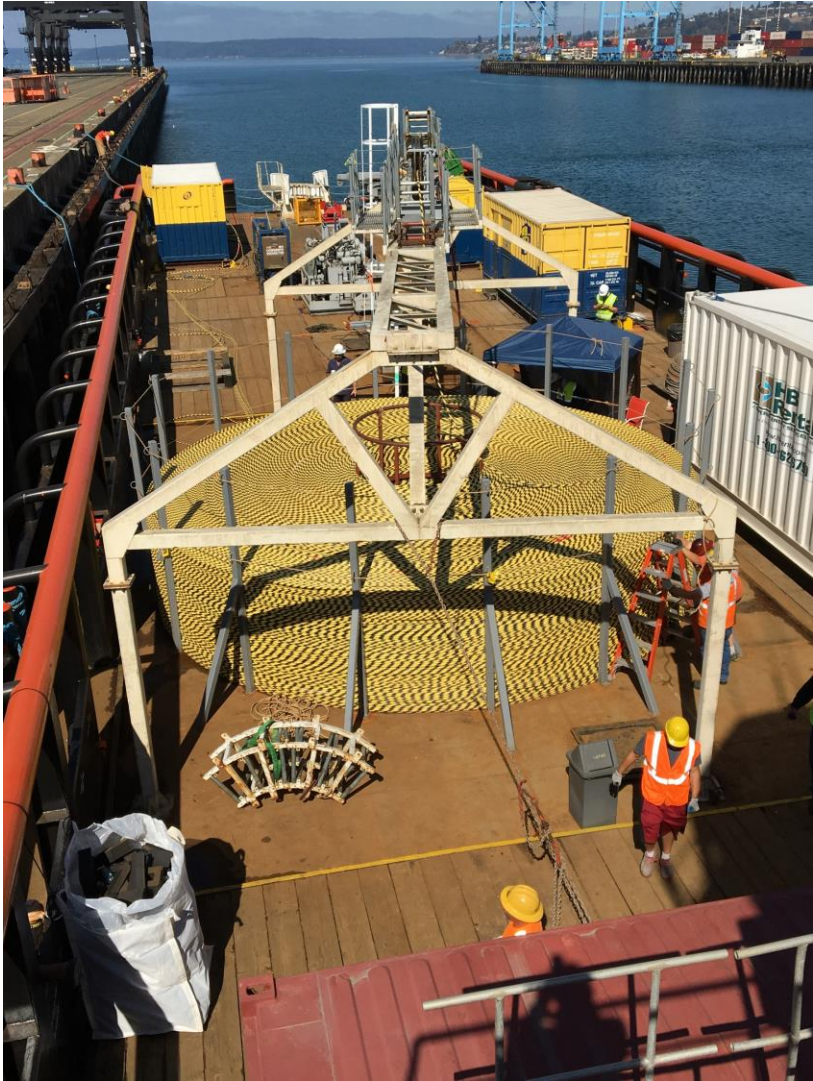
A \$21M Round 2 @usdaRD ReConnect grant helps Alaska Power & Telephone lay the submarine cable that will bring high speed internet to Kasaan and Coffman Cove!
#FiberToTheHome #ConnectAlaska #RainbowConnection
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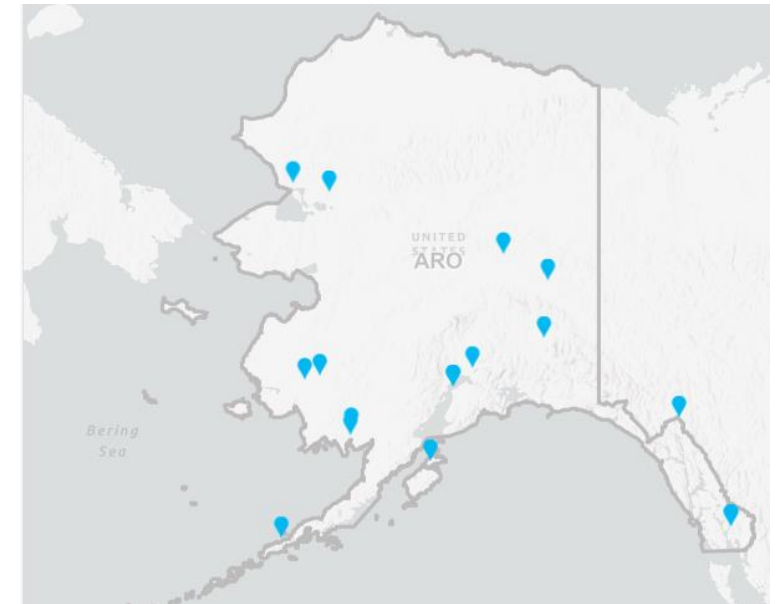
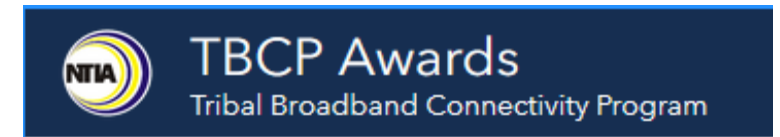


