

Tanana
Chiefs
Conference

Comprehensive Economic Development Strategy (CEDS) 2022-2026 & Economic Recovery Plan



Final, March 2022

Project website: www.tananachiefs.org/ceds/

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Acknowledgments

Many community leaders, Tanana Chiefs Conference (TCC) staff, regional partners, business owners, and Tribal members came together to help develop this plan. A special thanks goes to:

- All Tanana Chief Conference Region Tribal and Community Leaders
- Tanana Chiefs Conference Executive Staff
- Tanana Chiefs Conference Executive Board Members
- Shirley Kelly, Sharon Metiva, Economic Development Administration
- Regional Survey Participants
- CEDS Committee Members
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Acronyms

ACF	Alaska Community Foundation
ACS	American Community Survey
ANCSA	Alaska Native Claims Settlement Act
ANSEP	Alaska Native Science and Engineering Program
ANTHC	Alaska Native Tribal Health Consortium
AP&T	Alaska Power & Telephone Company
ARPA	American Rescue Plan Act
ARUC	Alaska Rural Utility Collaborative
AVEC	Alaska Village Electric Cooperative
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
CATG	Council of Athabascan Tribal Governments
CCHRC	Cold Climate Housing Research Center
CEDS	Comprehensive Economic Development Strategy
DOE	U.S. Department of Energy
DNR	Alaska Department of Natural Resources
EDA	U.S. Economic Development Administration
FNA	Fairbanks Native Association
FNSB	Fairbanks North Star Borough
FTTH	fiber to the home
FHWA	Federal Highway Administration
HUD	U.S. Department of Housing and Urban Development
IDEA	Interior Distance Education of Alaska
IGAP	Indian Environmental General Assistance Program
IHS	Indian Health Service
IRHA	Interior Regional Housing Authority
LEO	Local Environmental Observer (ANTHC program)
LEOs	Low Earth Orbit satellites
NAHASDA	Native American Housing and Self Determination Act
NPS	U.S. National Parks Service
NTIA	National Telecommunications and Information Administration
PCE	Power Cost Equalization Program
QCEW	Quarterly Census on Employment and Wages
SWOT	Strengths, Weaknesses, Opportunities and Threats
TANF	Temporary Assistance for Needy Families
TCC	Tanana Chiefs Conference
TDX	Tanadgusix Corporation
UAF	University of Alaska Fairbanks
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
VPSO	Village Public Safety Officer

PROPOSED RESOLUTION 2022 - 21
Tanana Chiefs Conference Full Board of Directors



Executive Board

**ADOPTION OF 2022-2027 TCC COMPREHENSIVE ECONOMIC
DEVELOPMENT STRATEGY (CEDS)**

WHEREAS, Tanana Chiefs Conference (TCC) is an Alaska Native tribal health and social services consortium established by the Interior Alaska tribes and tribal communities, to provide a unified voice in advancing sovereign tribal governments through the promotion of physical and mental wellness, education, socioeconomic development and culture of the Interior Alaska Natives; and

WHEREAS, TCC Planning and Development and Agnew::Beck/Information Insights/Northern Social-Environmental Research engaged and worked with TCC region tribal members, CEDS Committee Members and organizations on the development of the CEDS; and

WHEREAS, The CEDS is a tool for community based and regionally driven economic planning, with strategies and an implementation for creating stronger and more resilient communities and economies; and

WHEREAS, The CEDS is an essential planning and financial tool for the future growth and development of the TCC region with the primary goal of expanding employment opportunities for residents and improve the quality of life in the TCC region; and

WHEREAS, The CEDS is an important part of the U.S Department of Commerce Economic Development Administration (EDA) programs, and are often required in order to be eligible for federal and grant funding; and

WHEREAS, The CEDS will be used as a living document with annual updates, with a new document to be established every five years.

NOW THEREFORE BE IT RESOLVED that the TCC Executive Board of Directors supports and approves the 2022-2027 TCC Comprehensive Economic Development Strategy

CERTIFICATION

I hereby certify that this resolution was duly passed by the Tanana Chiefs Conference Executive Board of Directors on XX/XX/XX at Fairbanks, Alaska and a quorum was duly established.

1/27/22



Robert Wright Jr

Name

Title *SECRETARY/TREASURER*

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Executive Summary

Tanana Chiefs Conference (TCC) and partners developed this 2022-2026 Comprehensive Economic Development Strategy (CEDS) to identify ways to strengthen the regional economy. TCC communities have faced many challenges the past several years, including impacts caused by natural disasters and the COVID-19 pandemic. Many residents and communities deal with high unemployment and poverty rates, limited and/or unsatisfactory housing conditions, extremely high energy, and food costs. The region also has limited technological and communications infrastructure, which further hinders access to education, workforce development, and business expansion efforts.

This planning effort was initiated by TCC with input from member Tribes as well as many partner organizations, businesses, and residents. For a list of key participants and organizations, please see the Acknowledgements page.





Key Outcomes of the CEDS

Below you will find summary descriptions of data and input gathering for the whole CEDS process, including goals; priority strategies; a Strength, Weaknesses, Opportunities, and Threats (SWOT) analysis; and summaries of interviews and a survey.

Tanana Chiefs Conference Regional Economic Vision Statement

Healthy, Strong, Unified Tribes.

Goals

			
Goal A Promote Healthy Communities, Self-Sustaining Local Governments, and a High Quality of Life	Goal B Strengthen Businesses and Develop a Stronger Workforce	Goal C Support the Development, Maintenance, and Improvement of Critical Infrastructure	Goal D Promote a Healthy Environment and Carefully Manage Natural Resources

Priority Strategies

Broadband Connectivity

1. Establish reliable, high-speed, and affordable internet connectivity in the region by implementing recommendations in the TCC Tribal Broadband Plan, prioritizing local ownership of communications infrastructure.



Natural Resource Careers

2. Encourage young people to pursue careers in natural resource sciences and management; establish a clearinghouse of training and employment opportunities in the sector.



Self-Governance

3. Move forward with self-governance efforts, co-management agreements, and independent control of Tribal funds by providing education, advocacy, and support to TCC Tribes.



Energy

4. Support development of energy-efficient improvements and alternative energy systems by creating a Community Energy Action Plan for each TCC community.
5. Advocate for the continuation of the Power Cost Equalization program.
6. Form regional purchasing groups to conduct bulk fuel purchases to increase purchasing power and help lower fuel prices.
7. Construct a transmission line between Tok and Delta, connecting Alaska Power and Telephone with the Railbelt electrical grid.
8. Construct interties between nearby TCC region communities, including Tok-to-Northway and potentially a Nulato-to-Koyukuk intertie.
9. Reduce reliance on fossil fuels by continuing deployment of renewable energy investments.
10. Transition smaller standalone electric utilities to electric consortia.



Aviation Operations

11. Form a Tribal Air Taxi in the region.



Regional Collaboration

12. Convene TCC, Doyon, Doyon Foundation, Interior Regional Housing Authority, and Denakanagga for collaborative meetings and/or an Economic Summit at least twice a year to identify and advocate for shared economic development priorities.



Child Care Expansion

13. Expand the availability of child care by promoting training and business opportunities in the sector, including encouraging residents to get trained and licensed as child care providers.



Forest Management

14. Manage local forests to maximize the productivity of local biomass for heating and construction materials (potentially via shared wood lots) and to reduce threats from wildfires.



Water-Sewer

15. Continue to expand water-sewer infrastructure in underserved communities, including advocating for continued funding of key programs and offering technical assistance to communities seeking funding.



Community Halls

16. Support planning initiatives for building and sustaining community halls and multi-purpose centers, so villages have a central gathering space.



SWOT Analysis – Key Themes

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> • Subsistence • Mixed economy • Tribal sovereignty and self-determination • Village corporations 	<ul style="list-style-type: none"> • High cost of living • Limited local hire • Less training in villages • Poor phone and internet coverage • Limited small business presence in villages 	<ul style="list-style-type: none"> • Broadband funding opportunities • Improved technology for rural water-sewer services • Access to vocational and technical training • Expanded participation in natural resource management • Climate change research and planning 	<ul style="list-style-type: none"> • Climate change impacts • Salmon fisheries uncertainty • Potential loss of key programs like PCE or Bypass mail • Ongoing pandemic impacts to health, businesses, supply chains, etc. • Lack of Tribal Recognition by State of Alaska

Process to Develop the 2022-2026 CEDS and Economic Recovery Plan

Outlined below are the main steps in the TCC CEDS and Economic Recovery Plan planning process. The CEDS was developed with assistance from Agnew::Beck Consulting, Information Insights, and Northern Social-Environmental Research.

- Reviewed relevant regional background documents.
- Compiled data on TCC region population, economy, industry trends, and pandemic-focused data.
- Conducted outreach, including:
 - Regional survey with 199 responses
 - 30 interviews
 - Presentations at three TCC subregional meetings (Upper Tanana, Yukon Tanana, and Yukon Koyukuk)

- Promoted the regional survey and project via The Council newsletter, Facebook, and on Tribal Partnership calls
- Facilitated a 30-day public review process of the draft TCC CEDS in November-December 2021. Residents were encouraged to review the draft and submit comments via phone, email, an electronic survey, or mailed comment form. TCC incentivized participation by holding a drawing for five \$100 gift cards. Overall, 19 sets of comments were received and incorporated into the final CEDS.
- During the public comment period for the expanded TCC CEDS & Economic Recovery Plan, the project team presented at TCC subregional meetings in mid-March to promote the draft, share the proposed priority strategies and actions, and collect feedback. Flyers promoting the draft were also distributed to all delegates at the TCC Annual Convention in spring 2022 and the draft was announced via an email to the project distribution list. The TCC CEDS & Economic Recovery Plan was also promoted at the Interior Alaska Economic Summit, held in Fairbanks in February 2022.
- The complete CEDS and Recovery Plan was finalized at the end of March 2022.

Outreach Results

Interviews – Key Themes

Continued and Strengthened Mixed Economy

The TCC region has a mixed economy, with many village residents participating in subsistence activities while also earning cash wages. The Chinook and chum salmon fisheries crash of the past two seasons (2020-2021) resulted in all villages along the Yukon and Koyukuk Rivers and tributaries not being able to fish from late May to early July 2021. This prevented families from accessing a critical traditional food source and contributed to food insecurity. In the face of the pandemic, subsistence has never been so important for Interior village residents.

Workforce Development and Local Hire

There is a strong desire from Interior village residents for more jobs and more local hire when opportunities arise. There is also a desire for training opportunities to be organized and held in the villages, rather than just in Fairbanks or other hub communities.

Broadband Connectivity

When the pandemic began in March 2020 and public schools and workplaces closed, many locations around the country transitioned to remote work and virtual communications. This was more difficult in Interior villages due to the lack of high-speed affordable internet service, severely disrupting education and business.

Pandemic Relief and Cost of Living

The CARES Act of 2020 and American Rescue Plan Act of 2021 provided needed stimulus and relief to individuals, Tribes and Tribal organizations, businesses, and municipal governments. Despite this financial assistance, day-to-day costs of living in the villages remain high. Fortunately, recent and anticipated federal funds, such as the Infrastructure Investment and Jobs Act of 2021, will likely bring additional dollars to

address many of the infrastructure priorities in the region, including broadband access, water-sewer expansion, and transportation needs.

Climate Change

Climate change is being felt around the region, impacting infrastructure, travel safety, and natural resources. Melting permafrost can destabilize building foundations and river erosion threatens homes in many Interior Alaska communities. Climate change is increasing temperatures, thawing permafrost, and changing the hydrology of rivers. This harms species important to subsistence, creating uncertainty and potentially disrupting future food security.

Housing Needs

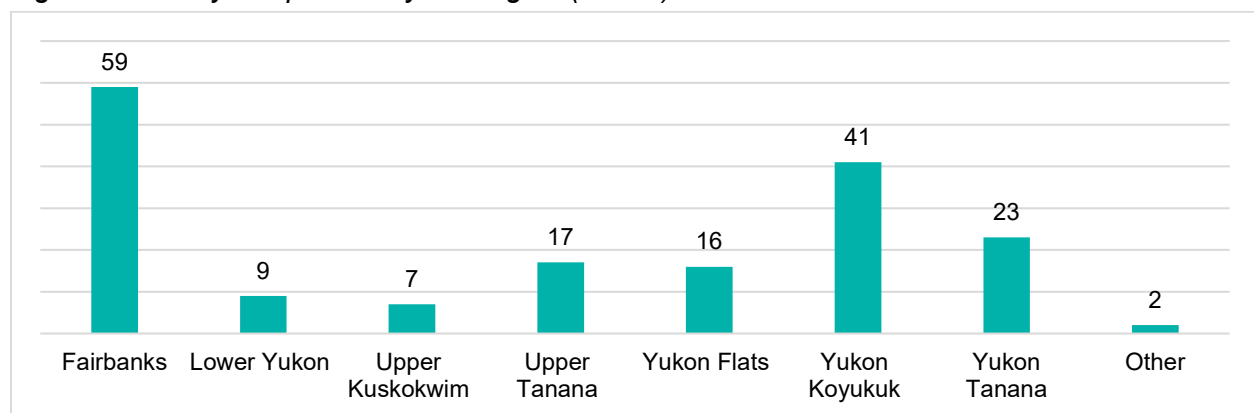
Many villages lack adequate housing and there is limited available land to expand residential subdivisions due to complex land ownership and management policies. The Interior Regional Housing Authority has been facilitating subregional meetings over the past year to inform development of an IRHA Housing Needs Assessment, which will identify key housing gaps and priorities for the region.

CEDS Regional Survey – Key Themes

To collect feedback on ideas, opportunities, and challenges from TCC residents, the project team created and distributed an online CEDS regional survey. The survey was shared with Tribal administrators and staff, posted on the TCC website and social media, and discussed during at least two subregional meetings in August and September 2021. The survey was open from mid-June 2021 to mid-October 2021. Overall, 199 people responded to the survey. All questions were optional, so the actual response rate (“n”) varies between questions.

This is not a statistically valid survey and is not intended to represent the views of all TCC region residents. Rather, the survey offers a helpful snapshot of perspectives and ideas for the project team to consider during development of the TCC CEDS.

Figure 1: Survey Responses by Subregion (n=192)



Note: There were also 18 respondents with an unidentified location due to an initial survey error with this question. These respondents are excluded from the chart above.

