

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

Mining Cluster Summary – **DRAFT**

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

Strengths <i>Internal attributes that contribute to success</i>	Weaknesses <i>Internal barriers to success</i>
<ul style="list-style-type: none"> • Three of Alaska’s largest mining operations (Usibelli, Fort Knox, and Pogo) are within 150 miles of Fairbanks • The University of Fairbanks mining program supports industry workforce needs • Mining company contributions to the community, including event sponsorships and UAF programs • Interior Alaska mines have a history of responsible operations, with no major recent events • Fort Knox contributes millions in property taxes annually to the FNSB (\$11.1 million in 2020) 	<ul style="list-style-type: none"> • There is a lack of infrastructure for potential mines • The cost of exploration is higher than in the Lower 48 • Poor public perception of mining and lack of understanding of what modern mining looks like • Mining companies often end community outreach after the permitting phase
Opportunities <i>External forces that contribute to success</i>	Threats <i>External forces that could be barriers to success</i>
<ul style="list-style-type: none"> • Potential future mining extraction projects in Interior Alaska such as the Manh Choh Project (owned by Kinross Fort Knox Gold Mine, near Tetlin) and Ester Dome (Felix Gold Limited) • Increasing global demand for rare earth minerals • Alaska’s reputation as a mineral source is increasing • Road systems through the Brooks Range and Ambler Mining District in planning phases • Green technology is reliant on minerals 	<ul style="list-style-type: none"> • Federal policies that restrict new resource development • Negative environmental impacts from mining • Public perception of mining is often negative or misinformed • The publicity damage of Pebble Mine persists and extends to other projects • Increasing skilled labor shortage

Where We Are	What measurements can we use to track progress? Where do we want to be in 5 years?	2026 Targets
\$1.9 billion <i>(2020)</i>	Mineral Value – Export value of minerals being extracted in Alaska <i>Alaska recently surpassed Florida to be the sixth most-productive mining state</i>	\$2 billion <i>(5% increase from 2019)</i>
3 Mines <i>(2020)</i>	Producing Mines – How many major deposits are moving from exploration and permitting to operation in Interior Alaska <i>The Interior has three active mines and two in exploration</i>	5 mines
1,293 Jobs <i>(2019)</i>	Employment – Number of FNSB residents employed full or part time in mining, quarrying, and oil and gas jobs <i>This number has decreased by almost half over the past 5 years (2,322 in 2014) – Why?</i>	1,360 <i>(5% increase from 2019)</i>

Sources for export value comes from Alaska Miners Association; employment numbers from the Bureau of Economic Analysis

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



1. Interior Alaska’s abundant mineral resources are the foundation for a thriving, responsible, modern mining industry.
2. FNSB residents and local and regional leaders are more knowledgeable about mining, including the industry’s economic importance, environmental stewardship, and employment opportunities.

Strategies & Actions – the activities we will implement over the next 5 years to accomplish goals & targets and who will lead them	Lead
<p>1. Workforce Development – Maintain a highly trained workforce that supports mining and geology needs across the spectrum, from exploration, permitting and production. <i>(Goals 1, 2)</i></p> <ol style="list-style-type: none"> a. Advocate for natural resources curriculum in public schools. b. Support and expand mining and geology related degree programs in Alaska, including expanding the UAF Mining and Geologic Engineering program and vocational training programs such as the Mining and Petroleum Training Service (MPTS). c. Continue to support public private partnerships such as Alaska Resource Education. d. Increase awareness of career opportunities in the mining industry. 	
<p>2. Increase Production – Support responsible exploration and permitting for potential new mines in Interior Alaska. <i>(Goal 1)</i></p> <ol style="list-style-type: none"> a. Support exploration and permitting phases for Livengood Mine. b. Support exploration and permitting phases for the Manh Choc Project, including addressing transportation concerns. 	
<p>3. Key Infrastructure – Explore feasibility of new infrastructure to improve access to deposit sites. <i>(Goal 1)</i></p> <ol style="list-style-type: none"> a. Perform a cost/benefit analysis for expansion of roads or railway to access sites in the exploration phase. 	
<p>4. Fair Policies – Ensure local, regional, and state policies balance environmental, economic, and community needs while supporting a competitive environment for exploration and investment. <i>(Goals 1, 2)</i></p> <ol style="list-style-type: none"> a. Review regional and state taxation policies to ensure mining is taxed at rates that benefit communities without placing an uneven burden on the industry, and that creates stability and certainty for mining investors. 	
<p>5. Education and Connection – Educate the public on modern mining practices and implement long-term engagement with communities around active and potential deposits. <i>(Goal 2)</i></p> <ol style="list-style-type: none"> a. Increase public education on modern mining and the safety measures that are taken. b. Launch a public relations campaign around how minerals (including rare earth minerals) are required to manufacture essentials such as smart phones, renewables, and electric vehicles. c. Educate mining operators on the benefits of engagement beyond the permitting phase. d. Increase tours to active mines. 	