Lynn Canal Fiber – Alaska Power & Telephone



Tribal Broadband Connectivity Program

- ▶ NTIA
- ▶ \$1B first round, \$2B added from Bipartisan Infrastructure Law
- ▶ 2 categories, adoption & deployment
- ▶ Applications under review and curing, awards rolling basis
- ▶ Alaska – 10 projects - \$341M
- ▶ More coming



TBCP – Doyon & Alaska Communications

- ▶ \$50.7M to Doyon in collaboration with Alaska Communications to bring fiber to Fort Yukon, Beaver, Stevens Village, Rampart, and Tanana
- ▶ 1GB service
- ▶ Anchorage rates



Doyon, Limited and Alaska Communications Will Bring Affordable, High-Speed Broadband to Five Tribal Communities in Alaska

TBCP – Calista & Alaska Communications

- ▶ \$52.5M to Calista in collaboration with Alaska Communications to bring fiber to Lower Kalskag, Upper Kalskag, Tuluksak, Akiak, Akiachak, Kwethluk, and Napakiak.
- ▶ 1GB service
- ▶ Anchorage rates



TBCP – Bethel Native Corporation & GCI

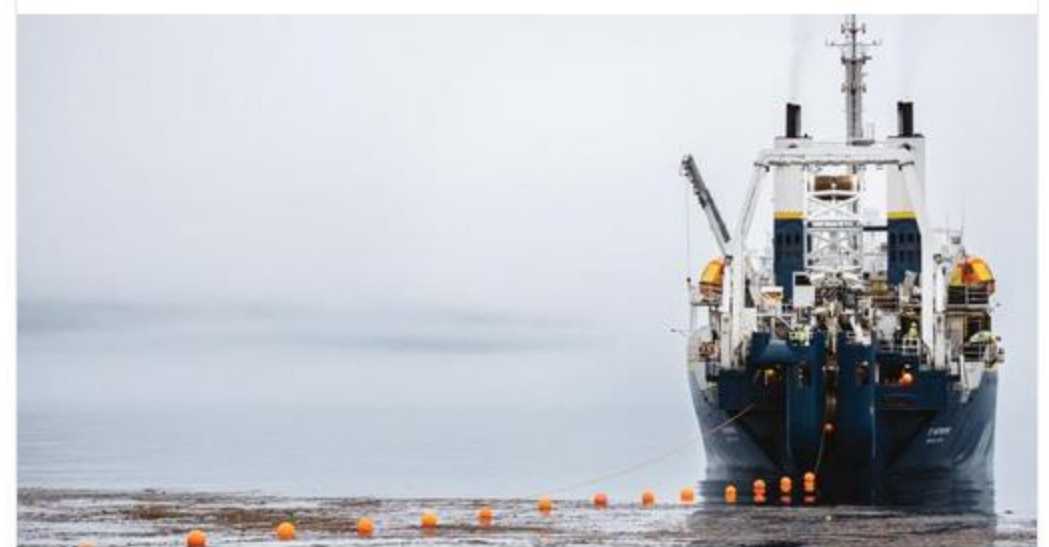
- ▶ \$42M to BNC in collaboration with GCI to bring fiber to Bethel, Platinum, Eek, Napaskiak, and Oscarville
- ▶ Connects with \$31M ReConnect grant to bring fiber to Atmautluak, Kasigluk, Nunapitchuk, Quinhagak, and Tuntutuliak
- ▶ 2GB service
- ▶ Affordable rates



Bethel-area fiber broadband project gets a Yup'ik name; 'Airraq is a string used to tell stories'