Figure 2: Survey Results: Which of the following have you personally experienced since the beginning of the pandemic? (n=198, participants could select all that apply)

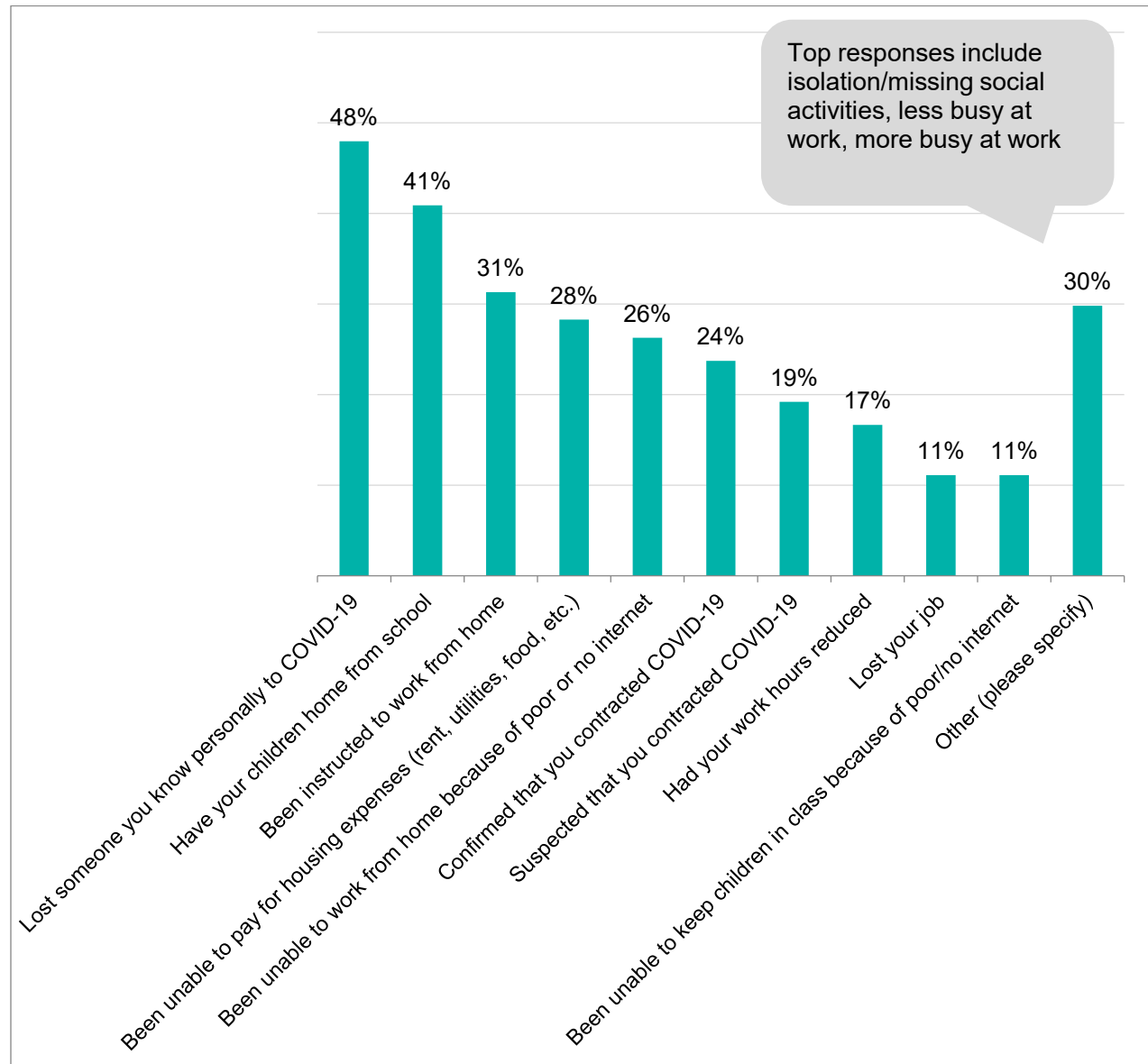
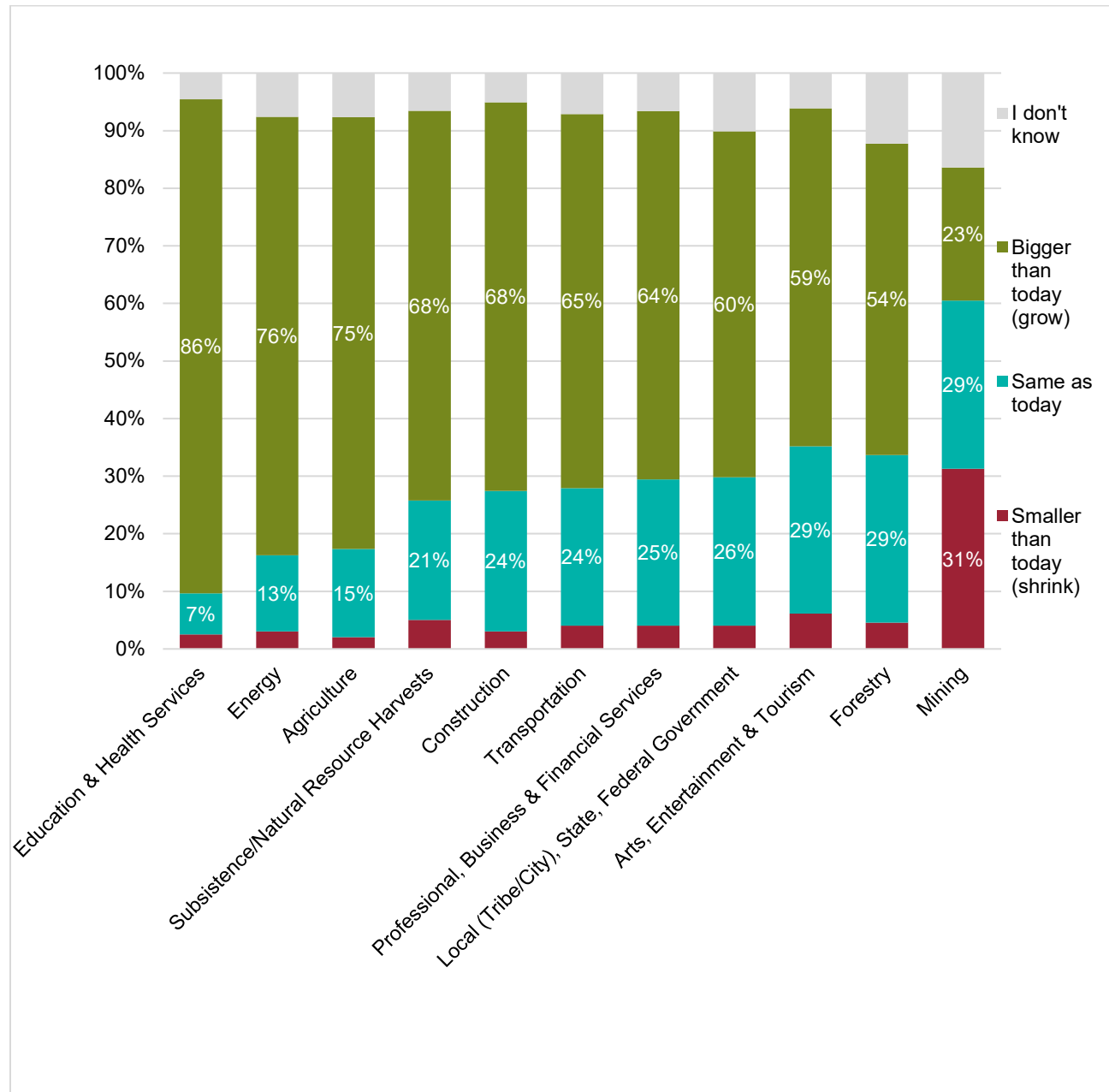


Figure 5: Survey Results: What can we do to better support new and existing businesses? (n=189)

Top 8 Themes (in descending order of frequency)
Reliable and Affordable Telecommunications (59 responses): Increase broadband and cell service connectivity.
Transportation (36 responses): Take steps to increase transportation access and reduce the cost of shipping and material goods through improvements to transportation, especially air service.
Business Development and Entrepreneurship (26 responses): Provide training, workshops, and startup funding for small business.
Energy (19 responses): Reduce the cost of heat and electricity, which impact the bottom line for small business in the region.
Workforce Development (10 responses): Expand the availability of training and local hire initiatives.
COVID-19 Response (10 responses): Businesses in the region need continued impact assistance and relief; support continued mitigation measures.
Support Local Business (9 responses): Encourage residents to buy local and help promote locally owned businesses in the region.
Spotlight Local Business (9 responses): Regional and statewide organizations could spotlight local business in the Interior.

Figure 6: Survey Results: 20 years from now, what is the ideal combination of industries in the TCC region? Which industries should grow, stay the same, or shrink? (n=198)



Chapter 1: Introduction

What is a CEDS?

A CEDS is a tool for community-based and regionally driven economic planning, with strategies and an implementation plan to create stronger and more resilient communities, regions, and states. CEDS are often required for federal and grant funding. CEDS go through robust updates every five years, with smaller updates prepared annually.

A CEDS provides an overview of economic indicators and identifies projects and actions to support economic development and increase regional wealth. The CEDS aims to highlight the region's economic development strengths, challenges, and opportunities and proposes strategies and actions that enhance the region's economic development potential. TCC and its member Tribes and communities will use the CEDS to collaborate and work strategically to leverage the resources and strengths of the region.

What is an Economic Recovery Plan?

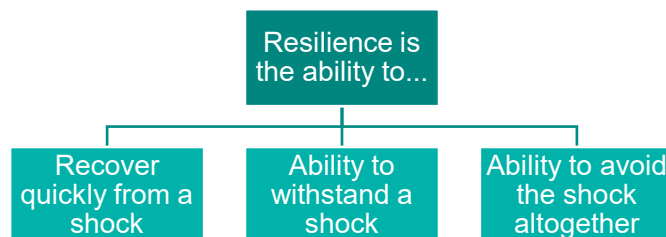
In late 2020, TCC was awarded funds by the U.S. Economic Development Administration (EDA) to develop an Economic Disaster Recovery and Resiliency Plan. The purpose of the plan is to quantify the economic impacts of the COVID-19 pandemic in the TCC region and provide a roadmap of goals, objectives, and strategies to guide regional leaders and communities through economic recovery.

An effective CEDS should also address resilience and, where appropriate, recovery-focused policies. TCC opted to integrate the TCC Economic Recovery Plan into the recently updated TCC CEDS. The initial TCC CEDS was finalized in December 2021, and the expanded CEDS & Economic Recovery Plan was released in March 2022. Additional recovery-focused content includes pandemic-focused data, a more detailed action plan, and a summary of recovery resources.

Defining Resilience and Recovery

Economic Development Administration Definition

According to the EDA, economic resilience includes three components, shown at right:



Regional Definition

Developed with input from the TCC CEDS Committee, November 2021

While regional resilience and recovery were included in previous CEDS, there is special emphasis on these topics in this update due to the disruption caused by COVID-19, which exposed a need for greater regional responsive capacity. Recovery assumes a target end state, such as returning to “normal.” TCC partners

cited the reopening and return to normal operations for schools and local businesses as a crucial indicator. Still, for all TCC communities, the pre-pandemic baseline is generally not a sufficient target. The influx of COVID-19 relief funds and new federal funding for transportation, broadband, and other infrastructure provide an opportunity to kickstart local economies. This reduces the resource gap between rural and urban areas. Post-pandemic recovery for the TCC region is about “building back better,” targeting a new normal that is ahead of where the region was before the pandemic.

Recovery efforts provide an opportunity to learn from setbacks and enhance regional resilience, which involves reducing the risk that future hazards might pose and strengthening the region’s ability to withstand disturbances that will inevitably occur. Resilience can also build on existing strengths, such as the region’s long history of adaptation. Interior people are inherently adaptable with local values that reinforce the importance of strong family networks and spiritual connection to the environment. Building resilience in the TCC region is about providing infrastructure, resources, and training to grow local capacity and self-reliance. Investing in youth and preparing the next generation to take on leadership roles is central to this goal.

“Interior people are adaptable.”

“I’d like to see more robust planning for future events, pandemics, and disasters.”

-CEDS Committee Discussion

“I’d like to see us use broadband, housing, and infrastructure funds to build things for the future that build the economy, not just go back to where we were.”

“Resilience means seeking ways to bring salmon back, but also finding alternatives – such as gardening and expanding access to other subsistence resources like moose and whitefish.”

-CEDS Committee Discussion

Who developed the CEDS & Economic Recovery Plan?

TCC developed this CEDS Update with assistance from Agnew::Beck Consulting, Information Insights, and Northern Social-Environmental Research. See the executive summary to learn more about the planning process.

TCC is organized as *Dena’ Nena’ Henash* or “Our Land Speaks,” an Alaska Native nonprofit corporation charged with advancing Tribal self-determination and enhancing regional Native unity. TCC works toward meeting the health and social service needs of Tribal members and beneficiaries throughout the TCC region. TCC was formed in 1962 to serve as an organizational unit to advocate land claims for member Tribes. It was incorporated as an official nonprofit regional consortium in 1972 through the Alaska Native Claim Settlement Act (ANCSA). TCC represents 42 Alaska communities, including 37 federally recognized Tribes. TCC programs and services include health care, housing, lands management, Tribal government assistance, education, employment, public safety, and natural resource programs. TCC also provides public safety through Alaska’s Village Public Safety Officer (VPSO) program.

This CEDS update was completed with U.S. Economic Development Administration (EDA) funding.

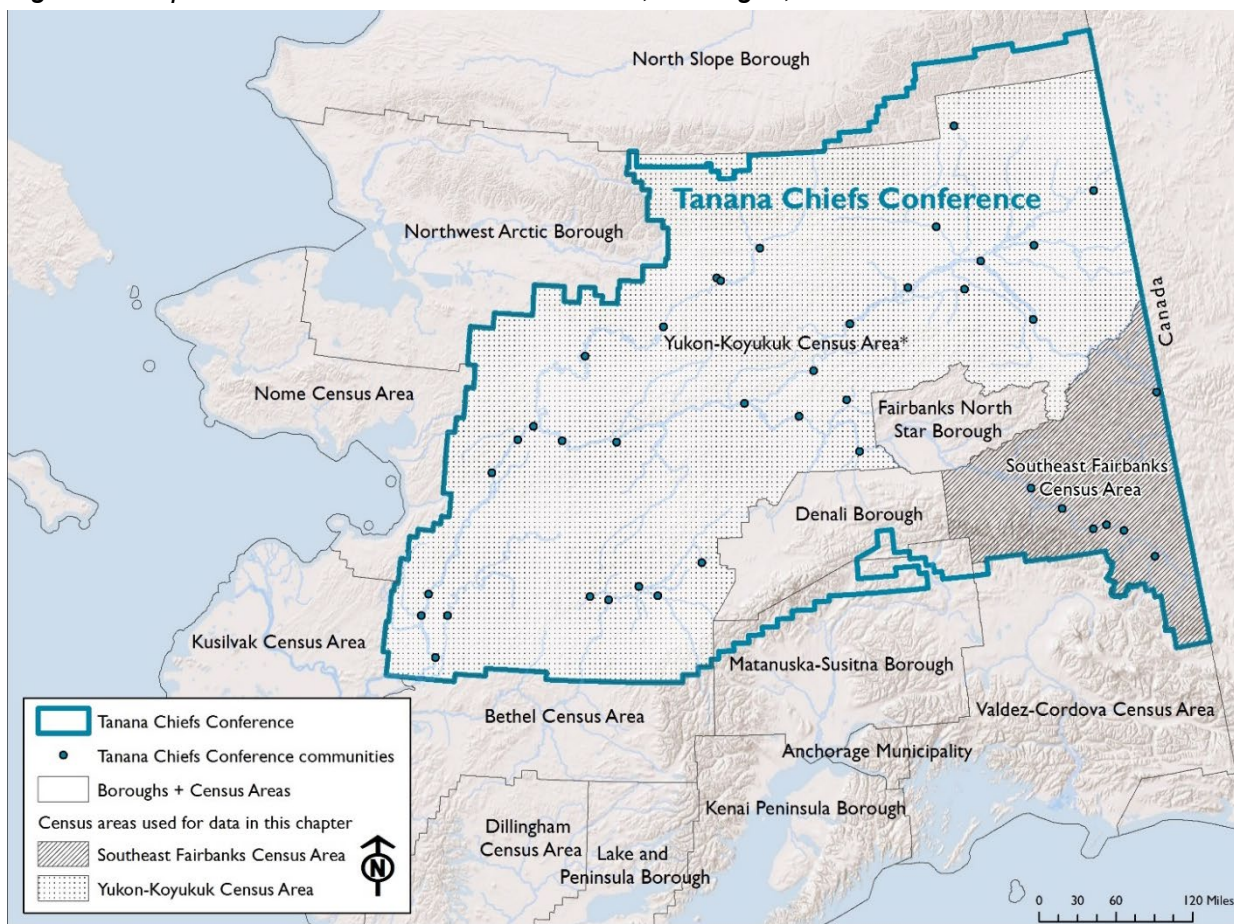
Learn more about Tanana Chiefs Conference at

www.tananachiefs.org/

Project Area Overview

The TCC region covers an area of 194,500 square miles, equal to about 30 percent of the entire state of Alaska (Figure 7). It shares boundaries with Doyon, Limited, the ANCSA regional corporation. The passage of ANCSA in 1971 set the TCC borders. This CEDS is intended to benefit all residents, communities, and Athabascan Tribes within the region as they make progress towards their community and economic development goals. As seen in Figure 7, the TCC region overlaps with all or part of the Fairbanks North Star Borough (FNSB), Denali Borough, Matanuska Susitna Borough, and North Slope Borough. However, no TCC communities are within the boundaries of these boroughs. The FNSB creates its own CEDS and is currently going through a five-year update.¹

Figure 7: Maps of the Tanana Chiefs Conference, Boroughs, and Census Areas



Map produced by Agnew::Beck Consulting

¹ Learn more about the FNSB Comprehensive Economic Development Strategy Update here: <https://fnsbcceds.com/>.