Other Relevant Resources

- **The Economic Benefits of Alaska’s Mining Industry.** Alaska Miners Association. 2021. [View here.](#)
- **Major Mines in Alaska.** Alaska Miners Association. 2022. [View here.](#)
- **Mineral Industry Annual Reports.** Alaska Department of Natural Resources, Division of Geological & Geophysical Surveys. [View here.](#)



Interior Alaska Economic Summit, February 22-23, 2022

Mining Breakout: Discussion Summary (02-22-22)

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)*

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Facilitated by Jomo Stewart, Fairbanks Economic Development Corporation

RSVPs: 24 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
<ul style="list-style-type: none"> • Add: Add how many acres are open to mining • Add: World-class mineralization • Add: Permissive regulation regime • Add: Geology is here and supports exploration • Add: UAF geology program • Add: Fort Knox partnership with Trout Unlimited • Add: Community projects of local mines • Economic propulsion from high number of employees • Add: Appreciation for workers of the mining industry and the opportunity the industry brings. • Add: Highlight what UAF offers the industry • Add: Fort Knox • Add: GVEA rates are low • Add: Strong environmental review and regulation • Add: Fairbanks is a logistical hub • Revise: Reword second bullet to “UAF supports industry workforce needs and provides research capabilities” • Revise: What is considered “recent” in bullet four? 	<ul style="list-style-type: none"> • Add: Lack of geology knowledge • Add: Lack of infrastructure • Add: Industry focus on gold • Add: Lack of trust with regulation agencies • Add: Who owns surface and subsistence rights? • Add: Land status mapping • Add: Lack of effective communication between mining and the public • Add: Cost of energy • Add: Public understanding land status • Add: UAF geology and engineering research and development • Add: Land status management • Add: Lack of honest disclosure • Add: No trust from mining companies and the public • Add: Mining conflicts with other user groups, such as trail users and home owners • Add: Outdated mining laws • Add: Low tax rate • Add: Limited recycling options • Add: Need to update land status • Revise: Add “production” to second bullet
Opportunities	Threats
<ul style="list-style-type: none"> • Add: Green tech is reliant on precious metals? Not minerals? • Add: Provides multiuse land access opportunities • Add: Metal refining, perhaps manufacturing • Add: Jobs • Add: Specialty processing plant • Add: Potential future mining extraction and exploration • Add: Education • Add: Giving credit to the mining industry for the good work they do • Add: Include gold (gold is not a rare earth mineral) • Add: Better outreach and public engagement • Add: Highway and Jobs bill • Delete: Road systems through Brooks Range and Ambler Mining District 	<ul style="list-style-type: none"> • Add: Other land uses don't jive with mining • Add: Time to development • Add: Declining level of trust by the public of regulatory agencies • Add: High energy costs • Add: Poor comprehensive knowledge among the public • Add: Competition for land (hunting, fishing, hiking, skiing) • Add: Community impact • Add: Actual potential impacts of Pebble Mine • Add: Public safety treat of Kinross using public highway as road • Add: Air pollution • Add: Changes in political administration