TBCP – Native Village of Port Lions & GCI

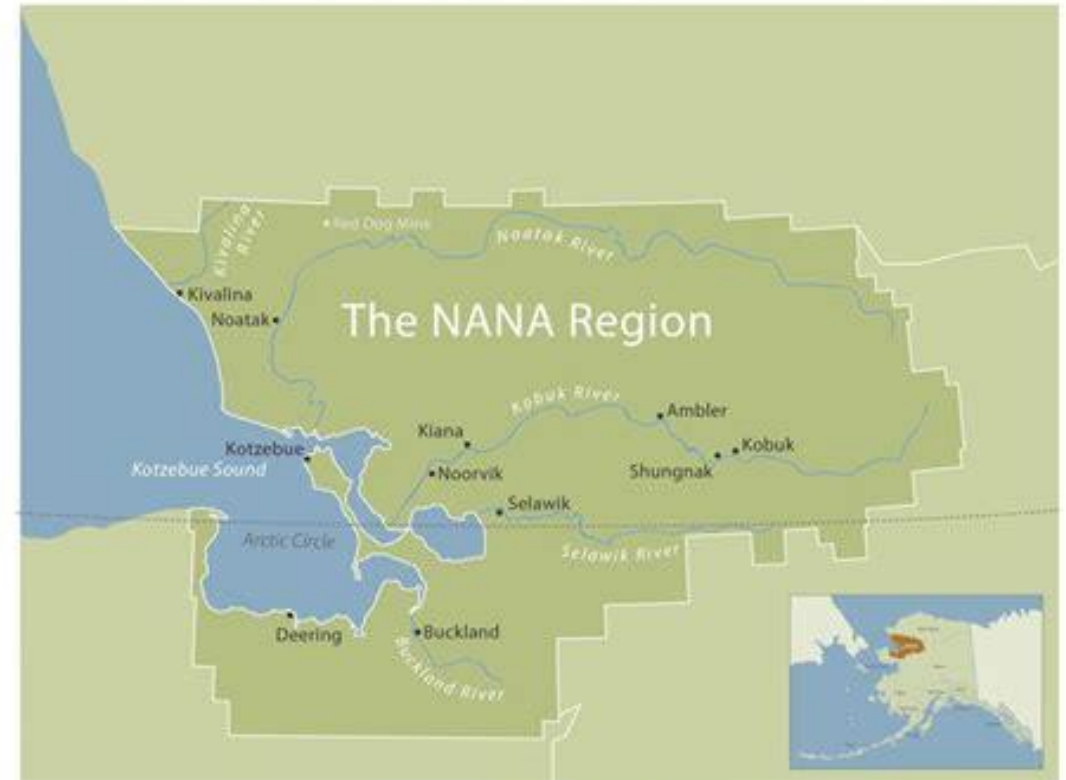
- ▶ \$29.3M to NVPL in collaboration with GCI to bring fiber to Chignik Lagoon, Chignik Lake, Cold Bay, False Pass, Ouzinkie and Port Lions.
- ▶ 2GB service
- ▶ Affordable rates



Native Village of Port Lions awarded \$29.3M federal grant to bring urban-level internet speeds to six more remote communities