Structure and How to Use the Document

This document is organized into the following chapters:

Executive Summary

- Summary of outreach efforts and vision, goals, and priority strategies.

Chapter 1: Introduction

- Overview of CEDS planning, purpose, and process.

Chapter 2: Summary Background

- Overview of the TCC region's people and economy; summary of COVID-19 impacts on the region.

Chapter 3: Regional SWOT Analysis

- Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis of the TCC region.

Chapter 4: Regional Future Direction

- Regional Future Direction, with regional goals, objectives and priority programs, projects, and activities.

Chapter 5: Preliminary Evaluation Framework

- Action plan and performance measures for tracking progress on the CEDS.

Appendix

- Survey results, outreach materials, additional background, and capital priorities for TCC communities.

Chapter 2: Summary Background

This section shares information that helps define the economy of the TCC region. The region is divided into six subregions (Figure 8). In some instances, we presented data by subregion. In other cases, we used Census areas to identify general socioeconomic trends. The 42 member Tribes of TCC fall into two U.S. Census areas: the Yukon-Koyukuk (YK) Census Area with 34 TCC communities and the

Southeast Fairbanks Census Area with seven TCC communities (Figure 9). Although the two combined census areas do not align exactly with the TCC region boundaries, they provide a relatively accurate picture of the economy and demographic trends in the region. Additional data is available in the appendix.

Figure 8: TCC Subregional Boundaries

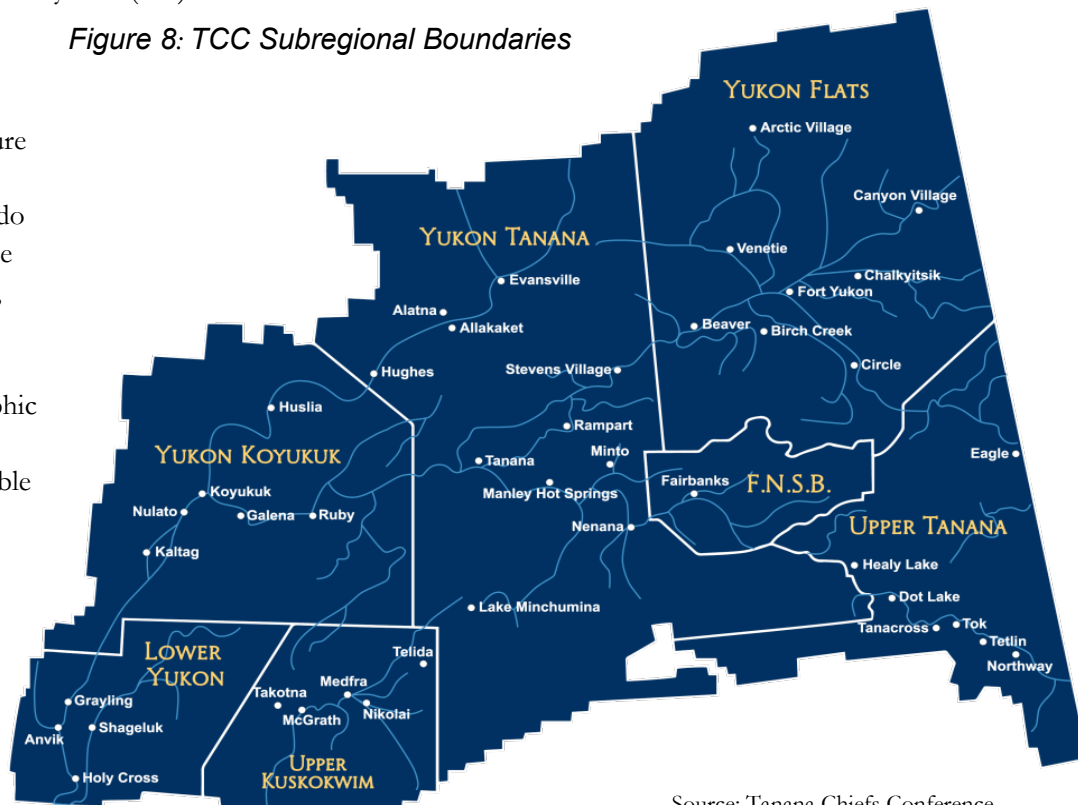


Figure 9: List of TCC Communities by Census Area

Census Area	List of Communities
Yukon-Koyukuk Census Area (2020 population: 5,044)	Alatna, Allakaket, Anvik, Arctic Village, Beaver, Birch Creek, Canyon Village*, Chalkyitsik, Circle, Evansville (Bettles), Fort Yukon, Galena, Grayling, Hughes, Huslia, Holy Cross, Kaltag, Koyukuk, Lake Minchumina*, Manley Hot Springs, McGrath, Medfra, Minto, Nenana, Nikolai, Nulato, Rampart, Ruby, Shageluk, Stevens Village, Takotna, Tanana, Telida, Venetie (Also includes seven non-TCC communities: Central, Coldfoot, Flat, Four Mile Road, Livengood, New Allakaket, Wiseman.)
Southeast Fairbanks Census Area (2020 population: 6,937)	Dot Lake, Eagle Village, Healy Lake, Northway, Tanacross, Tetlin, and Tok (Also includes nine non-TCC communities: Alcan Border, Big Delta, Chicken, Delta Junction, Deltana, Dry Creek, Eagle City, Fort Greely, Whitestone.)

*Lake Minchumina and Canyon Village are historical Athabaskan villages. However, they are not populated year-round nor designated as federally recognized Tribes.

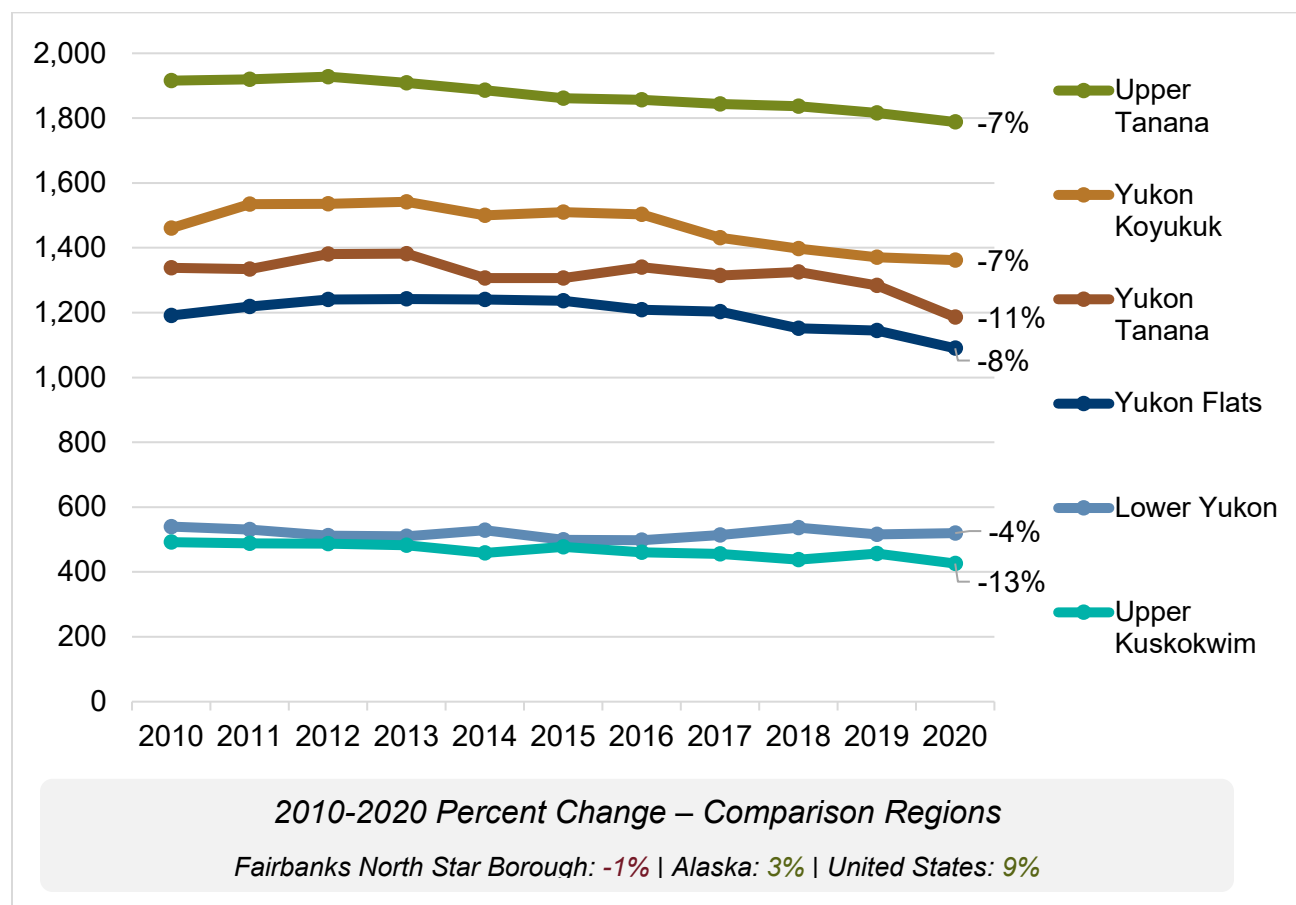
NOTE: While not formally a TCC community, the Village of Anaktuvuk Pass is a TCC/Indian Health Service compact member and has a TCC partner clinic. Anaktuvuk Pass is in the North Slope Borough.

Population

Key Takeaway: The TCC region's population declined by 8 percent between 2010 and 2020 (Figure 10).

- TCC's population decreased by 500 individuals between 2010 and 2020.
- The largest decrease during this period was seen in the Upper Kuskokwim subregion, while the smallest decrease was seen in the Lower Yukon subregion.
- Over the same time period, Alaska and the United States experienced population growth rates of 3 percent and 9 percent, respectively.
- The population of the Fairbanks North Star Borough declined during this period, but at a lesser rate (1%) than the TCC region (8%).
- See the "weaknesses" section of the SWOT Analysis in Chapter 3 for possible factors.

Figure 10. Population Trends across Tanana Chiefs Conference Subregions, 2010-2020



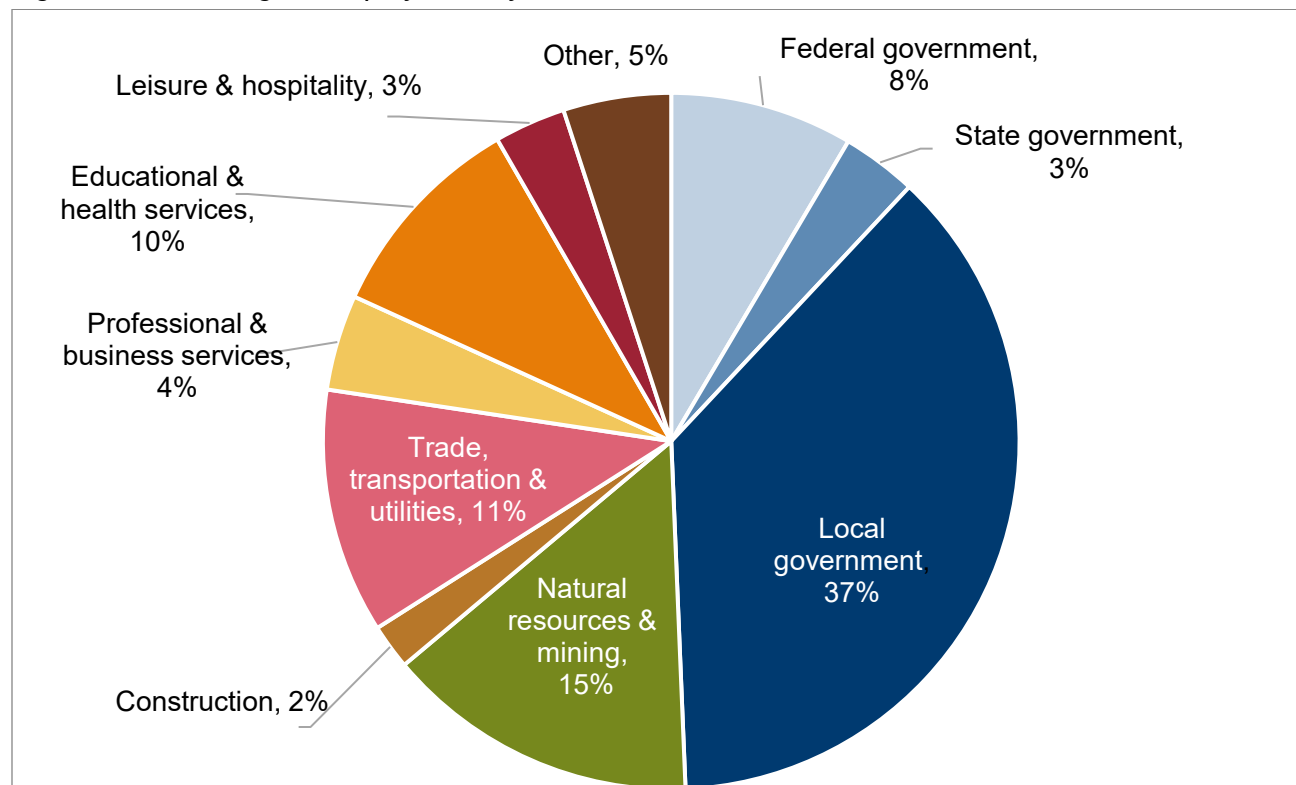
Source: Alaska Department of Labor and Workforce Development, Research and Analysis, Alaska Population Estimates by Borough, Census Area, City, and Census Designated Place (CDP), 2010 to 2020

Economy

Local government is the largest employment sector in the TCC region, providing 37 percent of total employment; this sector has grown since 2014 (Figure 11 and Figure 12).

