2022-2026 Fairbanks North Star Borough Comprehensive Economic Development Strategy (CEDS)

Communications Influencer Summary - DRAFT

Includes: Strengths, Weaknesses, Opportunities, Threats | Targets | Goals | Strategies & Actions | Relevant Plans

| Strengths Internal attributes that contribute to success | Weaknesses Internal barriers to success | |
|---|--|--|
| 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, and Quintillion | Limited internet connectivity; 11% of the population do not have any internet service providers (FCC, 2020) Poor cell service in portions of FNSB Current FCC broadband maps use a process developed 20 years ago that is not helpful, relevant, or accurate to capture current needs Land use policies that create challenges for affordably installing telecommunications infrastructure Limited availability of funding, especially for middle mile infrastructure The region's relatively small population spread across a large geography, with limited overland connectivity to surrounding rural areas and distance from | |
| Opportunities External forces that contribute to success | Threats External forces that could be barriers to success | |
| Rapidly evolving technology improvements, including satellite 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 Availability of programs that aim to reduce the costs of internet for low-income households | 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? | 2026 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 |

Other Potential Indicators (need baselines and targets): wireless coverage maps from providers; cell coverage; future FCC coverage maps; eligibility and participation numbers in FCC's Affordable Connectivity Program

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.

Communications Goals – long term improvements and changes we want to see in five years or more



1. Residents in Interior Alaska have equitable access to affordable, reliable, quality phone and internet.



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

| Strategies & Actions – the activities we will implement over the next 5 years to accomplish goals & targets and who will lead them | | | | |
|--|---|--|--|--|
| Collaboration – Encourage partnerships between public, private, and Tribal entities to collaborate on needed infrastructure projects. (Goals 1, 2) 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. Advocate for improved data and maps to ensure data-driven decision making. | | | | |
| 2. | 2. Installation – Install and sustainably operate and maintain infrastructure that will better serve the region with reliable phone and internet service. (Goals 1, 2) a. Review land use policies to ensure they are supporting current telecommunication needs. b. Support efforts to develop reliable and affordable power, especially in underserved rural areas. See also – energy cluster recommendations. c. 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 also – education and workforce development recommendations. d. Advocate for streamlined state and federal permitting for broadband projects and reduced permitting fees. | | | |
| 3. | a. Better promote the Federal Communications Commission's Emergency Broadband Benefit, which provides discounts on internet service for qualifying households. b. Support communities with ongoing operation and maintenance funding by establishing an Alaska Universal Service Fund and a Federal Grant-Matching Fund, as recommended by the Governor's Task Force on Broadband. | | | |

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. <u>View here</u>.
- Joint Alaska Senate/House Resolutions in Support of Broadband. The Alaska State Legislature, 2021. View here (Senate), here (House).



Interior Alaska Economic Summit, February 22-23, 2022

Communications Breakout: Discussion Summary (02-23-22)

To view results from the other sessions, visit https://fnsbceds.com/ (results will be posted by March 11th)

This document compiles feedback and notes from the breakout session. The other tools that were used to guide the discussion include:

- An economic cluster/influencer one-pager that identified a preliminary SWOT analysis, goals, strategies, actions, and measures of success
- A worksheet identifying a proposed economic vision statement and guiding questions for each of the activities. The guiding questions have been copied into this document for reference. The feedback on the economic vision statement was compiled separately and will be released by March 11th.

Participants (alphabetical by first name, based on sign in sheet)

| First | Last | Affiliation | Email |
|---------|----------|---------------------------------------|-------------------------------|
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Facilitated by Jamie Hansen, Information Insights

RSVPs: 20 participants

Feedback on the Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis

Guiding Questions:

- 1. What did we get right?
- 2. What's missing?

- 3. What would you change?
- 4. What's the most important item in each quadrant?

Discussion Notes:

Color Key: Blue = proposed revision | red = proposed deletion | green = proposed addition

| Strengths | Weaknesses | |
|--|--|--|
| Add: More middle mile needed Add: Increased demand for distance learning Add: Increased demand for telemedicine Add: Increased demand for remote work Add: Fiber is built to last Add: Low Earth Orbit satellites | Add: Last mile is a huge problem Add: Need to determine service for federal funds Add: Missing middle mile is a challenge Add: OPEX M&O \$ Add: Need new FCC maps to know who is served Add: \$1 billion middle-mile program Add: Operations and maintenance Add: Lack of 5G Add: Education and training | |
| Opportunities | Threats | |
| Add: Need local skillset and expanded workforce for network | Add: Federal-state coordination | |

Goals, Strategies, Actions Discussion Questions

Guiding Questions:

- 1. What did we get right?
- 2. What would you change?
- 3. What's missing?

- 4. Who will lead each of the strategies? What do you see as you/your organization's role?
- 5. Which of the strategies is most important for us to focus on over the next year?

Discussion Notes:

- Goals
 - o Refine: Provide residents in the Interior with reliable, quality voice and data
 - Refine: Partner with public, private and Tribal partners to work collaboratively to achieve the region's connectivity needs.
 - Refine: "Provide residents in Interior Alaska with equitable access to affordable, reliable, quality phone and internet."

- Refine: "Partner with public, private, and Tribes to work collaboratively to achieve the region's connectivity needs."
- Refine: "Provide residents in Interior Alaska equitable access to affordable, reliable, quality phone and internet services."

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Strategy 1: Collaboration

- Add: Rewarding
- Add: Competition
- o Add: Partnerships
- Add: Leverage existing infrastructure
- o Add: Ensure all shareholders are part of the conversation
- o Add: Prioritize residents first
- Add: Accountability and transparency
- o Refine: Office of Broadband is critical
- o Refine: 1B: Change "advocate for" to "require

Strategy 2: Installation

- Add: Create plan to address underserved communities
- o Add: Regulatory Commission of Alaska
 - AK Center for Power and Energy
 - AK Energy Authority
- o Add: AK works
 - ANSEP TECH
- o Add: Reliable voice and broadband

• Strategy 3: Affordability

- o Add: Investment in communication facilities in the FNSB
- o Add: Provide affordable, quality broadband
- o Add: Use lower-cost middle-mile tech
- o Add: Community -level access through community facilities
- Add: action (3C): Community resources
- Refine: Strategy revision: change to "affordability and access"
- Other (could go in other chapters)
 - o Other resource: 2014 Alaska Broadband Report

Measures of Success Discussion Questions

Guiding Questions:

- 1. What did we get right?
- 2. What's missing?
- 3. What would you change?
- 4. Which of these indicators will be the most effective at measuring our success?

Discussion Notes:

- o Add: Verify speeds at the local level
- o Add: Add number of ISPs in the community
- Add: number of wireless users and track the percent increase
- o Add: number of employees
- Add: Look for data on underserved communities
- Refine: The speed numbers look flawed, pivot from baseline numbers from FCC to set a benchmark
- o Refine: Define affordable