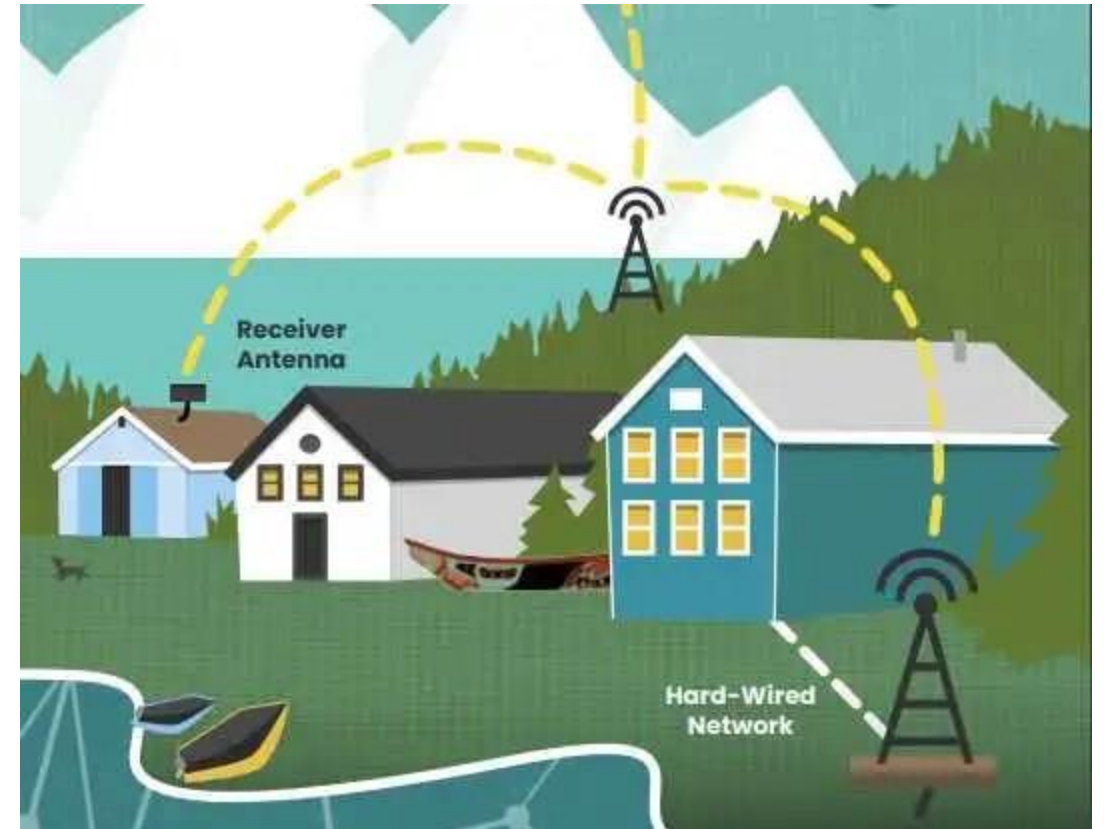
TBCP – NANA Regional Corporation

- ▶ \$68.5M to NANA to bring fiber to the NW Arctic Borough
- ▶ 4 year, 680 miles submarine cable
- ▶ 1GB service



TBCP –Tlingit & Haida

- ▶ \$49.9M to deploy fixed wireless and LEO service
- ▶ Minimum speed 25/3



TBCP – Metlakatla Power & Light

- ▶ \$10.5M to deploy fiber to the home
- ▶ 2 mile undersea cable
- ▶ 1GB service



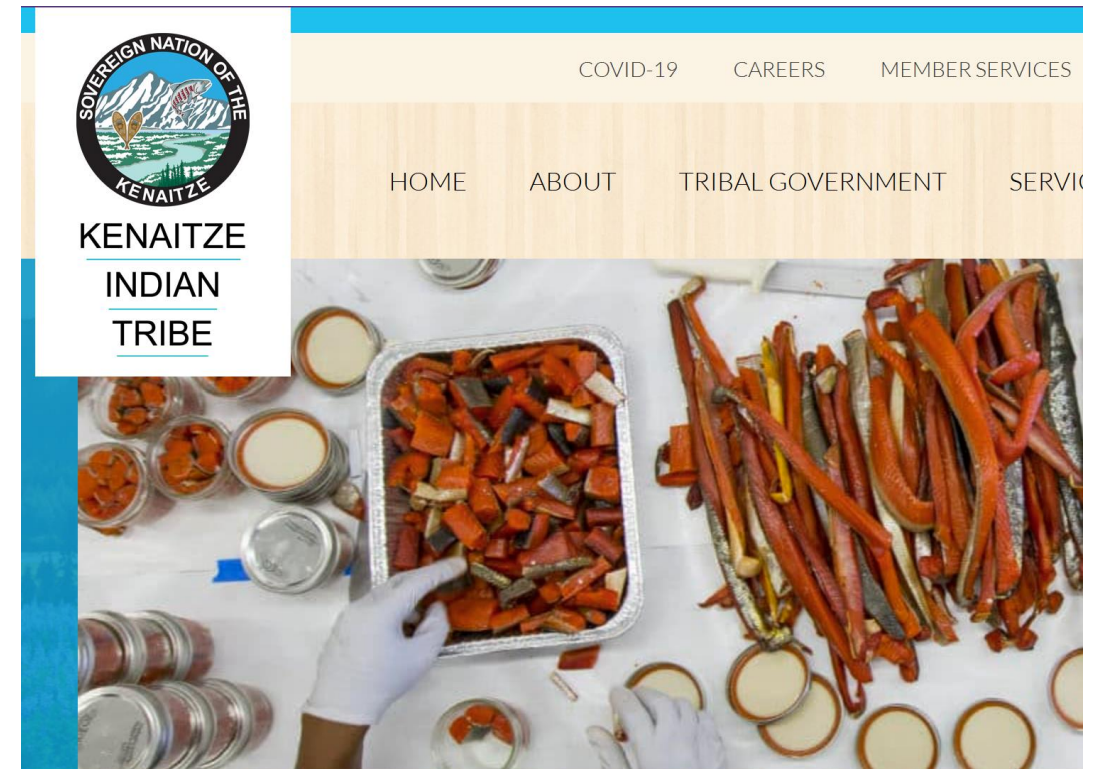
TBCP – Choggiung, Limited

- ▶ \$29.5M to deploy fiber to the home
- ▶ 100Mbps service
- ▶ Middle mile fiber



TBCP – Kenaitze Indian Tribe

- ▶ \$7M to deploy fiber to the home
- ▶ Minimum 336Mbps service





Alcan ONE – Matanuska Telecom Association



Ketchikan Public Utilities



Infrastructure, Investment & Jobs Act (IIJA)

