

Appendix D: Situational Assessment and SWOT Analysis

Key Takeaways

This **situational assessment** reflects on the 2016 Fairbanks North Star Borough (FNSB) Comprehensive Economic Development Strategy (CEDS) and discusses how the regional economy has evolved since 2016. Major lessons learned from the 2016 CEDS include a desire to create an updated CEDS that is shorter and more graphically compelling, with a tighter link between goals, objectives, and strategies. The updated CEDS should also reflect greater private sector and partner participation in both CEDS development and implementation. The situational assessment also identifies major changes impacting the region’s economy that have occurred in the past five years, including expansion of military personnel, the COVID-19 pandemic, growth in Arctic opportunities, and more.

	Internal	External
Advantages: What resources and strengths will help us create jobs and grow businesses so more wealth comes to and stays in the region?	Strengths	Opportunities
Disadvantages: What are our economic constraints? What makes it hard to do business, start a business, get a job or hire employees in the Y-K?	Weaknesses	Threats

Following the situational assessment is the **Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis**. The SWOT Analysis discusses the internal and external factors that support and contribute to the region’s economic development, and factors that limit and threaten the region’s economy; a snapshot of key elements is shown in Figure 20. The sector summaries include detailed industry-specific SWOT Analyses.

Figure 1. SWOT Analysis Snapshot

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> • Strong sense of community; culture • Steady population • Scenery, access to outdoor space and recreation opportunities • Hub of Interior Alaska • Diverse industry composition • Military • Strong public schools and secondary education institutions • Natural resources: minerals, natural gas • On the road and rail system; transportation and utility connectivity to other parts of Alaska 	<ul style="list-style-type: none"> • Environment and weather (long winters, darkness) • Air and groundwater quality issues • High cost of living, including costs of energy, shipping, child care • Limited facilities including recycling, internet, public transit • Lack of shopping and indoor recreation • Health care service gaps • Poor internet • Housing shortage 	<ul style="list-style-type: none"> • Energy advancements and new infrastructure • Agricultural expansion and food security • Growth in tourism, including Arctic and year-round visitors • Alaska Long Trail • Military expansion • Interior Alaska as a growing research hub • Tribal organizations as economic drivers • Collaboration with neighboring communities • Expanding rail access • Federal funding opportunities, especially for infrastructure 	<ul style="list-style-type: none"> • Oil and gas price fluctuations • Changing federal policies around oil, gas, coal • Environmental impacts of mining • Climate change • Potential designation as Environmental Protection Agency (EPA) nonattainment area for PM_{2.5} • State budget uncertainty • Risk of overbuilding to meet temporary military needs (e.g., housing) • Pandemic-induced uncertainty and ongoing negative impacts

Reflection on the 2016 CEDS

This section provides an overview of lessons learned during 2016 CEDS development and implementation, followed by a summary of significant changes the FNSB and Interior Alaska have experienced since the 2016 CEDS was finalized. This information will contribute to refinement of the current and future CEDS processes and will improve the accuracy, accessibility, and usefulness of the CEDS for all stakeholders.

It is not possible to predict what local, regional, state, national, or international changes the next five years will bring. For example, toward the end of the production of this CEDS, a major international development occurred with Russia's invasion of Ukraine, creating a cascade of humanitarian and economic impacts felt around the globe, and reinforcing the importance of Alaska as a strategic Arctic defense location. **This reinforces the importance of building economic resiliency so the community can respond to both anticipated and unexpected future challenges.**

Lessons Learned

The following suggestions and lessons learned have been identified by FNSB Economic Development Commissioners, FNSB staff, and community partners:

- A CEDS that is easily digestible is more likely to be read in its entirety and implemented by FNSB staff and community partners. The 2016 CEDS was lengthy and repetitive, and the tasks were not clearly tied to goals and objectives. The 2022 CEDS should lean more heavily on intuitive graphics than long narratives.
- A CEDS is an economic plan for the borough and Interior Alaska partners, not just the Fairbanks North Star Borough. The planning effort for this five-year update seeks to better integrate community and regional partners such as the Greater Fairbanks Chamber of Commerce, the Fairbanks Downtown Association, Fairbanks Economic Development Corporation (FEDC), and Interior Alaska organizations like Tanana Chiefs Conference, Doyon, Limited and others. It also prioritizes private sector and industry participation, with the help of the partners identified here.
- The 2016 CEDS included updated datasets but relied on recycled strategies from the 2011 CEDS. The new 2022 CEDS should include relevant strategies that consider population and economic trends and projected changes that may impact the FNSB and Interior Alaska economy.
- The CEDS should include a succinct, short executive summary highlighting key topics, plan goals, priority strategies, and projects.
- Due to the narrative approach of the 2016 CEDS, sector-specific information was woven throughout the document, making it challenging to follow. The updated CEDS will include industry-specific sections that stand alone as individual, tailored, one-page plans for those sectors.

Key Changes in FNSB since the 2016 CEDS

The FNSB has experienced significant change since the 2016 CEDS was developed, which needs to be considered in this update. The following are some key changes that have occurred over the past five years:

- **Military Changes.** The military is a critical part of the FNSB community. Eielson Air Force Base and Fort Wainwright are both within the FNSB boundaries. There are also other military installations nearby, including Fort Greely and Clear Space Force Station. Relevant military-related changes include:
 - **Arctic Strategies.** As interest in the Arctic has increased, the Department of Defense has developed arctic strategies that identify national and branch policies and priorities, including the following publications:

- U.S. Department of Homeland Security, [Strategic Approach for Arctic Homeland Security](#), February 2021
 - U.S. Army, [Regaining Arctic Dominance](#), January 2021
 - Department of the Navy, [A Strategic Blueprint for the Arctic](#), January 2021
 - U.S. Air Force, [Arctic Strategy: Ensuring a stable Arctic through vigilance, power projection, cooperation, and preparation](#), July 2020
 - U.S. Sea Services (Navy, Marine Corps, Coast Guard), Maritime Strategy, [Advantage at Sea: Prevailing with Integrated All-Domain Naval Power](#), December 2020
 - Office of the Under Secretary of Defense for Policy, [Department of Defense Arctic Strategy](#), June 2019
- **Eielson Air Force Base Expansion.** The arrival of F-35 fighter jet battalion at Eielson Air Force Base is bringing over 3,300 new residents to the FNSB. With new residents come increased demand for housing, education, child care, health care, and other services. In addition, the upcoming addition of KC-135 tankers to Eielson will drive additional population growth and related economic development opportunities.
 - **Fort Greely.** The Department of Defense has allocated funds to expand the ground-based missile defense system missile field at Fort Greely, including adding additional missile interceptors.
 - **Clear Space Force Station.** Clear Air Force Base was designated as a Space Force station in 2021. The Station also saw the recent installation of a new power plant and long-range discrimination radar.
 - **Quality of Life.** In 2019, Fort Wainwright brought in a Behavioral Health Epidemiological Consultation (BH EPICON) to evaluate public health on the installation in response to a high number of suicides and fatalities. The BH EPICON final report offered recommendations to improve moral and quality of life for troops in the community. The Army has started to implement recommendations, including upgrading gym equipment, increasing the availability of dining options and healthy foods, and barracks upgrades and improvements.
 - **Collaboration.** These many changes on bases in and around FNSB have also resulted in increased collaboration between local, state, and federal partners around key community needs such as housing.
- **Global Pandemic.** The FNSB was profoundly impacted by COVID-19 and will continue to experience impacts from the pandemic, likely for years to come. The leisure and hospitality industry saw the largest declines in employment. The FNSB developed the Interior Alaska COVID-19 Economic Impact and Recovery Plan to guide the community's response to the pandemic.
 - **Federal Investment.** In response to the devastating impact of the pandemic, the federal government has responded with the largest collective of economic investment in decades. The timing for a CEDS update is ideal, as billions of dollars in infrastructure grants and social services spending are earmarked for Alaska.
 - **State Fiscal Uncertainty.** The State of Alaska faces an ongoing fiscal crisis, with budget deficits and the lack of a comprehensive fiscal plan for generating new revenues. The decline of oil production and prices and the associated state budget fiscal gap created significant economic and political challenges. Deep cuts, including to the University of Alaska Fairbanks, were felt immediately, but the impact to workforce development could be felt for decades. State budget cuts have also hit areas including the school district and facility maintenance.
 - **Energy Costs and Innovation.** Interior Alaska continues to experience high energy costs that make it more expensive to live and do business. At the same time, the FNSB is emerging as a center of innovation for arctic topics and rural energy. The following list summarizes relevant energy updates:

- **Interior Energy Project.** Since 2016 there have been increased efforts to bring lower-cost energy to the FNSB, including the Interior Energy Project and the Alaska LNG Project.
- **Arctic Energy Office.** The U.S. Department of Energy recently reopened its Arctic Energy Office at the University of Alaska Fairbanks (UAF), an office dedicated to researching, developing, and deploying energy technology.
- **National Renewable Energy Laboratory.** In the summer of 2021, the National Renewable Energy Laboratory (NREL) joined forces with Fairbanks-based Cold Climate Housing Research Center with the goal of growing its impact. NREL's 10-year strategy focuses on Integrated Energy Pathways, a research area guiding future energy systems. This strategy will result in expanded staffing, research facilities, and new investment in Fairbanks.
- **Renewables.** Institutions such as NREL and the UAF Alaska Center for Energy and Power continue to research and develop new ways to generate renewable power in Alaska. Chena Hot Springs hosts an annual renewable energy fair. Both President Biden and Governor Dunleavy have expressed interest in increasing the deployment of renewables over the next fifty years.
- **Energy investments on military installations.** In fall 2021, the Air Force announced that Eielson Air Force Base was selected for one of the Air Force's first micro-reactors. Fort Wainwright is currently exploring different options to replace the current heat and power plant and is completing work on an Environmental Impact Statement to help guide the decision.
- **Air Quality.** The Environmental Protection Agency (EPA) designated the FNSB a serious nonattainment area for failing to meet federal air quality standards for fine particulate matter. This creates negative economic and health impacts. The Alaska Department of Environmental Conservation has prepared an amendment to the Serious State Implementation Plan, which lays out measures to address nonattainment, and is awaiting EPA approval. If approval is not granted, there would likely be additional measures required, such as further regulations on utilities and loss of federal funding. Until the FNSB reaches attainment, there will be uncertainty about the potential for federally mandated requirements on utilities and other operations that would inhibit economic growth. Failure to meet attainment has potentially significant negative economic repercussions.
- **Infrastructure Expansion.** The FNSB continues to see new infrastructure, including expansion of the Alaska Railroad, rail car storage, a new recycling center, natural gas, and water and sewer distribution systems in and around the City of North Pole. There is also discussion of a new Fairbanks Convention and Arts Center in downtown Fairbanks. Many critical infrastructure needs remain, including access to affordable, reliable broadband connectivity.
- **Arctic Opportunities.** The U.S. is an Arctic nation because of Alaska. Interest in the Arctic for military, transportation, tourism, and resource opportunities has and will continue to grow. FNSB is well-positioned as a global hub for serving, promoting, and advancing the nation's Arctic interests due to its northern location, strategic access along rail/road/air routes, and concentration of education, military, and research institutions.
- **FNSB Capital Improvement Program adopted.** In 2019 the FNSB Assembly adopted Ordinance 2019-35, changing how the FNSB vets and approves public projects on its Capital Improvement Program (CIP) list. The new process invites increased input from the public, adds a prioritization element, and identifies potential funding sources. The CIP is now a fiscally constrained 10-year capital projects plan that aligns with estimated resources.