- Natural resources & mining is the next largest sector and largest private sector employer (15% of total employment), followed by trade, transportation & utilities (11%) and educational & health services (10%).
- This breakdown contrasts many urban areas in the state, such as FNSB, where the military is the largest employer, employing 16% of the workforce in 2019.
- Top employers statewide are trade, transportation, and utilities (20%), educational and health services (17%), and local government (13%).

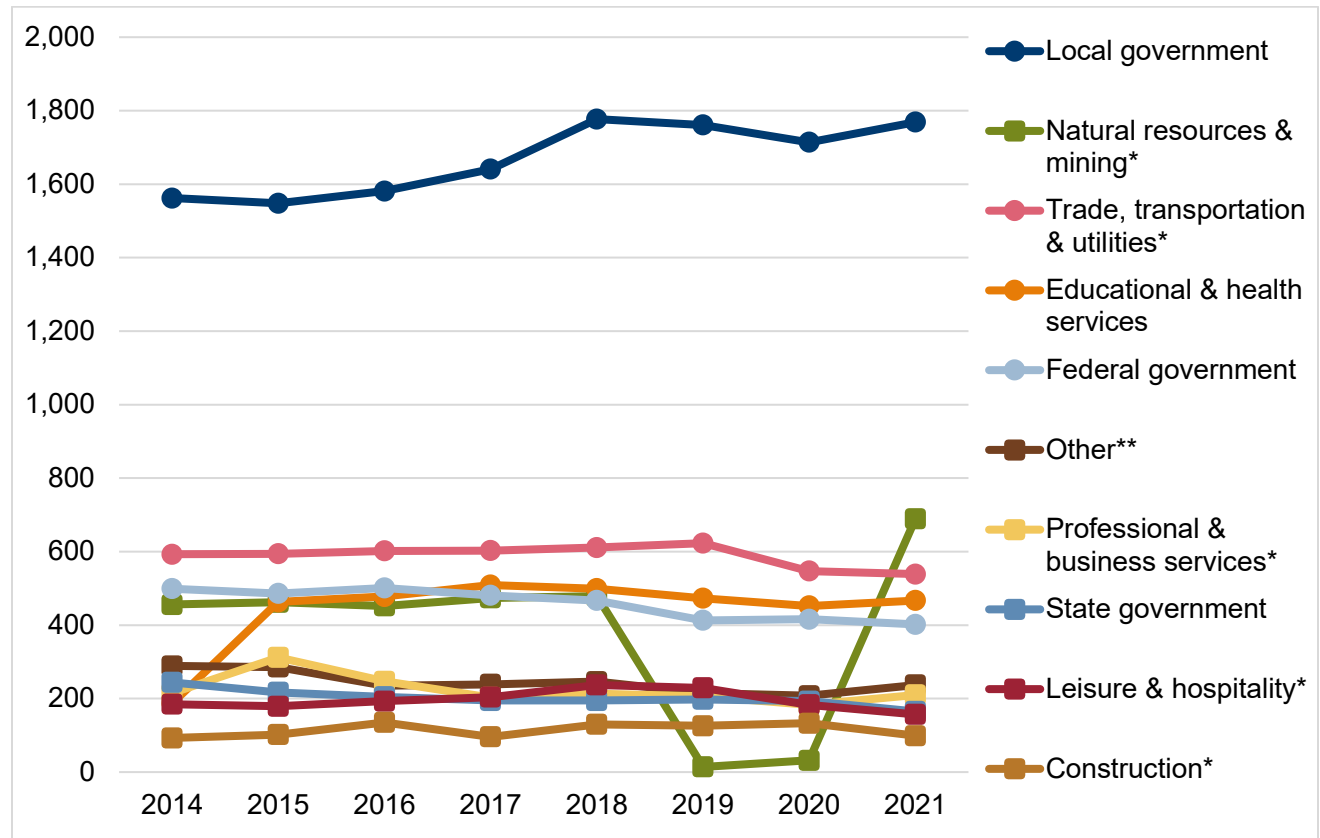
Figure 11. TCC Region Employment by Sector, 2021



Notes: “Tanana Chiefs Conference Region” is defined as the Yukon-Koyukuk and Southeast Fairbanks census areas combined. “Local government” includes municipal and Tribal employment. Subsistence activities and the self-employed are not represented in the data set. “Other” includes manufacturing, information, financial services, and other services.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis, Quarterly Census of Employment & Wages (QCEW), 2021. <https://live.laborstats.alaska.gov/qcew/index.html>

Figure 12. Total Employment by Industry for the TCC Region, 2014-2021



Notes: “Tanana Chiefs Conference Region” is defined as the Yukon-Koyukuk and Southeast Fairbanks census areas combined. “Local government” includes municipal and Tribal employment. Subsistence activities and the self-employed are not represented in the data set.

* This data is limited because some information is not disclosed due to confidentiality concerns, which is when there are a small number of business establishments in a specific industry within the region. Industries marked with an asterisk may be underrepresented in Figure 12. This likely accounts for the extreme variation in natural resources & mining employment in Figure 12.

** “Other” includes manufacturing, information, financial services, and other services.

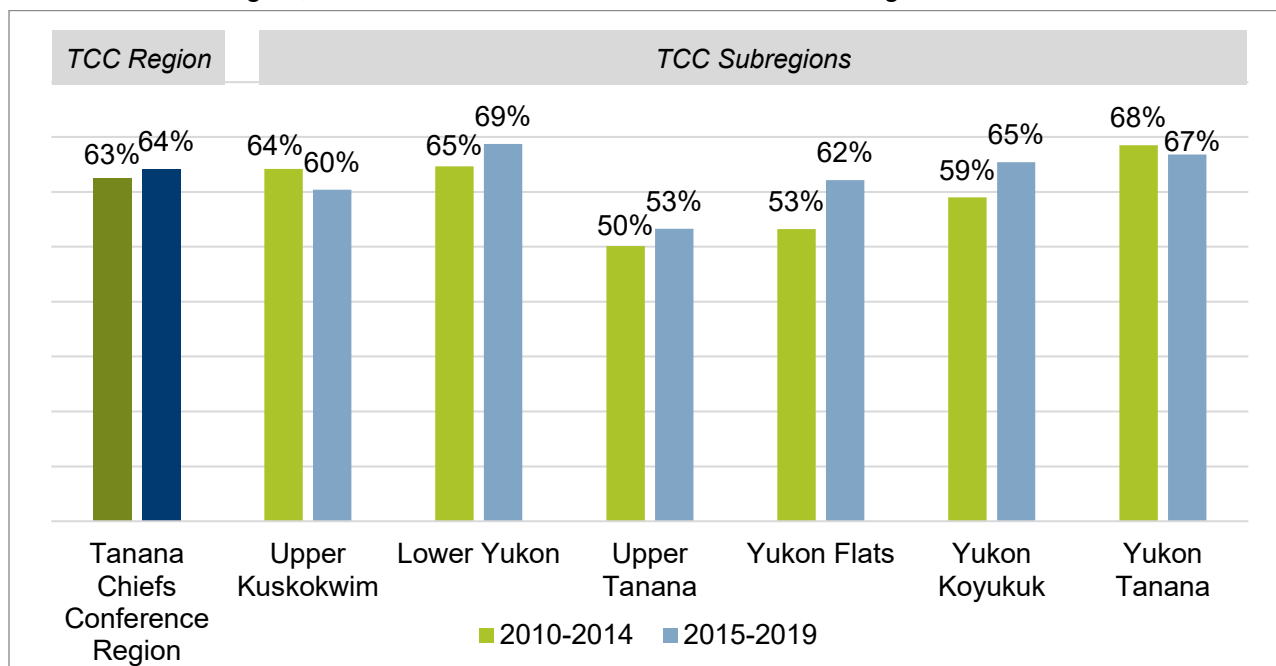
Source: Alaska Department of Labor and Workforce Development, Research and Analysis, Quarterly Census of Employment & Wages (QCEW), 2014-2021. <https://live.laborstats.alaska.gov/qcew/index.html>

Labor Force

The Lower Yukon subregion has the highest percentage of residents over 16 who are employed (Figure 13).

- Upper Kuskokwim, Upper Tanana, and Yukon Flats subregions have a lower percentage of residents over 16 who are employed compared to the TCC region average for 2015-2019.
- Lower Yukon, Upper Tanana, Yukon Flats, and Yukon Koyukuk subregions increased their percentage of residents over 16 who are employed from 2010-2014 to 2015-2019, while Upper Kuskokwim and Yukon Tanana saw a decrease over the same time period.

Figure 13. Percentage of Residents over 16 who are Employed by Tanana Chiefs Conference Subregion, 2010-2014 and 2015-2019 Five-Year Averages



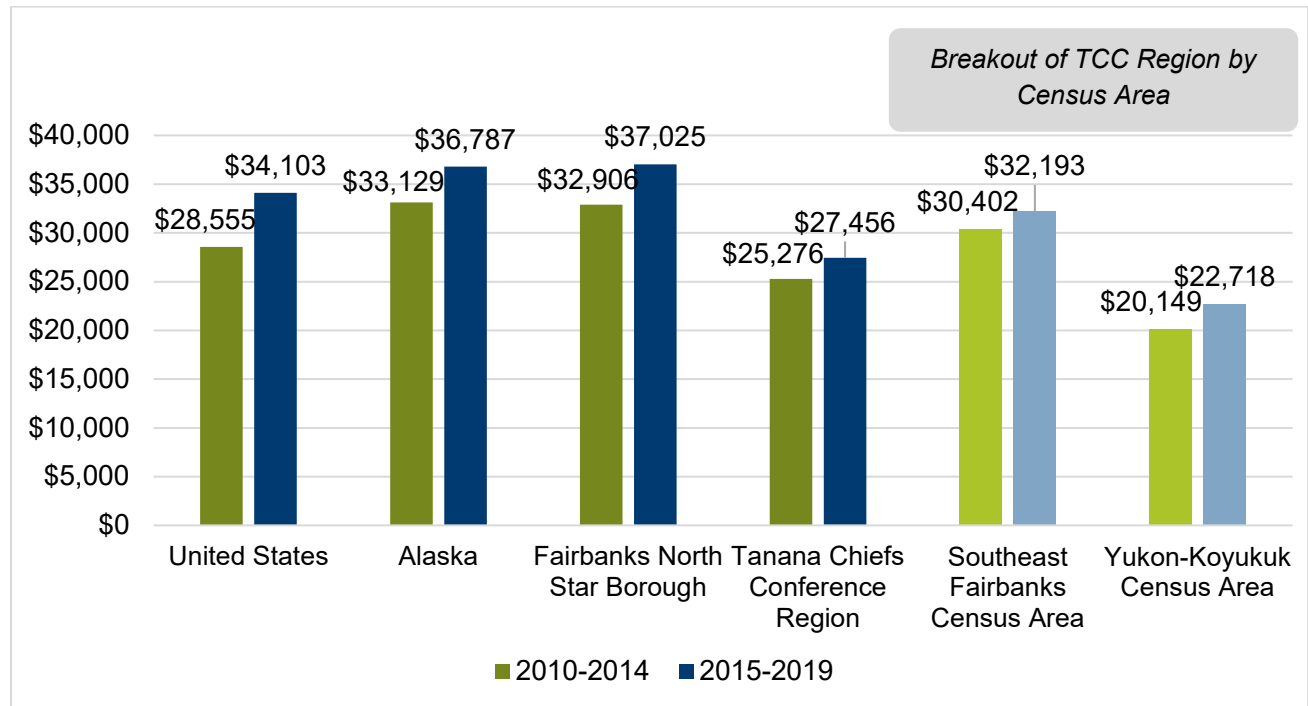
Tanana Chiefs Conference Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

Source: U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates, Selected Economic Characteristics

Per capita income in the TCC region during the five-year period from 2015 to 2019 grew when compared with the previous five-year period of 2010 to 2014 but remains lower than national and state per capita incomes (Figure 14).

- Per capita income in the TCC region grew slightly between the two five-year periods, from \$25,276 to \$27,456.
- The TCC region's average per capita income of \$26,366 per year remains approximately 25% lower than the average per capita income for Alaska and Fairbanks North Star Borough during this period (\$34,966 and \$34,958 respectively).
- There is a significant income disparity between the two census areas that make up the TCC region. The five-year average for the Southeast Fairbanks Census Area's per capita income is \$32,193, and the Yukon-Koyukuk Census Area's per capita income is almost \$10,000 less at \$22,718.
- The per capita income data for TCC communities does not capture the dollar equivalent of non-monetary resources, such as subsistence harvests, which are an important supplement to traditional income in many TCC households.

Figure 14. Per Capita Income by Region, 2010-2014 and 2015-2019 Five-Year Averages



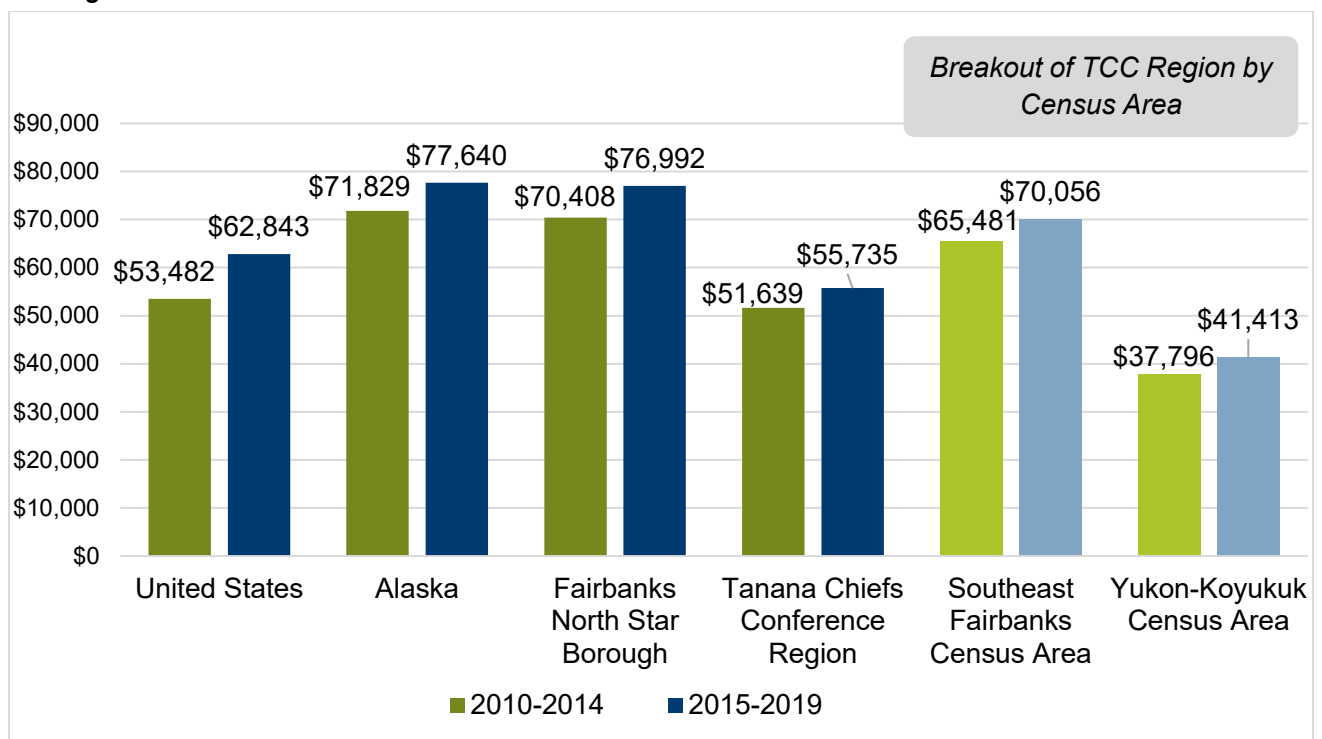
Tanana Chiefs Conference Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

Source: U.S. Census Bureau, ACS 5-Year Estimates Detailed Tables

Median household income increased during the five-year period from 2015 to 2019 when compared with the previous five-year period of 2010 to 2014 but remains lower than national and state per capita incomes (Figure 15).

