Communications Summary

Strengths *Internal attributes that contribute to success*

Funding & Markets
- Increased demand for internet due to distance learning, telemedicine, remote work

Infrastructure
- Expansion of middle mile infrastructure (the segment of physical telecommunications infrastructure that links community networks with global network lines) over the past decade
- Major improvements and investments in new infrastructure in Alaska, including installation of a 5th fiber optic cable along the Dalton Highway, the GCI's TERRA network, Quintillion, AlcanOne and satellite expansion
- Telecommunications technology is becoming more affordable and longer lasting

Weaknesses *Internal barriers to success*

Businesses, Organizations, & Government
- Current Federal Communications Commission (FCC) broadband maps use a process developed 20 years ago that is not helpful, relevant, or accurate to capture current needs (new maps coming fall 2022)

Funding & Markets
- Limited availability of funding, especially for much-needed middle mile and last mile infrastructure
- Limited internet connectivity; 11% of the population do not have any internet service providers (FCC, 2020)

Infrastructure
- High cost of operations and maintenance
- Land use policies that create challenges for affordably installing telecommunications infrastructure
- Poor cell service in portions of FNSB
- The region's relatively small population spread across a large geography, with limited overland connectivity to surrounding rural areas and distance from lower 48 networks

Opportunities *External forces that contribute to success*

Funding & Markets
- Availability of programs that aim to reduce the costs of internet for low-income households
- Current and potential federal funding opportunities for new infrastructure through the American Rescue Plan Act, COVID-19 relief funds, Infrastructure Investment and Jobs Act, and more

Infrastructure
- Rapidly evolving technology improvements, including satellite
- Constructing terrestrial middle mile from Fairbanks to Nome

Threats *External forces that could be barriers to success*

Businesses, Organizations, & Government
- Lack of coordination between state and federal partners

Education & Workforce
- Workforce shortages

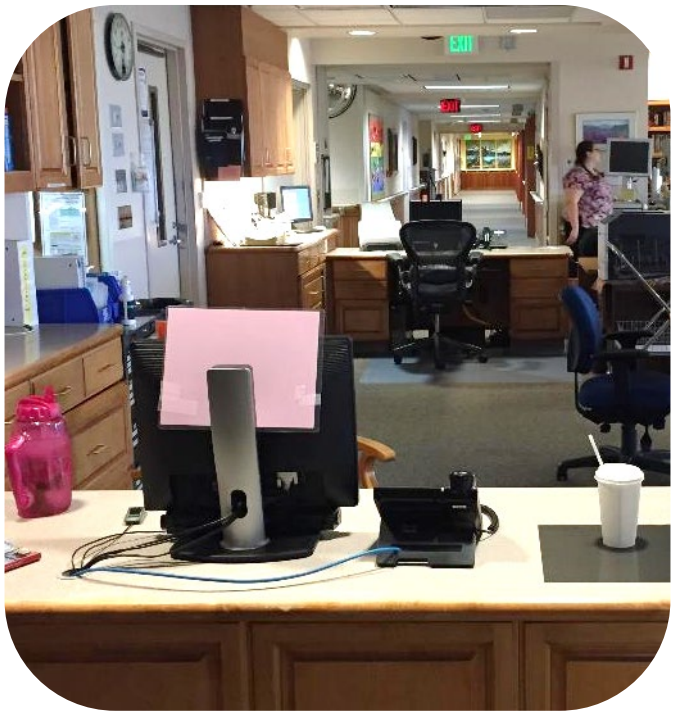
Infrastructure
- Some of the submarine fiber optic cables connecting Alaska to the Lower 48 are nearing the end of their design life
- Technology advancements – infrastructure becomes obsolete quickly

Where We Are (2019)	What measurements can we use to track progress? Where do we want to be in 5 years?	2027 Targets
98.4% urban 70% rural	**Speeds –** Percentage of FNSB population with access to fixed terrestrial broadband at speeds of at least 25 Mbps downstream and 3 Mbps upstream *Overall state rate is 85.2%; likely overestimates coverage due to methodology*	**100% urban 100 % rural**
37 communities 6,383 residents	**Unserved –** Number of unserved communities in Interior Alaska (lacking speeds of at least 25 Mbps downstream and 3 Mbps upstream)	**0 communities 0 residents**

Sources: Speeds come from Federal Communications Commission Fourteen Broadband Deployment Report, January 2021; unserved communities/residents come from Governor's Alaska Broadband Task Force Report, November 2021

"Broadband and energy can coexist. It would be great to develop shared agreements for intertie projects so we can maximize space and resources."

"Providers want to help connect Alaskans. There is a lot of shared interest in achieving better connectivity."



Communications Objectives – *Long term improvements and changes we want to see in five years or more*

1. Provide residents in Interior Alaska equitable access to affordable, reliable, quality phone and internet services.

2. Public, private, and Tribal partners are working collaboratively to achieve the region's connectivity needs.

"There are still many middle mile gaps in Alaska's infrastructure, and less funding is going toward the middle mile."

"There needs to be more trust and relationship building between Tribal communities, the state, federal agencies, and private sector partners. The most underserved areas are often Tribal communities. Funds are becoming available for Tribal and in many areas, partnerships will be required for projects to be successful, and to ensure Tribes are receiving a quality product."

"There should be a review of existing land use policies to ensure they are supporting current telecommunication needs. The industry is changing rapidly and it's important to ensure land use and other policies are evolving to match."