Strengths, Weaknesses, Opportunities, Threats (SWOT) Analysis

This section offers a synopsis of the key themes emerging in the Strengths, Weakness, Opportunities, and Threats (SWOT) Analysis. Quotes from participants are included alongside the themes. These themes were gathered with input from the following sources:

- Booths at the Midnight Sun Festival (June 2021), Golden Days (July 2021), and Tanana Valley State Fair (August 2021), where the following questions were asked:
 - What do you value most about living in Fairbanks?
 - What do you find most challenging about living in Fairbanks?
 - What are your ideas for creating a stronger, thriving, more resilient Fairbanks economy?
- A series of stakeholder interviews and sector-specific roundtable conversations.
- Relevant news articles (key sources include the Fairbanks Daily News Miner, Anchorage Daily News, KUAC, and Alaska Public Media).
- The SWOT Analysis from the 2016 CEDS.
- Background data and trends.
- A review of relevant background documents and regional plans.
- Input from participants at the Interior Alaska Economic Summit.

See sector summaries for detailed industry-specific SWOT analyses.



Interior Alaska Economic Summit, February 2022



Midnight Sun Festival, June 2021

Strengths *What are our competitive advantages?*

STRONG SENSE OF COMMUNITY

<ul style="list-style-type: none"> • Strong sense of community • Small-town feel • Strong Native community • Community events • Arts and culture 	<ul style="list-style-type: none"> • Local food and drink establishments • Ability to buy local • Steady population size • Family-friendly 	<p><i>“It’s in my heart. I feel more accepted here than anywhere.”</i></p> <p><i>“Fairbanks provides opportunity.”</i></p> <p><i>“Everyone is willing to help you out.”</i></p>
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ENVIRONMENT & OUTDOORS

<ul style="list-style-type: none"> • Nature • Extreme/unique weather • Scenery • Trails • Aurora 	<ul style="list-style-type: none"> • Outdoor recreation • Hunting and fishing • Wildlife • Proximity to open space (state and national parks, national forest lands) 	<p><i>“You experience all seasons.”</i></p> <p><i>“Northern Lights.”</i></p> <p><i>“Playing in the Chena River.”</i></p>
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DIVERSE INDUSTRY SECTORS

<ul style="list-style-type: none"> • Economic hub of Interior Alaska • Diverse industry composition • Military brings jobs, investment, new residents • Strong industries including construction, visitors, agriculture • Advancements in energy innovation • Strong local business-focused organizations including the Greater Fairbanks Chamber of Commerce and Fairbanks Economic Development Corporation 	<p><i>“The local construction industry is going bananas – commercial, roads, businesses.”</i></p> <p><i>“Fairbanks is a bucket list destination for a lot of people.”</i></p> <p><i>“We’re a military family. We’d like to retire here.”</i></p>
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SUPPORTIVE PUBLIC FACILITIES & SERVICES

<ul style="list-style-type: none"> • UAF and community college that contribute to a skilled workforce and support a thriving research and innovation sector • Museums that support visitors, researchers, history • Transfer stations • Infrastructure advancements including natural gas distribution, telecommunications connectivity, and water-sewer expansion 	<p><i>“Education is a major industry and UAF is a major employer. We need to continue to support them.”</i></p> <p><i>“I value our education programs: Pre-K to PhD.”</i></p>
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ACCESS TO NATURAL RESOURCES

<ul style="list-style-type: none"> • Mineral resources • Natural gas • Agricultural lands 	<p><i>“Lots of potential near Fairbanks for more large-scale mining.”</i></p> <p><i>“The progress we’ve made on natural gas distribution is really positive.”</i></p>
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CONNECTIVITY

<ul style="list-style-type: none"> • Connected by railroad, roads, airports, and utilities to other parts of the state • Hub for Interior Alaska • International airport and status as Foreign Trade Zone 	<p><i>“I like that we’re on the road system.”</i></p> <p><i>“We are a hub for military, transportation, energy.”</i></p>
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Weaknesses *What are our competitive disadvantages?*

EXTREME WEATHER & ENVIRONMENT

<ul style="list-style-type: none"> • Harsh winter conditions • Mosquitos • Groundwater contamination • Air quality • Land use conflicts between competing interests • Development constraints in certain areas, including extensive wetlands and floodplains 	<p><i>“Most challenging aspect of living here is winter.”</i></p> <p><i>“Mosquitos.”</i></p> <p><i>“It feels like the town and the UAF campus shuts down when it gets cold – although this might be COVID-related, too.”</i></p>
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HIGH COST OF LIVING