- A breakdown of median income by geographic area shows a stark difference between the two census areas that comprise the TCC region. The Southeast Fairbanks Census Area has a median household income higher than the U.S. (\$70,056 and \$62,843 respectively); the Yukon-Koyukuk Census Area is almost 50% lower than the national median, at \$41,413.

Figure 15. Median Household Income by Region, 2010-2014 and 2015-2019 Five-Year Averages



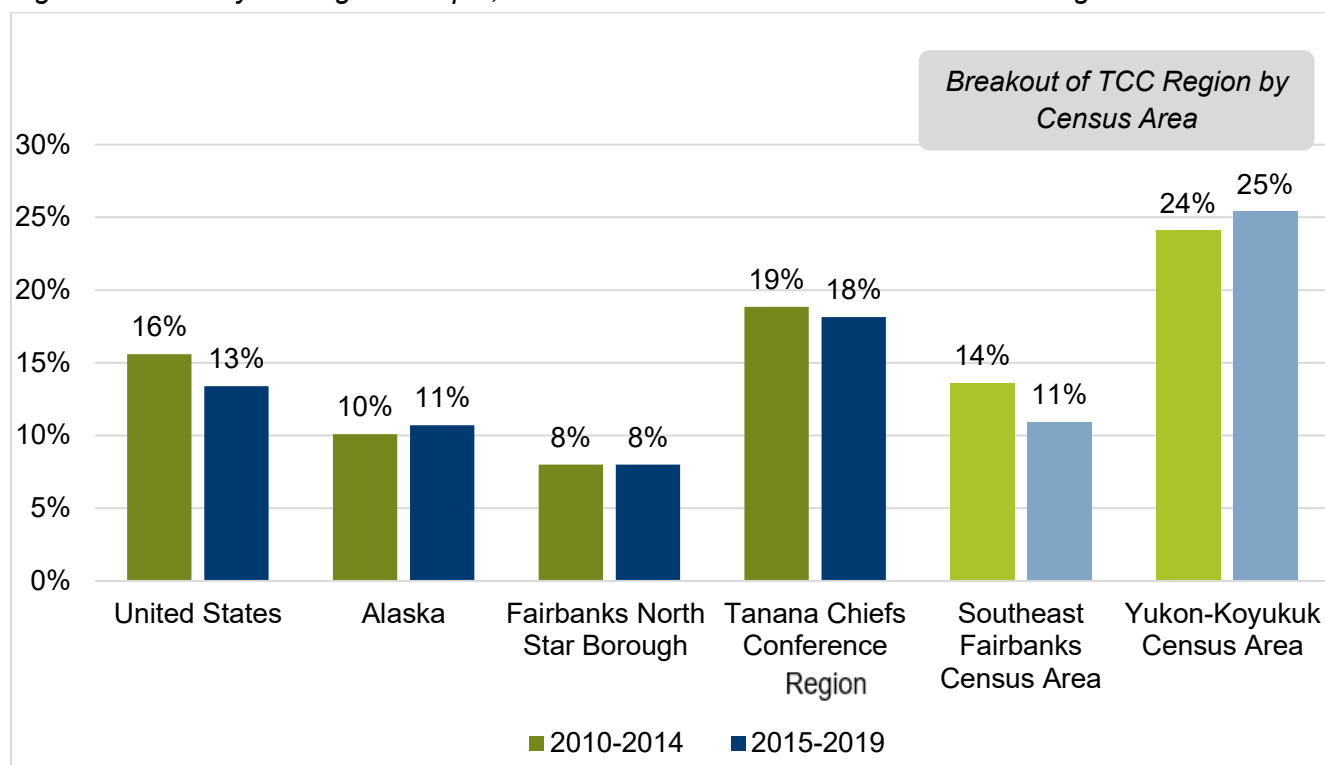
Source: U.S. Census Bureau, ACS 5-Year Estimates Detailed Tables

Tanana Chiefs Conference Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

Poverty rates in the region remain high, although they decreased slightly during the five-year period from 2015 to 2019 when compared with the previous five-year period of 2010 to 2014 (Figure 16).

- During the five-year period between 2015 and 2019, the poverty rate of 18 percent for the TCC region (18%) was higher than Alaska (11%) and close to that of the U.S.
- Poverty rates within the TCC region vary significantly between communities and census areas. The Yukon-Koyukuk Census Area shows a much higher poverty rate than the Southeast Fairbanks Census Area, with approximately one in four people experiencing poverty during the five-year period between 2015 and 2019.
- When comparing the two five-year periods, poverty decreased in the Southeast Fairbanks Census Area and increased in the Yukon-Koyukuk Census Area.

Figure 16. Poverty Among All People, 2010-2014 and 2015-2019 Five-Year Averages



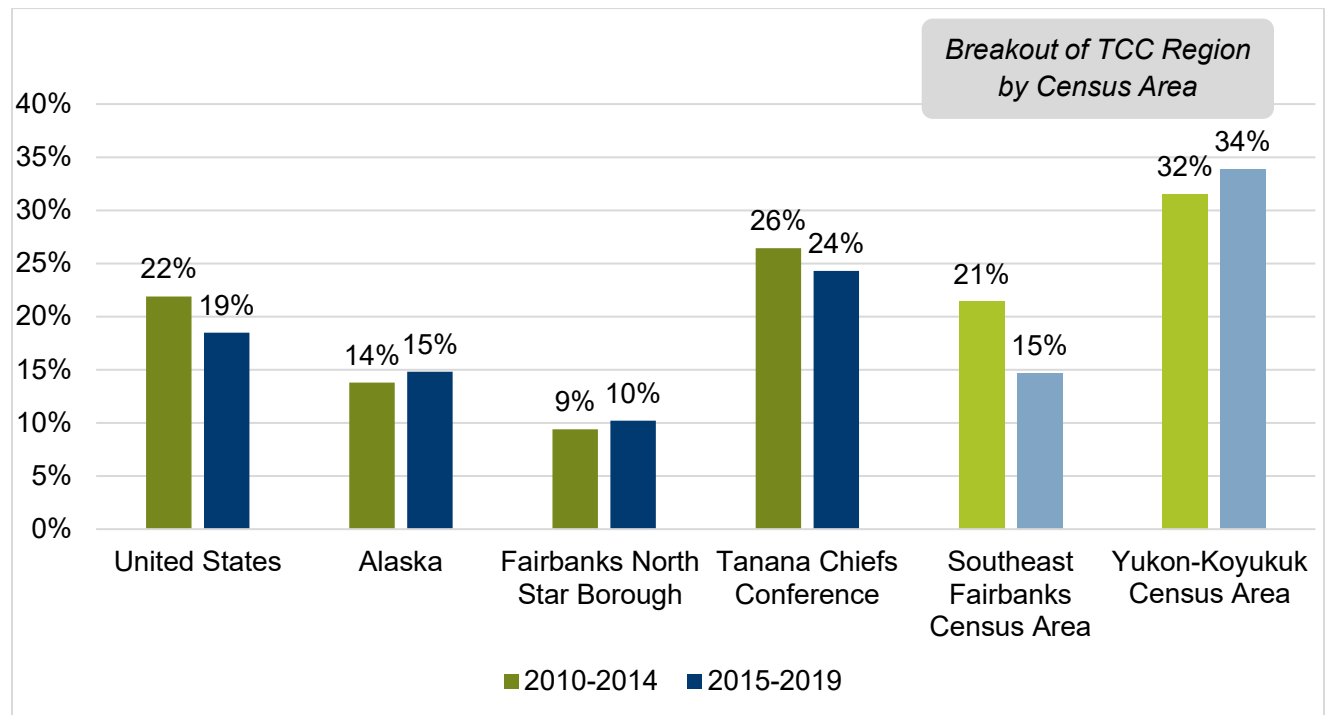
Source: U.S. Census Bureau, ACS 5-Year Estimates Detailed Tables

Tanana Chiefs Conference Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

Poverty levels among young people are higher than overall poverty estimates (Figure 17).

- During the five-year period from 2015 to 2019, an average of one in three young people experienced poverty in the Yukon-Koyukuk Census Area. This number increased slightly from the previous five-year average.
- Poverty among young people is significantly lower in the Southeast Fairbanks Census Area at 15%, comparable to the poverty rate for the state of Alaska and lower than that of the U.S.

Figure 17: Poverty Among Those 18 Years Old and Under, 2010-2014 and 2015-2019 Five-Year Averages



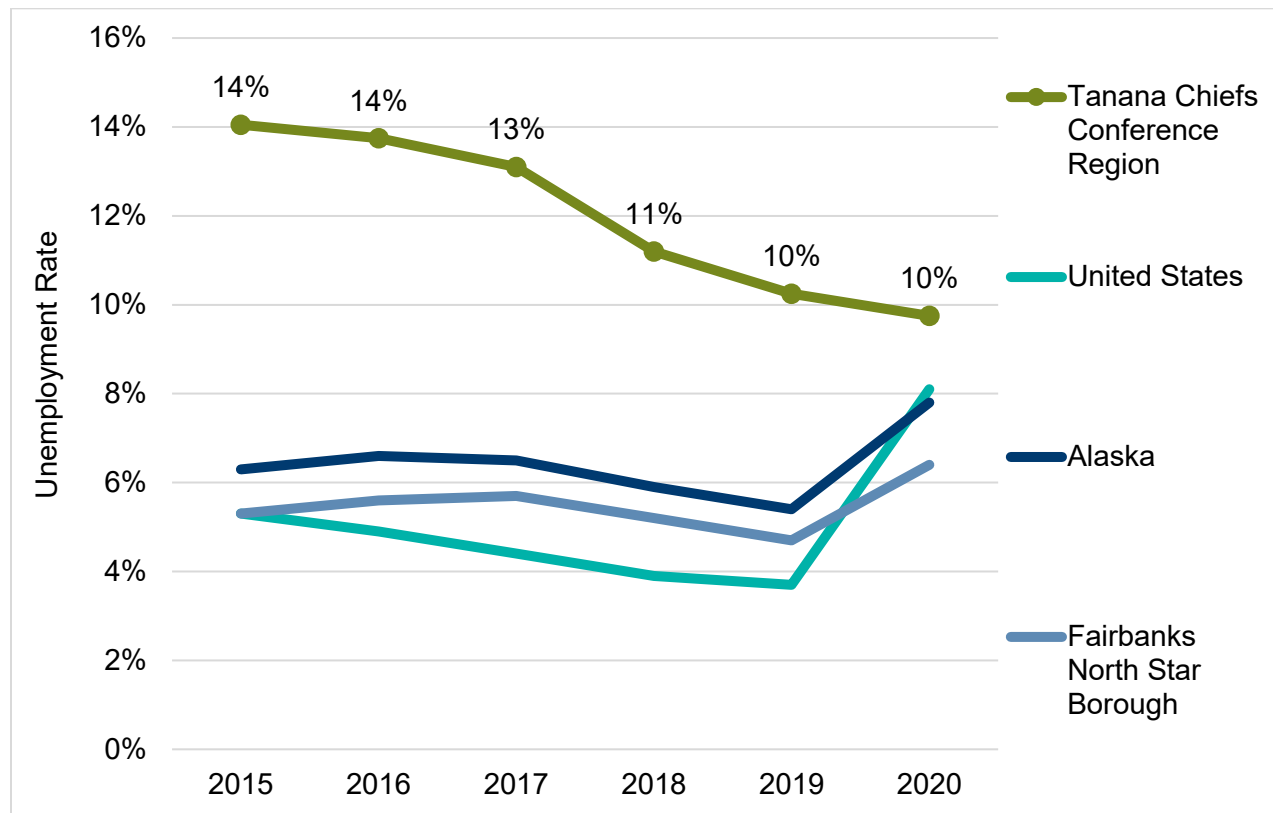
Source: U.S. Census Bureau, ACS 5-Year Estimates Detailed Tables

Tanana Chiefs Conference Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

The annual unemployment rate for the TCC region has steadily declined over the past five years, from 14 percent in 2015 to 10 percent in 2020 (Figure 18).

- In 2015, the TCC region experienced unemployment rates over 200% higher than Alaska as a whole (14% and 6%, respectively).
- The onset of the COVID-19 pandemic in 2020 raised unemployment rates drastically in the FNSB, U.S., and Alaska while appearing to have a lesser impact on TCC region employment.

Figure 18: Average Annual Unemployment Rate, 2015-2020



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, Unemployment rates (Not Seasonally Adjusted)

Tanana Chiefs Conference Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

Snapshot of Key Sectors

Local Government

There are no incorporated regional governments or boroughs, in the Yukon-Kuskokwim and Southeast Fairbanks Census Areas in Interior Alaska. Most Interior communities have an incorporated local municipal government or city council, but due to limited natural resource development opportunities in the region and therefore limited tax base potential, borough government formation and organization has been a low if non-existent priority for most Interior villages and subregions after Alaska statehood in 1959.

Preceding state government, since 1936 when Congress passed the Alaska Reorganization Act, federally recognized Tribes were formed and organized throughout Alaska, including Interior Athabascan villages. Although not governmental entities or organizations per se, Alaska Native Claims Settlement Act – Alaska Native corporations are significant landowners throughout Interior Alaska, namely Doyon, Limited as the regional corporation, and the attendant village corporations for each TCC member village. Most Alaska Native residents in the region are enrolled members of a federally recognized Tribe and shareholders of Doyon, Limited and at least one village corporation.

A combined 1,769 individuals were employed in local government (including both municipal and Tribal roles) in the first quarter of 2021, or approximately 37 percent of the entire regional workforce.²

Education & Health Services

The TCC region hosts seven school districts and over 40 school facilities, including boarding schools and distance delivery home school programs. According to October 2021 enrollment data from the Alaska Department of Education and Early Development, approximately 16,654 pre-K to high school students are based in the TCC region. There are two boarding schools in Galena and Nenana and two home school programs offered by Interior Distance Education of Alaska (IDEA) and Raven Homeschool, respectively.

The major health services delivery provider is the TCC Health Services department, through an Indian Health Service (IHS) Self-Governance Program compact, and other miscellaneous and specialized Indian Self-Determination and Technical Assistance Act, or “638,” contracting service delivery. There are small clinics in nearly all TCC villages. Clinic services range from behavioral health, substance abuse and suicide prevention counseling, nutrition and community health and wellness, primary care, and in some cases, specialized care like radiology or orthopedics.