- ▶ \$42.45B - Broadband Equity, Access, & Deployment (BEAD)
- ▶ \$14.2B - Affordable Connectivity Program
- ▶ \$2.75B - Digital Equity Planning, Capacity & Competitive Grants
- ▶ \$2B - Tribal Broadband Connectivity Program
- ▶ \$2B - ReConnect
- ▶ \$1B - Enabling Middle Mile Broadband Infrastructure



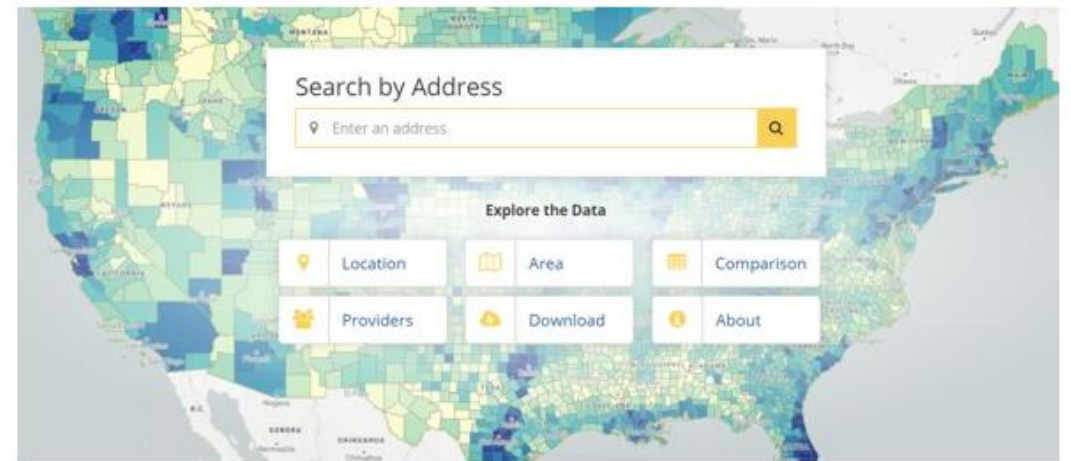
Broadband Equity, Access & Deployment (BEAD)

- ▶ \$42.5B Nationwide
- ▶ NTIA funds directly to Alaska Office of Broadband
 - ▶ Allocation depends on new FCC maps
 - ▶ Grants for broadband deployment
 - ▶ Priority 1 = Unserved <25/3Mbps
 - ▶ Priority 2 = Underserved <100/20Mbps
 - ▶ Priority 3 = Anchor institutions
 - ▶ Adoption & access
 - ▶ Requires 5-year plan
 - ▶ Delivers 100/20Mbps minimum service, scalable
 - ▶ Collaboration with local and statewide entities



FCC Broadband Fabric Maps

- ▶ First-ever national dataset capturing individual locations that should have fixed broadband service availability.
- ▶ “Input from state, local, and Tribal governments is essential to the success of the BDC. We invite these entities to actively engage with this effort.”
- ▶ NTIA will use maps to calculate BEAD allocation first half 2023
- ▶ Challenge process underway
- ▶ Evolving, Alaska data improving



Enabling Middle Mile Broadband Infrastructure

- ▶ NTIA
- ▶ "Encourage the expansion and extension of middle mile infrastructure to reduce the cost of connecting unserved and underserved areas ... and to promote broadband connection resiliency"



Enabling Middle Mile Broadband Infrastructure

- ▶ Competitive grant program
- ▶ \$1B Nationwide
- ▶ 235/\$5.5B applications
- ▶ Awards March 2023



Digital Equity Act

- ▶ Ensure that all people and communities have the skills, technology, and capacity needed to reap the full benefits of our digital economy.
- ▶ Planning funds for States and Native entities.
- ▶ Rasmuson Foundation State Administering Entity
- ▶ 306 Native entities
- ▶ \$2.75B Nationwide



Affordable Connectivity Program

- ▶ FCC
- ▶ Subsidy of \$75/month for low-income families
- ▶ \$100 towards device
- ▶ Rigorous enrollment process
- ▶ \$14.2B Nationwide
- ▶ <https://www.fcc.gov/acp>



**AFFORDABLE
CONNECTIVITY
PROGRAM**

Helping Households Connect

What's Next?

- ▶ Grant opportunities
 - ▶ Collaboration
- ▶ State Office of Broadband
 - ▶ Engagement
 - ▶ Planning
- ▶ Implementation
 - ▶ Permitting, supply chain, workforce
- ▶ Sustainability



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