Strategies & Actions – *Activities we will implement over the next five years to accomplish objectives & targets. See Chapter 3 for a detailed action plan.*

Icon Key: Capital Project Military-related

1. **Encourage Collaboration** – Encourage partnerships between public, private, and Tribal entities to collaborate on needed infrastructure projects. *(Objectives 1, 2)*
   a. Support implementation of the Governor's Task Force on Broadband recommendations to establish a State Office of Broadband Deployment, a State Broadband Advisory Board, and a Regional Broadband Planning Committee.
   b. Advocate for improved data and maps to ensure data-driven decision making.
   c. Ensure all shareholders can participate in decision making, with resident needs a top priority.
   d. Ensure infrastructure planning efforts are transparent with clear lines of accountability.
   e. Encourage low or no-cost pole line, easement, and utility infrastructure access for broadband deployment.

2. **Develop Infrastructure** – Install and sustainably operate and maintain infrastructure that will better serve the region with reliable phone and internet service. *(Objectives 1, 2)*
   a. Create a plan to address unserved communities in Interior Alaska.
   b. Review land use policies to ensure they are supporting current telecommunication needs.
   c. Advocate for streamlined state and federal permitting for broadband projects and reduced permitting fees and collaborate with other utilities to share easements where appropriate (e.g., transmission lines, "dig once" policies).
   d. Support leasing of FNSB facilities for small communication system technology (e.g., small cell towers), including school locations.

e. Support efforts to develop reliable and affordable power, especially in underserved rural areas. *See Energy for related recommendations.*
f. Work closely with education and workforce development partners to ensure the local workforce has the skills to deploy, operate, maintain, and repair broadband infrastructure. *See Education and Workforce Development for related recommendations.*

3. Increase Affordability and Access – Ensure all residents can afford quality internet. *(Objectives 1, 2)*

a. Better promote the FCC's Affordable Connectivity Program, which provides discounts on internet service for qualifying households.
b. Support communities with ongoing operation and maintenance funding by ensuring the long term stability of the Alaska Universal Service Fund and a Federal Grant-Matching Fund, as recommended by the Governor's Task Force on Broadband.
c. Establish community-level broadband access by configuring community facilities with public internet, especially in communities that lack affordable and reliable connectivity to homes.
d. Support investment of communication facilities and upgrades in FNSB.

Other Relevant Resources

- **Tanana Chiefs Conference Tribal Broadband Plan**. Tanana Chiefs Conference. 2021.
- **Governor's Task Force on Broadband, Final Report**. State of Alaska. November 2021. View here.
- **A Blueprint for Alaska's Broadband Future**. Denali Commission. December 2019. View here.
- **A Blueprint for Alaska's Broadband Future**. State of Alaska Statewide Broadband Task Force. October 2014. View here.
- **Joint Alaska Senate/House Resolutions in Support of Broadband**. The Alaska State Legislature, 2021. View here (Senate), here (House).

Communications Action Plan

See Appendix A for a list of acronyms.

Strategy #1: Encourage Collaboration – Encourage partnerships between public, private, and Tribal entities to collaborate on needed infrastructure projects.

Capital Project?	Action	Lead	Support	Estimated Resources	Target Completion
	a. Support implementation of the Governor's Task Force on Broadband recommendations to establish a State Office of Broadband Deployment, a State Broadband Advisory Board, and a Regional Broadband Planning Committee.	Governor's Task Force on Broadband	State agencies, FNSB, service providers, Tribes, FEDC	Varies	Varies
	b. Advocate for improved data and maps to ensure data-driven decision making.	State Office of Broadband	FCC, State agencies, FNSB, service providers, Tribes	Varies	Ongoing
	c. Ensure all shareholders can participate in decision making, with resident needs a top priority.	FCC, state agencies	FNSB, service providers, Alaska Tribal Broadband	Varies	Ongoing
	d. Ensure infrastructure planning efforts are transparent with clear lines of accountability.	FCC, FNSB, state agencies	Service providers	Varies	Ongoing
	e. Encourage low or no-cost pole line, easement, and utility infrastructure access for broadband deployment.	TBD	TBD	Varies	Ongoing

Strategy #2: Develop Infrastructure – Install and sustainably operate and maintain infrastructure that will better serve the region with reliable phone and internet service.

Capital Project?	Action	Lead	Support	Estimated Resources	Target Completion
	a. Create a plan to address unserved communities in Interior Alaska.	State Office of Broadband	UAF Alaska Center for Energy and Power, service providers, Tribes, municipalities, Alaska Tribal Broadband	TBD	TBD
	b. Review land use policies to ensure they are supporting current telecommunication needs.	FNSB	State and federal agencies, service providers	TBD	TBD
	c. Advocate for streamlined state and federal permitting for broadband projects and reduced permitting fees and collaborate with other utilities to share easements where appropriate (e.g., transmission lines, "Dig Once" policies).	TBD	Service providers, Tribes, municipalities State and federal agencies	TBD	TBD
	d. Support leasing of FNSB facilities for small communication system technology (e.g., small cell towers), including school locations.	FNSB		Varies	Varies

Strategy #3: Increase Affordability and Access – Ensure all residents can afford quality internet.

Capital Project?	Action	Lead	Support	Estimated Resources	Target Completion
	a. Better promote the Federal Communications Commission's Affordable Connectivity Program, which provides discounts on internet service for qualifying households.	State Office of Broadband	FNSB, service providers	TBD	Ongoing
✓	**b.** Support communities with ongoing operation and maintenance funding by ensuring the long term stability of the Alaska Universal Service Fund and a Federal Grant-Matching Fund, as recommended by the Governor's Task Force on Broadband.	State Office of Broadband	Service providers, FEDC	TBD	TBD
✓	**c.** Establish community-level broadband access by configuring community facilities with public internet, especially in communities that lack affordable and reliable connectivity to homes.	Municipalities, Tribes, School Districts	Service providers, FEDC	Varies	Varies
✓	**d.** Support investment of communication facilities and upgrades in FNSB.	Service providers	FNSB	Varies	Varies