The TCC Early Head Start & Head Start program provides early education services to children under five years of age in many TCC communities. Head Start offers classroom and home-based programming and prenatal care in 14 TCC communities. Some school districts in the region also operate preschool programs. Many communities face child care shortages and there is demand for more center-based programs.

A combined 467 individuals were employed in the region’s education and health services sectors in the first quarter of 2021, or approximately 10% of the entire regional workforce.

² Bureau of Labor Statistics: Quarterly Census of Employment and Wages, 2021. Combined numbers for both Southeast Fairbanks Census Area and Yukon-Koyukuk Census Area.

Military

Alaska is home to nine military bases, four of which are located in Interior Alaska. These include Eielson Air Force Base and Fort Wainwright, both located within the boundaries of the Fairbanks North Star Borough, plus the smaller Clear Air Force Base and Fort Greely. Roughly two million acres (one percent of the land area) within Interior Alaska are military-owned. Approximately three percent of the labor force is employed in the armed forces.

Natural Resources

Subsistence

The TCC region is minimally connected to the road system and helps make up approximately 17% of the total Alaska population living in rural areas of the state. Due to the rural nature of many TCC region communities and the prevalence of traditional and customary subsistence harvesting of fish, game, and flora, there is a mixed economy between subsistence lifestyles and wage-based employment. According to Alaska Department of Fish and Game, Division of Subsistence data from 2019, the average per capita subsistence harvest in the TCC region is approximately 293 pounds, above the average rural area harvest statewide of approximately 276 pounds.³

The Yukon, Tanana, and Koyukuk Rivers are major drainages in the TCC region; the headwaters of the Upper Kuskokwim River are also in the region. The Yukon River hosts five major salmon species runs, and the Koyukuk River hosts all but sockeye runs. Many villages in the TCC region have harvested salmon since time immemorial. In at least the past two salmon run seasons (2020-2021), both the Chinook and chum runs have crashed, resulting in TCC region villages being unable to harvest any of the two species from late May to early July in most cases. Late June and early July are when the coho and sockeye runs begin, but these runs are not as large by volume or have as much nutritional value to human consumption as Chinook. Chum salmon are primarily used to feed sled dogs, common in many TCC region villages. During the 1980s, TCC region residents could generate significant business and personal income by commercially catching and selling Chinook salmon and egg roe to market buyers. However, no Chinook commercial fishing has taken place in the TCC region since 2007 due to all-time historical lows of Chinook runs.

Mining

There are several fully operating mines in Interior Alaska, including the Fort Knox Mine located north of Fairbanks, the Pogo Mine near Delta Junction, and several small mining explorations and prospects on the Lower and Upper Tanana River and the Middle and Upper Yukon River. Doyon, Limited recently began joint venture mining exploration programs with junior mining companies located in the Upper Tanana and Upper Yukon Rivers on Doyon-owned lands.

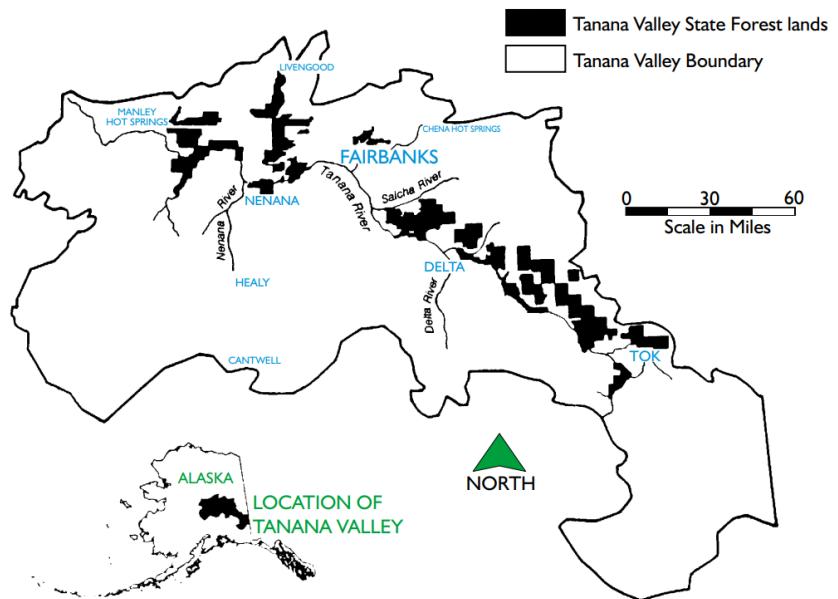
³ Alaska Department of Fish and Game: Wild Harvest Notebook. 2019.

Forestry

The Tanana Valley State Forest is approximately 1.8 million acres, with units spanning Interior Alaska from Manley to Tok (Figure 19). There are several businesses that operate within the Tanana Valley State Forest, including businesses operating out of Fairbanks, Delta, and Tok. Some villages harvest biomass to offset heating expenses for community facilities, including the Tok School in Tok and Sustainable Energy for Galena Alaska, Inc. in Galena.

TCC has a Forestry Department, and major Forestry Department activities in the region mostly involve wildland fire management and suppression during the summer months. TCC Forestry administers and manages one Type II Initial Attack rated wildland fire crew and has recently begun administering and operating a feeder crew helping train and keep a local workforce engaged in wildland fire prevention activities like thinning, cutting fuel breaks, and human-made structure protection, i.e., remote cabins or telecommunications infrastructure.

Figure 19: Map of Tanana Valley State Forest Units



Source: Alaska Department of Natural Resources, Division of Forestry

Trade, Transportation & Utilities

Trade and Transportation

Villages in the TCC region are accessed via a mix of roads, air service, and barge. Ten communities are accessible by road; generally, these communities have the lowest transportation costs. Seventeen communities are accessed by air; these communities struggle with increasing air travel costs and limited air carrier service options. Nineteen TCC communities are serviced by barge; in these communities, barge service can be limited by ice in the winter. Some communities have multiple access methods. Overall, limited transportation connectivity contributes to a higher cost of living and creates challenges for smaller communities that lack easy access to services such as health care and employment opportunities.

Alaska relies heavily on federal funds to pay for capital transportation projects. State funding is used primarily for maintenance and, as required, match funds. The Federal Highway Administration (FHWA) also provides funding for Tribal transportation programs.

Several new transportation projects are being considered in Interior Alaska, including:

- Ambler Mining Road, which would open industrial access to the Ambler Mining District. It is a proposed 211-mile, controlled access road that would connect the Dalton Highway to mineral resources near the community of Ambler in the Northwest Arctic Borough. This project is being led

by the Alaska Industrial Development and Export Authority. Learn more at: <https://ambleraccess.org/>.

- The Yukon-Kuskokwim Energy and Freight Corridor would establish additional connectivity along the Yukon and Kuskokwim Rivers. This includes expanding the road to Tanana to connect with Bethel area communities via waterways. The Association of Village Council Presidents is leading this project. Learn more at <https://www.avcp.org/tribal-resources/yk-corridor/>.

Village stores are a key part of the economy in many TCC communities, supporting the movement of goods between urban and rural areas and providing one of the only opportunities for local groceries and home goods. In many cases, these stores are owned and operated by village corporations. Village stores face various challenges including high freight costs, supply chain challenges, and increasing competition from online stores such as Amazon.

Utilities

All TCC region villages utilize diesel power generation, and all but Nenana participate in the Alaska Energy Authority-managed Power Cost Equalization (PCE) program. Several villages and communities in the region operate biomass boilers that provide building and water heat for school, washeteria, and some other public facilities like municipal offices. At least one village in the region has a solar panel array that provides significant kW hour power generation, helping displace expensive diesel-power generation. Some TCC villages are members of the Alaska Village Electric Cooperative, while Alaska Power and Telephone serve many others.

Water and sewer utility service delivery has not yet reached 100 percent across every residential household and public or commercial facility in the region. Most villages only have fractions of residential subdivisions connected to fully operating water and sewer for both kitchens and bathrooms, while there are still a total of thirteen “unserved” communities in the region without any water and sewer utility service delivery at all. Some TCC villages have organized and operate single-village water and sewer utilities, and others without organized water and sewer utilities receive some funding and technical assistance from the Alaska Native Tribal Health Consortium, Division of Environmental Health and Engineering.

Pandemic Impacts on the TCC Region

This section summarizes health, economic, transportation/supply, and education impacts of the COVID-19 pandemic on the TCC region. In addition to the measurable impacts, the pandemic continues to impact the region by disrupting gatherings, travel, and essential social and cultural activities such as potlatches. The pandemic has highlighted vulnerabilities in the region's economy and infrastructure, such as the lack of affordable and reliable broadband service. The priorities in Chapters 4 and 5 seek to identify and address many of these challenges. The pandemic also brought a surge of federal funding to the region and to Tribal organizations in particular. These funds present a unique opportunity to implement key community and regional priorities. As stated in the introduction, post-pandemic recovery for the TCC region is about more than returning to status quo. It's about creating a new normal and an improved baseline.

This document was produced in spring 2022. At this time the pandemic is ongoing, and the data presented in this section represents a snapshot in time based on most current data.

COVID-19 Cases, Hospitalizations, and Deaths

Between March 2020 and December 2021, the TCC region experienced significant COVID-19 cases and hospitalizations, as shown through the high number of cases in the region and as a percentage of the total population (Figure 20). Notable trends include:

- Based on data through December 2021, a total of 2,321 residents tested positive for COVID-19, representing 19 percent of the population. This matches nationwide rates and is slightly lower than case rates in the FNSB and Alaska.
- While per capita case rates were lower in the TCC region compared to FNSB and Alaska, hospitalizations and deaths were almost twice as high.

Figure 20: COVID-19 Cases, hospitalizations, and deaths, March 2020-December 2021

Geography	All Cases (% of pop.)	Hospitalizations (% of pop.)	Deaths (% of pop.)
Tanana Chiefs Conference Region	2,321 (19%)	100 (0.8%)	22 (0.2%)
Yukon-Koyukuk Census Area	930 (17%)	34 (0.6%)	8 (0.1%)
Southeast Fairbanks Census Area	1,391 (20%)	66 (1.0%)	14 (0.2%)
Fairbanks North Star Borough	19,286 (20%)	395 (0.4%)	111 (0.1%)
Alaska	172,329 (24%)	3,337 (0.5%)	955 (0.1%)
United States	63397935 (19%)	3,919141 (1.2%)	842,873 (0.3%)

Source: Alaska Department of Health and Social Services Coronavirus Response Hub, "COVID-19 Cases Dashboard," January 18, 2022, Available at: [Alaska COVID19 Data Hub \(arcgis.com\)](https://arcgis.com)

Community Perceptions of the Response

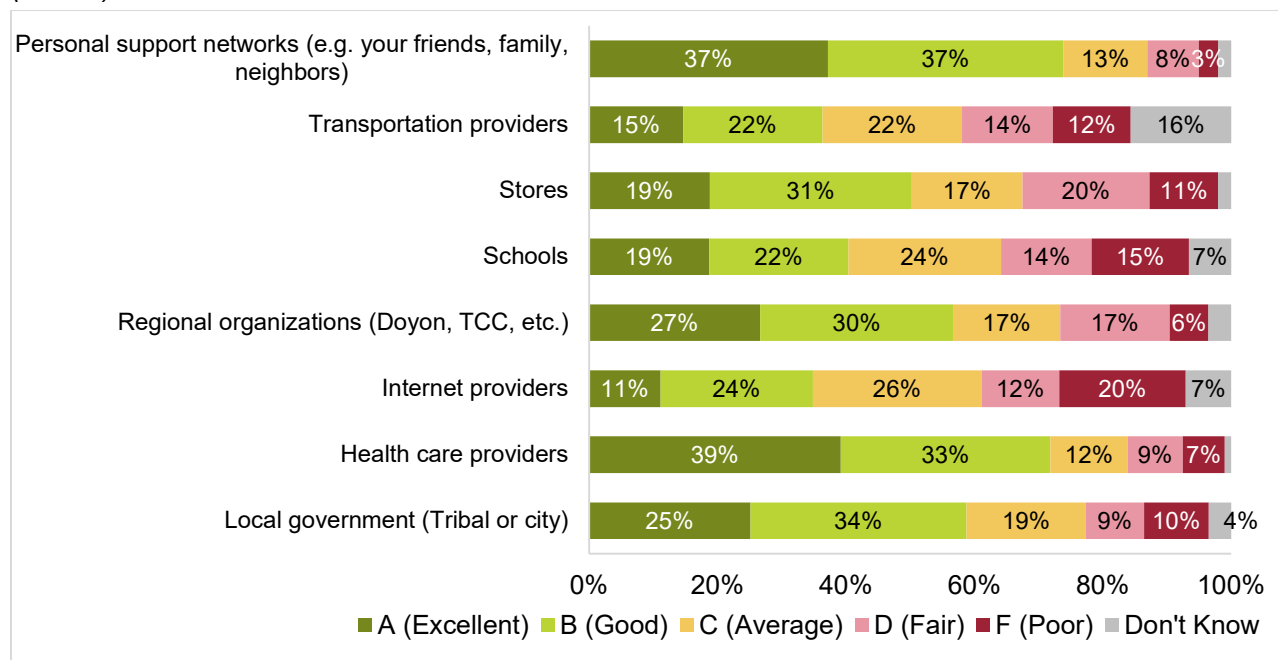
An online TCC CEDS Regional Survey collected input from residents between mid-June to mid-October 2021. One of the survey questions asked respondents to grade the region's response to the pandemic (Figure 24). Overall, areas with the most positive evaluation (based on a combined percentage of A and B grades) include personal support networks (combined 74 percent A or B), followed by health care providers

(combined 72 percent A or B). Areas with the most critical evaluation (based on a combined percentage of D and F grades) include internet providers (combined 32 percent D or F) and stores (combined 31 percent D or F).

One limitation of the survey is that it captured perceptions during a specific window in time. The pandemic continues to present challenges to the region and some of the entities evaluated below may have improved their response (such as continued expansion of telehealth in the health care industry), while others have experienced renewed challenges or setbacks (such as stores experiencing ongoing supply chain issues).

To view other key themes from the survey, see the Executive Summary. To see a detailed summary of results, see Appendix B.