<ul style="list-style-type: none"> • Slow shipping times & high costs • High cost of energy • Supply costs and materials have increased, driving up costs of new construction and operation expenses • High costs and limited availability of child care • Business start-up costs can be prohibitively expensive 	<p><i>“Cost of living is high.”</i></p> <p><i>“Farmers need more access to training and start-up funds for basic infrastructure like fences and watering.”</i></p> <p><i>“The child care industry needs help. We need more money to pay people so they can stay. There needs to be a culture shift in how we view the industry.”</i></p>
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INSUFFICIENT PUBLIC FACILITIES AND SERVICES

<ul style="list-style-type: none"> • Limited undeveloped land that is serviced by public water, wastewater, and other infrastructure • Low density land use patterns can make provision of public services cost prohibitive • Shortage of affordable, quality housing • Lack of land use code enforcement • Lack of public transportation 	<ul style="list-style-type: none"> • Housing and services for persons experiencing homelessness are insufficient to meet the need • “Orphan roads” with no road maintenance • Poor internet and phone connectivity • Lack of recycling 	<p><i>“The most challenging part of living in Fairbanks is the lack of public transportation.”</i></p> <p><i>“Housing. This goes along with supporting military – we need to meet the needs. We lack quality housing.”</i></p>
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LIMITED OPTIONS

<ul style="list-style-type: none"> • Lack of indoor recreation activities, especially in winter • Relatively small market size (approximately 100,000 residents) and geographic isolation mean it can be hard to achieve economies of scale for features such as shopping, chain restaurants, etc. 	<ul style="list-style-type: none"> • Dilapidated/rundown properties • Lack of food processing/storage spaces • Limited activities for young people 	<p><i>“There’s no Target.”</i></p> <p><i>“There are limited indoor and outdoor winter recreation . . .”</i></p>
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WORKFORCE CHALLENGES

<ul style="list-style-type: none"> • High workforce turnover and challenges recruiting skilled labor • Evolution of work habits during the pandemic and permanent changes to worker preferences and priorities • Growth of the gig economy impacting availability of workers 	<p><i>“People are working differently now. They want more independence, flexibility. Employers and trainers need to figure out how to adapt.”</i></p> <p><i>“I’d like to see greater collaboration with UAF – how can we make sure their research efforts are accessible to the community and private sector?”</i></p>
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Opportunities *What are potential or upcoming opportunities for improvement or progress?*

NATURAL RESOURCE DEVELOPMENT

<ul style="list-style-type: none"> • Efforts underway to decrease energy costs and increase energy security/ reliability (e.g., Interior Energy Project, expansion of renewables) • Extraction industries can provide tax revenues • Increased interest in food security and agricultural expansion • Increased demand for rare earth minerals and precious metals 	<p><i>“Alaska has every rare earth mineral...and we do it well – we are heavily regulated and safe.”</i></p> <p><i>“Alaska leads the nation in new farms. It’s important to support farmers markets and farm stands. Those are the viable sales venues, rather than getting products in grocery stores.”</i></p>
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YEAR-ROUND VISITOR INDUSTRY

<ul style="list-style-type: none"> • Growth in Arctic tourism, winter tourism and aurora viewing • Alaska Long Trail • Revitalizing Fairbanks and North Pole downtowns 	<p><i>“The Alaska Long Trail is a major opportunity, with Fairbanks as an end point.”</i></p> <p><i>“We carved our tourism market out of a mountainside. We build a market where there wasn’t one before, in winter especially...the tourism industry</i></p>
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ARCTIC OPPORTUNITIES