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

- Add: Add a training and hires goal
- Add: Add a goal regarding the impact to the community
- Make actionable
- Goal 2: In reference to "more knowledgeable" – more knowledgeable than what?
- Goal 1: "Interior Alaska's abundant mineral resources are a mechanism supporting a thriving, responsible, modern mining industry and local communities."
- Goal 1: What is considered "responsible"?
- Goal 2: "FNSB residents and local and regional leaders have a knowledgeable understanding of mining, including the industry's economic importance, environmental stewardship, and employment opportunities."
- Goal 2: Add education and communication

Strategy 1: Workforce Development

- Add: Increase partnerships for workforce development
- Add: Add a vocational action
- Add: Millwright Education
- Refine: Strategy revision: ... "through permitting to production."
- Refine: Strategy revision: "Make and create a highly trained local workforce..."
- Refine: Strategy revision: "Create and maintain a highly trained local workforce..."
- Refine: 1A: Add "and universities" to the end of the sentence
- Refine: 1A: Add "create" to the start of the sentence
- Refine: 1A: Refer to badge program designed for farthest north Girl Scouts and Girl Scouts of Alaska.
- Refine: 1B: Turn "Vocational training programs such as the Mining and Petroleum Training Service" its own bullet
- Refine: 1B: Support/provide CDL training and licensing
- Refine: 1B: Add "and Hutchinson High School" to the end
- Refine: 1D: Add "with definition on job skills and needs and avenues for professional growth and advancement" to the end of the sentence
- Refine: 1D: Add "connect needs to resources" to the end

Strategy 2: Increase production

- Add: Add infrastructure
- Add: Add communication toward community acceptance
- Add: Add workforce
- Refine: strategy: Add “remediation and restoration” to the end
- Refine: strategy: Add “robust public input” after “support”
- Refine: Make actions more inclusive of all mines
- Refine: Add in public process
- Refine: What does “support” mean?
- Refine: 1A: Make more general
- Refine: 1A: “Support exploration and permitting phases for Livengood mine and get started recruiting workforce and training locals for hire”
- Refine: 1A: “Exploration and permitting for mine projects”
- Delete: 2B

Strategy 3: Key Infrastructure

- Add: Add money
- Refine: Who is going to pay for it? Estimated cost?

Strategy 4: Fair Policies

- Add: Highlight environmental regulatory process. Show that the profession is constantly changing.
- Add: Add consistency on timing in permitting
- Add: Permitting and environmental regulations need to be included

Strategy 5: Education and Connection

- Add: Build trust back with the public and agencies
- Add: How are agencies negatively affecting communication? Is government not doing enough outreach during permitting?
- Add: Engage the public
- Add: Gain social license by communicating with communities and taking concerns into consideration
- Refine: Strategy name revision: “Public Education and Connection”
- Refine: Strategy name revision: “Outreach”
- Refine: Comment: This sounds like PR

Other (could go in other chapters)

- Add: Infrastructure is key to public support and the social license
- Add: Reclamation standards need to be strengthened and clarified
- Add: How much science versus industry propaganda is taught?

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:

- General comment: the Energy one-pager seems anti-coal, but in mining, coal mining expansion seems like a priority. Are these contradictory?
- Add: Develop “grading” for wood so that it can be financed
- Add: Use Interior-specific metrics as opposed to all of Alaska
- Add: Poll FNSB residents on their perception of mining and track the number of good, bad and indifferent between now and then to measure if PR is having any influence
- Add: Use a local hire metric
- Add: Add % of market to mineral value measure
- Add: Add metric for recycling and repurposing mined materials
- Revise: Why not expand mines?
- Revise: Targets for mineral value and employment are too low
- Delete: You want to permit and open two mines within 5 years?