Figure 21: Survey Results: How would you grade our region's response to the pandemic? (n=199)



Pandemic Unemployment

Figure 21 shows unemployment claimants by month from January 2020 through December 2021 for the TCC region and comparison geographies. The highest percentage of unemployment insurance claims in the TCC region was in May 2020. Notable trends include:

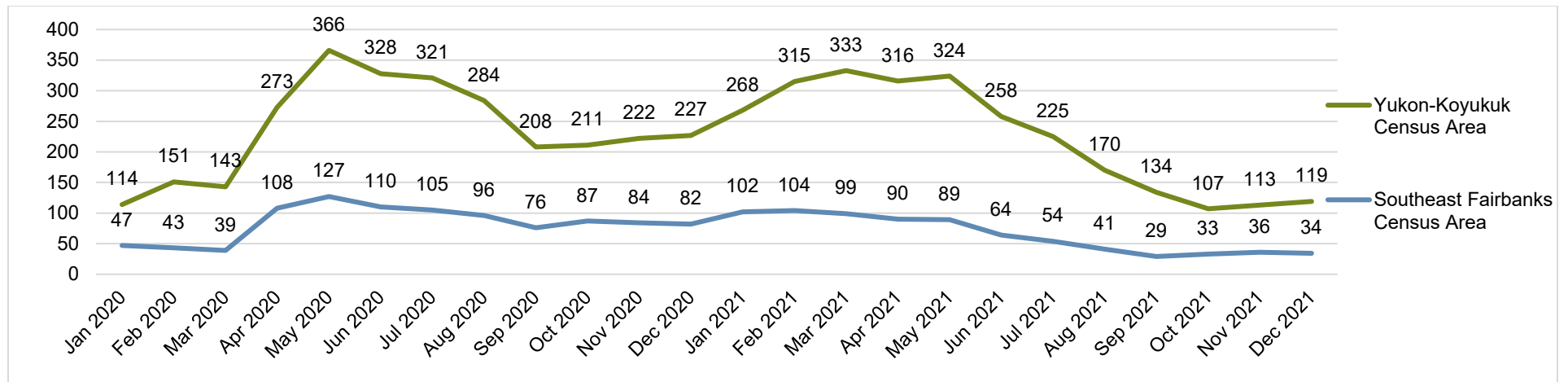
- The TCC region saw the greatest spike in unemployment insurance claims in May 2020, consistent with the peak of claims for the FNSB and Alaska and a month after the U.S. peak. Claims in the TCC region remained higher than pre-pandemic levels through most of 2021 but appear to drop closer to pre-pandemic numbers in winter 2021.
- Demographic groups that appear hardest hit by pandemic unemployment trends in the TCC region include individuals between the ages of 25 and 44 and individuals who earn fewer than \$40,000 a year.
- Though the pandemic affected individuals employed across all industries, individuals employed in the food services, retail trade, accommodation, and transportation sectors saw the highest levels of unemployment insurance claims.

Figure 22: Unemployment Insurance Claimants by Month, January 2020 – December 2021

Geography	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sep 2020	Oct 2020	Nov 2020	Dec 2020
TCC Region	161	194	182	381	493	438	426	380	284	298	306	309
Southeast Fairbanks CA	47	43	39	108	127	110	105	96	76	87	84	82
Yukon-Koyukuk CA	114	151	143	273	366	328	321	284	208	211	222	227
United States	736,493	479,430	1,709,565	12,227,308	5,756,570	3,159,178	2,156,113	1,314,805	911,707	761,121	741,150	875,069
Alaska	8,639	8,612	12,397	43,387	48,503	40,417	38,749	35,048	27,813	27,206	26,346	26,091
Fairbanks North Star Borough	940	884	1,254	4,592	4,829	3,909	3,811	3,372	2,597	2,585	2,497	2,339
Geography	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	June 2021	July 2021	Aug 2021	Sep 2021	Oct 2021	Nov 2021	Dec 2021
TCC Region	370	419	432	406	413	322	279	211	163	140	149	153
Southeast Fairbanks CA	102	104	99	90	89	64	54	41	29	33	36	34
Yukon-Koyukuk CA	268	315	333	316	324	258	225	170	134	107	113	119
United States	910,844	766,125	849,982	1,066,273	752,154	658,602	590,771	459,840	478,251	353,702	328,640	413,315
Alaska	28,095	27,455	27,419	24,931	23,722	20,096	16,692	13,591	9,106	7,933	8,154	8,040
Fairbanks North Star Borough	2,596	2,520	2,490	2,268	2,072	1,673	1,385	1,162	804	844	894	908

Source: Alaska Department of Labor and Workforce Development, “Monthly Unemployment Insurance Claims by Borough/Census Area” 2021, Available at: [Unemployment Insurance Research Program Department of Labor Research and Analysis \(alaska.gov\)](#)

Figure 23: Unemployment Insurance Claimants by Month for TCC Region Census Areas, January 2020 – December 2021



Source: Alaska Department of Labor and Workforce Development, “Monthly Unemployment Insurance Claims by Borough/Census Area” 2021, Available at: [Unemployment Insurance Research Program Department of Labor Research and Analysis \(alaska.gov\)](#)

Quarterly Census of Employment and Wages

Compared with 2019 numbers, the trade transportation, utilities, professional, and business services industries in the TCC region experienced a consistent decline in employment across all of 2020 (Figure 23). The leisure and hospitality industry experienced the largest decrease in employment between 2019 and 2020, losing 34 percent of its workforce between quarter 3 of 2019 and quarter 3 of 2020. This is likely due to the drop in visitors due to the pandemic and temporary closures of businesses such as restaurants.

Figure 24: Percent Change in Average Employment by Sector for the Tanana Chiefs Conference Region, 2019-2020

Industry	2019Q1- 2020Q1	2019Q2- 2020Q2	2019Q3- 2020Q3	2019Q4- 2020Q4
	(Jan-Mar)	(Apr-Jun)	(Jul-Sep)	(Oct-Dec)
	Percent Change	Percent Change	Percent Change	Percent Change
Federal Government	1%	-1%	-1%	4%
State Government	0%	-4%	-2%	-4%
Local Government	-6%	-13%	3%	6%
Natural Resources and Mining*				
Construction	29%	15%	-7%	-4%
Manufacturing*				
Trade, Transportation, and Utilities	-9%	-16%	-16%	-7%
Information	-24%	-24%	-6%	14%
Financial Activities*	3%	-3%	-6%	0%
Professional and Business Services	-9%	-6%	-18%	-12%
Educational and Health Services	-6%	-8%	-5%	0%
Leisure and Hospitality	9%	-27%	-34%	-17%
Other Services	-4%	-9%	-1%	6%

***NOTE:** Wage data for industries with fewer than three firms or in which one firm employs more than eighty percent of total industry employment are confidential and left blank in the state's data files. In this table, industries affected by data suppression include "Natural Resources and Mining," "Manufacturing," and "Financial Activities."

Source: Alaska Department of Labor and Workforce Development, "Current Quarterly Census of Employment and Wages," 2021, Available at <https://live.laborstats.alaska.gov/qcew/index.html>.

New Revenues

According to the U.S. Government's USA Spending Tool, the TCC region received significant federal COVID-19 relief dollars between 2020 and the present, including funds allocated through the CARES Act and American Rescue Plan Act (ARPA). Since 2020, a total of approximately \$166 Million has been obligated to entities in the TCC region, with most of the funds (\$93 Million) coming in through ARPA.

Figure 25: Total Covid-19 Assistance by Legislation for the TCC Region (Combined Southeast Fairbanks and Yukon-Koyukuk Census Areas), 2020-2022

Legislation	Outlayed amount <i>Total amount paid to date</i>	Obligated amount <i>Total amount announced</i>
Coronavirus Preparedness & Response Supplemental Appropriations Act, 2020 (CARES) (Emergency)	\$51,448	-
Coronavirus Aid, Relief, & Economic Security Act (CARES) (Emergency)	\$6,432,983	\$16,977,343
Coronavirus Aid, Relief, & Economic Security Act (CARES) (Non-Emergency) Paycheck Protection Program & Health Care Enhancement Act (Non-Emergency) Consolidated Appropriations Act, 2021 (Non-Emergency)	\$54,022,421	\$53,535,591
Paycheck Protection Program & Health Care Enhancement Act (Emergency)	\$560,296	\$627,186
Consolidated Appropriations Act, 2021 (Emergency)	\$883,507	\$1,145,513
American Rescue Plan Act of 2021 (ARPA) (Non-Emergency)	\$89,670,680	\$93,976,211
Total	\$151,621,335	\$166,261,844

Note: The assistance summarized in this table includes loans, grants, and direct payments, but excludes contracts.

An outlay occurs when federal money is actually paid out, not just promised to be paid ("obligated").

Source: USAspending.gov, "COVID-19 Spending by Prime Award for the Southeast Fairbanks and Yukon-Koyukuk Census Areas," 2020-2022, Available at: <https://www.usaspending.gov/search/?hash=4af42718b8e639929b65c67ec04a3d5e>

As shown in Figure 26, most (89 percent) of these funds were outlayed to Tribal designated organizations in the TCC region. Approximately seven percent of these funds were distributed to small businesses, and approximately two percent were distributed to state government offices serving the region.

In addition to the distributions identified below, \$568,572,886 of the State of Alaska's Coronavirus Relief Fund (CRF) was allocated for Direct Municipal Relief through the Department of Commerce, Community, and Economic Development (DCCED). Approximately \$3,492,407 of this allocation was distributed to Tribes and municipalities in the TCC region between March 2020 and November 2021. Approximately 24 percent of this \$3,492,407 was distributed to Tribes, while 76 percent was distributed to municipalities. Most of these funds went toward public health initiatives, with a lesser amount covered other economic support, administration, and housing.⁴

⁴ Office of Governor Mike Dunleavy, Office of Management and Budget, COVID-19 Reports, "Community Coronavirus Relief Fund Spending Reports Summary" 2021, Available at <https://omb.alaska.gov/information/omb-monthly-covid-19-reports/>

Figure 26: Total COVID-19 Assistance by Recipient Type for the TCC Region (Combined Southeast Fairbanks and Yukon-Koyukuk Census Areas), 2020-2022

Recipient Type	Outlayed total <i>Total amount paid to date</i>	Obligated total <i>Total amount announced</i>	Percent of total outlayed COVID funds	Percent of total obligated COVID funds
American Indian/Alaska Native Tribal Designated Organization	\$135,285,764	\$140,506,354	89.23%	84.51%
Small Business	\$10,504,737	\$10,554,202	6.93%	6.35%
State Government	\$2,498,889	\$4,101,441	1.65%	2.47%
Individual	\$1,181,554	\$1,183,554	0.78%	0.71%
Individual; small business	\$185,351	\$223,995	0.12%	0.13%
Nonprofit with 501c3 status (other than an institution of higher education)	\$188,677	\$188,677	0.12%	0.11%
For-profit organization (other than small business)	\$122,951	\$122,951	0.08%	0.07%
City or township government	\$56,005	\$67,125	0.04%	0.04%
Other	\$1,597,408	\$9,313,545	1.05%	5.60%
Total	\$151,621,335	\$166,261,844	100%	100%

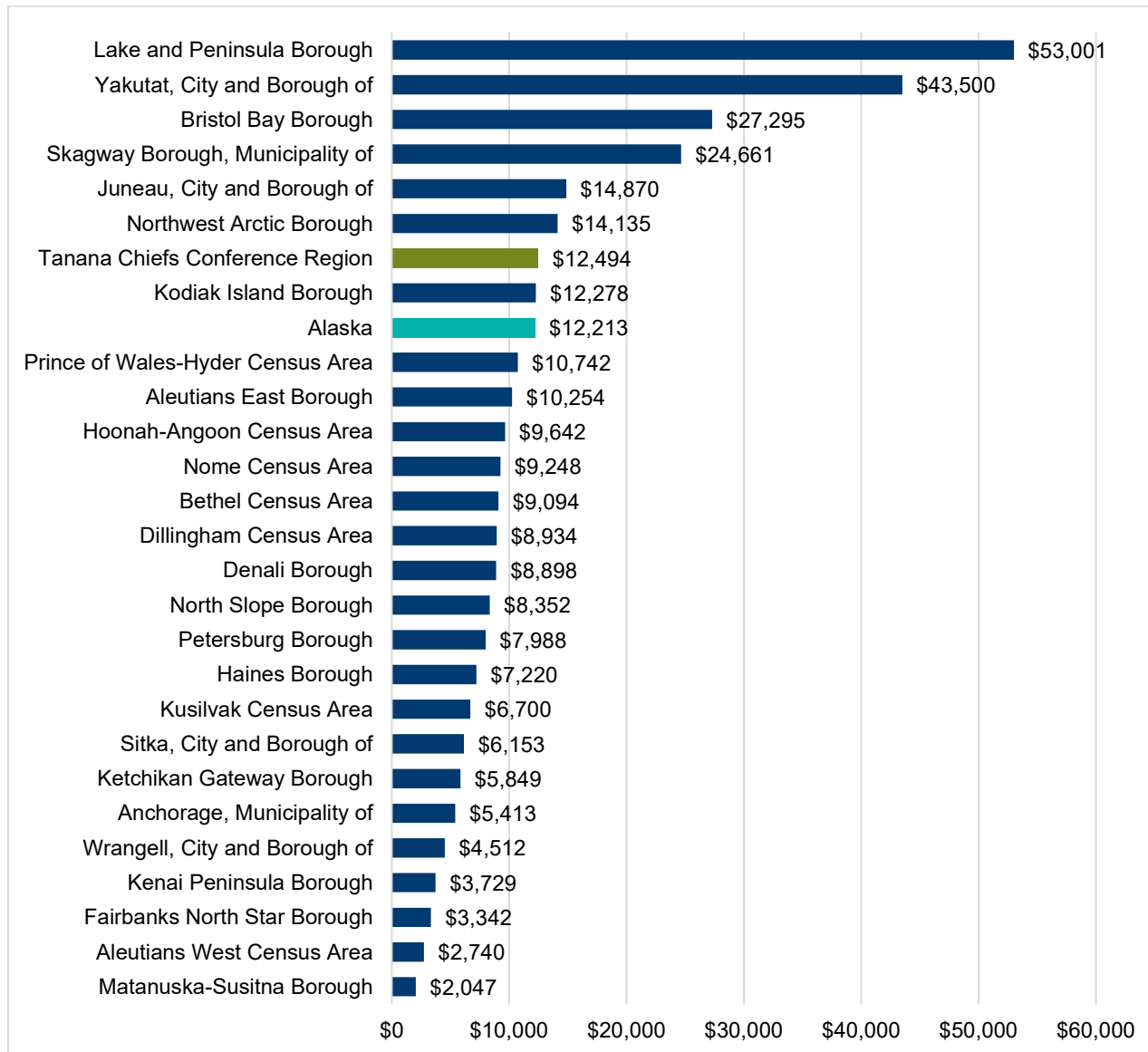
Note: The assistance summarized in this table includes loans, grants, and direct payments, but excludes contracts.

An outlay occurs when federal money is actually paid out, not just promised to be paid ("obligated").

Source: USAspending.gov, "COVID-19 Spending by Prime Award for the Southeast Fairbanks and Yukon-Koyukuk Census Areas," 2020-2022, Available at: <https://www.usaspending.gov/search/?hash=4af42718b8e639929b65c67ec04a3d5e>

Figure 27 showcases total federal COVID-19 assistance outlay amounts per capita by region in Alaska. Between 2020 and 2022, the TCC region received approximately \$152 Million in COVID-19 assistance translating to about \$12,500 per capita, higher than the Alaska average of \$12,213 per capita.

Figure 27 Total COVID-19 Assistance Outlays Per Capita by Area, 2020-2022



Note: The assistance summarized in this table includes loans, grants, and direct payments, but excludes contracts.

An outlay occurs when federal money is actually paid out, not just promised to be paid ("obligated").