<ul style="list-style-type: none"> • F-35 & KC-135 Missions • Increased military presence in the Arctic • Arctic research at UAF and with other research institutions • Continued expansions and innovations on military installations (e.g., missile defense expansion, Clear’s Space Force Station designation, Eielson’s micro nuclear reactors) • Military Facility Zone designation 	<p><i>“Our growing military presence also good for the local economy.”</i></p> <p><i>“We are the farthest north U.S. city that still has access by air, road, and rail. We are a key location for an Arctic hub.”</i></p> <p><i>“People are vying for status as Arctic states. We need to plant the flag and get the world to come here.”</i></p> <p><i>“We are the only military facility zone in Alaska – there are many</i></p>
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REGIONAL COLLABORATIONS

<ul style="list-style-type: none"> • Tribal organizations across the state/in the region as economic drivers • Collaboration with neighboring communities around key industries (tourism, mining, transportation) • Federal, state and local collaboration to solve issues such as housing, air quality • Extensive funding for research relevant to FNSB, including climate change, oceans, and cold weather testing 	<p><i>“I’d like to see us increase the transition of research into practical community applications through small business innovation research and small business technology transfers.”</i></p> <p><i>“FNSB planning efforts are not just for the borough, even if they are facilitated by the borough; they are for the betterment of the entire community.”</i></p> <p><i>“I’d like to see us increase our partnerships with Tribal organizations and Native Corporations to address needs around areas such as housing and utilities; Anchorage has done this well.”</i></p>
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INFRASTRUCTURE DEVELOPMENT

<ul style="list-style-type: none"> • Expanding rail service to be year-round, and potential connection with Alberta • Federal funding such as American Rescue Plan, COVID-19 relief funds, Infrastructure Investment and Jobs Act 	<p><i>“I think our biggest priorities need to be utilities: public infrastructure, broadband, natural gas, roads.”</i></p> <p><i>“Calling the landmark bill one of the most ‘consequential’ pieces of legislation in her Senate career, Murkowski said the legislation addresses major gaps in Alaska’s core infrastructure.” (Fairbanks Daily News-Miner</i></p>
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Threats *What are threats to regional improvement or progress?*

FEDERAL RESOURCE DEVELOPMENT POLICIES

<ul style="list-style-type: none">• Reliance on oil and gas• Negative impacts from market price fluctuations• Federal policies that limit resource development (especially oil and gas)• Reliance on coal, and potential for carbon pricing	<p><i>“The military is a huge consumer of energy. We always seem to jump to cost, but there is a huge vulnerability in supply of energy in Alaska. Supply drives the cost. We need to start the conversation at what energy does this community need.”</i></p> <p><i>“I see federal policies that impact resource development opportunities as a potential threat to us right now.”</i></p>
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ENVIRONMENTAL RISKS

<ul style="list-style-type: none">• Environmental impacts from resource development such as mining and logging• Climate change impacts such as wildfire risks, melting permafrost, increased flooding, etc.• Air quality and ongoing designation as Environmental Protection Agency (EPA) nonattainment area• Indoor air quality	<p><i>“Mining has its positives and negatives. They are good jobs, and fit with our training and demographics and interests. But drive to Fox if you want to see what it actually looks like.”</i></p> <p><i>“Polluted air is a liability for all with the potential implications of not receiving federal funding if we remain out of compliance.”</i></p>
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UNCERTAINTY

<ul style="list-style-type: none">• State budget challenges and uncertainty of funding to health care, social services, UAF, and infrastructure funding• Risk of overbuilding to meet short-term military demands• Pandemic uncertainty and ongoing negative impacts on health care, supply chains, child care• Reliance on imported foods and lack of food security• Nationwide workforce shortages mean FNSB is competing with other employers across the country (e.g., in health care, construction)	<p><i>“The story of Fairbanks is filled with booms and busts – we need to focus on sustainability.”</i></p> <p><i>“Access to labor during the pandemic has been a huge issue. It’s impacted our ability to bounce back.”</i></p> <p><i>“I’d like to see us continue to increase and diversify local exports, so if one large employer leaves, we are not as impacted.”</i></p> <p><i>“We see ongoing challenges with school closures, daycare closures, and lack of reliable bus service, which mean many parents cannot commit to a traditional work</i></p>
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