Source: USAspending.gov, "COVID-19 Spending by Prime Award," 2020-2022, Available at: <https://www.usaspending.gov/search/?hash=1fe7a4673d0b6c99650c04971b271bf2>

Operations Impacts

- **Airline & Ferry Disruptions:** The National Oceanic and Atmospheric Administration (NOAA)’s 2021 Arctic Report Card cited the 2020 bankruptcy of the Ravn Alaska airline and state reduction of ferry service as significant factors in the reduction of store-bought food access for Alaska Native people during the pandemic.⁵
 - Interior communities that lost Ravn service in 2020 include Fairbanks, Arctic Village, Venetie, Fort Yukon, Chalkyitsik, Eagle, Tok, Northway, Tanana, Bettles, Koyukuk, Allakaket, Ruby, Shageluk, Nulato, Kaltag, Anvik, Holy Cross, and Galena.⁶
- **Grocery and Mail Order Supply Disruptions:** Many communities in the TCC region do not have access to year-round overland transportation and shipping options. Many respondents to the TCC CEDS Regional Survey highlighted that rising shipping and air freight costs make ordering food and medical supplies, or travelling to purchase them, cost prohibitive.
- **Decreased Accessibility of Medical Care:** Travel restrictions due to the COVID-19 pandemic led to the closure of many rental car companies and hotels, hindering travel from rural areas to access medical care. Telehealth, an option available more widely to communities across the country and state, is seriously limited in the TCC region. Telehealth services are offered from the Fairbanks Chief Andrew Isaac Health Center and from regional health centers, but slow or absent internet and telephone services remove telehealth as an option in most communities in the region.⁷
- **Amplified Communication Disparities:** Currently, internet access is unstable or nonexistent in most TCC communities and hinders communities’ abilities to hold remote jobs and attend distanced schooling. According to the TCC Tribal Broadband Plan, only 17 percent of communities have access to an affordable residential internet plan and none of these communities have household access to broadband (25Mbps/3Mbps) speeds.⁸

Education Impacts

In the TCC regional survey, respondents were asked about pandemic impacts to their household. Many respondents mentioned education-related impacts, with 41 percent who selected “children home from school” and 11 percent who selected “unable to keep children in class because of poor/no internet.” To further understand how COVID-19 has impacted young people and schools, the project team compiled data on a variety of different education-related measures by school district. Based on the data, overall impacts to school district attendance, dropout rates, and graduation rates appear relatively small. Overall attendance rates for TCC region school districts stayed flat and, in some cases, increased during the 2019-2020 school year when

5 National Oceanic and Atmospheric Administration Arctic Report Card, “The Impact of COVID-19 on Food Access for Alaska Natives in 2020,” 2021, Available at <https://arctic.noaa.gov/Report-Card/Report-Card-2021/ArtMID/8022/ArticleID/957/The-Impact-of-COVID-19-on-Food-Access-for-Alaska-Natives-in-2020>

6 Anchorage Daily News, “Ravn suspends air service, including mail deliveries, to most rural Alaska communities,” 2020, Available at <https://www.adn.com/alaska-news/aviation/2020/04/02/ravn-suspends-air-service-including-mail-deliveries-to-most-rural-alaska-communities/>

7 Tanana Chiefs Conference, “Tribal Broadband Plan,” 2021

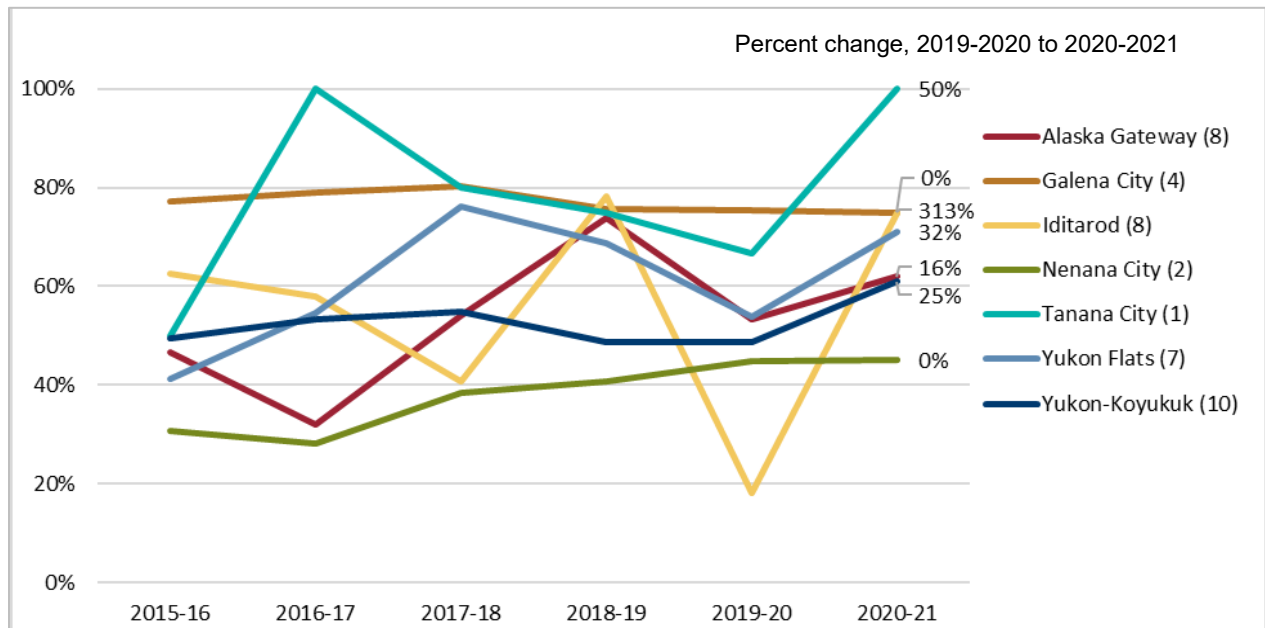
8 Tanana Chiefs Conference, “Tribal Broadband Plan,” 2021

compared with the year prior. Dropout rates also stayed flat or decreased during the 2019-2020 school year. However, some school districts saw lower graduation rates during the 2019-2020 school year.

Figure 27 shows four-year graduation rates by school district from the 2015-2016 school year to the 2020-2021 school year. Percent change in graduation rates varies widely between school districts in the TCC region in recent years. Notable trends include:

- Both Nenana City and Galena City School Districts were among the most stable between 2019 and 2021, seeing little to no change at all (0 percent).
- Tanana City, Yukon Flats, Alaska Gateway, and Iditarod School Districts all saw a decline in graduation rates during the 2019-2020 school year, but also saw significant increases in the following school year.
- The Iditarod School District had the most drastic increase in graduation rates between the 2019-2020 school year and the 2020-2021 school year (313 percent).

Figure 28: Four-year Graduation Rates for School Districts in the TCC Region, 2015-2020



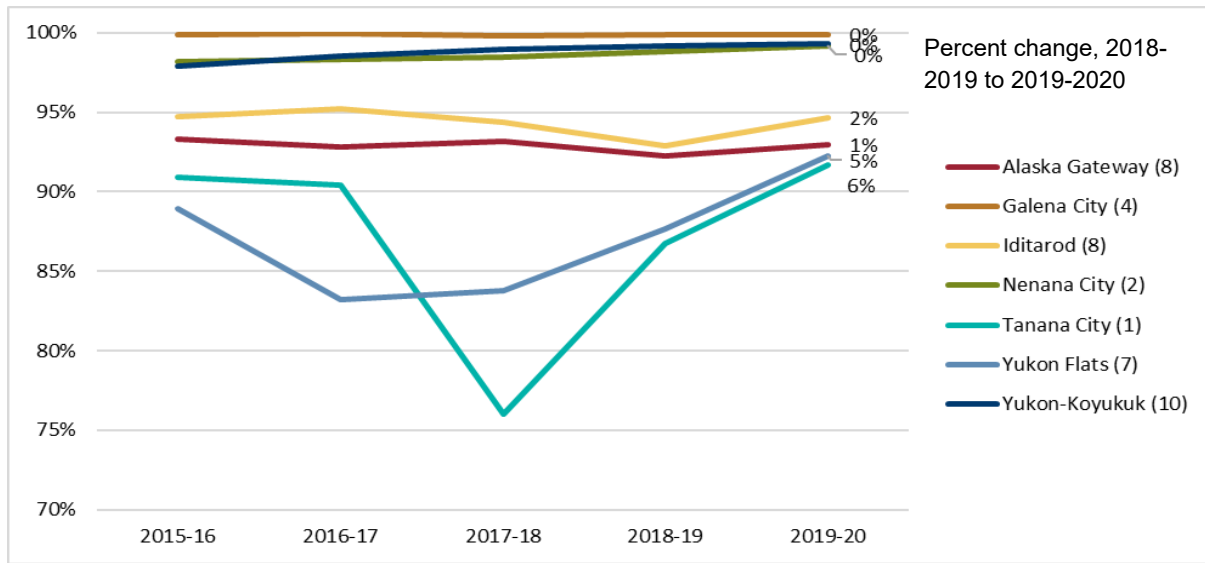
Note: Number of schools per district shown next to district names.

The low 2019-2020 graduation rate for Iditarod School District was confirmed in conversation with the district superintendent. There were a large group of students who graduated in five years instead of four, contributing to the discrepancy; there were also some issues with students who moved out of state but were likely incorrectly categorized as dropouts.

Source: Alaska Department of Education and Early Development (DEED) Data Center, Statistics & Reports, “Four Year Graduation Rate by District,” 2021, Available at <https://education.alaska.gov/data-center>

Figure 28 shows attendance rates by school district in the TCC region. The highest percent increase in attendance rates was observed in the Tanana City (6 percent) and Yukon Flats (5 percent) School Districts between the 2018-2019 school year and the 2019-2020 school year. All other school districts in the TCC region have remained relatively stable in attendance rates between 2015-2020 (between 90-100 percent).

Figure 29: Attendance Rates for School Districts in the TCC Region, 2015-2020



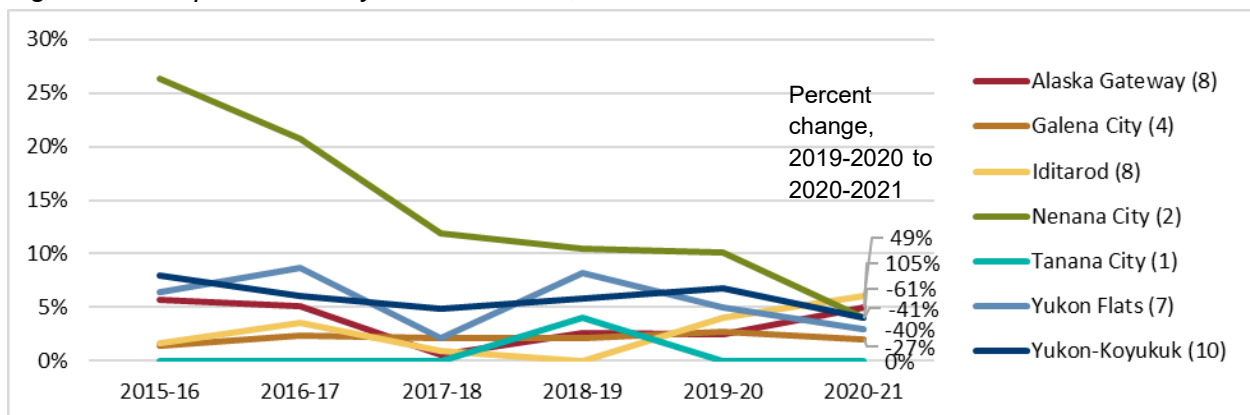
Note: Number of schools per district shown next to district names

Source: Alaska Department of Education and Early Development (DEED) Data Center, “Report Card to the Public by District” 2021, Available at <https://education.alaska.gov/compass/report-card>

Figure 29 shows dropout rates by school district for schools in the TCC region. Notable trends include:

- The dropout rate in the Nenana City School District has been steadily decreasing between 2015 and 2020, and was the highest among TCC region school districts in the 2019-2020 school year. (10 percent)
- Alaska Gateway and Iditarod school districts were the only two in the TCC region to increase their dropout rates between the 2019-2020 school year and the 2020-2021 school year.
- Yukon-Koyukuk, Yukon Flats, and Galena City school districts saw slight decreases in dropout rates between the 2019-2020 school year and the 2020-2021 school year (2-4 percent).
- Tanana City school district remained at a 0 percent dropout rate between the 2019-2020 school year and the 2020-2021 school year.

Figure 30: Dropout Rates by School District, 2015-2020



Note: Number of schools per district shown next to district names

Source: Alaska Department of Education and Early Development (DEED) Data Center, Statistics & Reports, “Dropout Rates (Grades 7 -12) by District,” 2021, Available at <https://education.alaska.gov/data-center>.

Chapter 3: Regional SWOT Analysis

Developing the most impactful economic development and related supports for a region requires a clear understanding of the area's current situation. This chapter offers an analysis of the TCC region's Strengths (S), Weaknesses (W), Opportunities (O) and Threats (T), or "SWOT Analysis." This information creates a picture of the region today and helps inform the vision, goals, objectives, and strategies presented in Chapter 4. Together, this information helps TCC villages strategically achieve economic resiliency, which is "the region's ability to avoid, withstand and recover from economic shifts, natural disasters and impacts of climate change."⁹ The TCC region can accomplish this by leveraging the region's existing strengths and opportunities, and mitigating weaknesses and potential threats.

Key Themes from the SWOT Analysis

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none">• Subsistence• Mixed economy• Tribal sovereignty and self-determination• Village corporations	<ul style="list-style-type: none">• High cost of living• Limited local hire• Less training in villages• Poor phone and internet coverage• Limited small business presence in villages	<ul style="list-style-type: none">• Broadband funding opportunities• Improved technology for rural water-sewer services• Access to vocational and technical training• Expanded participation in natural resource management• Climate change research and planning	<ul style="list-style-type: none">• Climate change impacts• Salmon fisheries uncertainty• Potential loss of key programs like PCE or Bypass mail• Ongoing pandemic impacts to health, businesses, supply chains, etc.• Lack of Tribal Recognition by the State of Alaska

Strengths

Self-Governance, Tribal Sovereignty, and Leadership – Strengths

- Tribal governments are recognized as sovereign entities by the U.S. and the federal government has trust responsibilities toward Tribes, which brings a significant amount of set aside funding.
- TCC Tribes have increased self-governance efforts over the past ten years. The TCC Self Governance Department has varied options for Tribes who want increased control of

"Our Tribes, regional & subregional, work together for solutions of mutual benefit with TCC as moderator."

- Survey Participant

⁹ As defined by the U.S. Economic Development Administration in the *Comprehensive Economic Development Strategy (CEDS) Content Guidelines*. Updated March 2016. Available here: <https://www.eda.gov/ceds/files/ceds-content-guidelines-full.pdf>

operations and financial management of their programs and funds. Some Tribes in the region have elected to operate federal programs directly with federal agencies.¹⁰

- Most TCC villages have a current community plan.
- TCC's subregional structure offers opportunities for communities to work together and address shared concerns.

Health, Culture, and Wellness – Strengths

- The TCC region has a history of resilience due to the independent and self-sustaining characteristics of many residents. Despite the major obstacle of the pandemic, emerging data indicates unemployment has not significantly increased in the region, and residents are continuing to gather and provide for their families.
- Subsistence ways of life are highly valued and practiced in the region. Subsistence activities occur year-round including fishing, berry picking, hunting, gathering firewood, and trapping.
- The Doyon Foundation provides Athabascan languages education and mentor-apprentice conversation opportunities and is working to expand culturally appropriate education for youth and adults alike.
- Many communities offer youth culture camps, health weeks, and winter and spring carnivals. Many villages also receive U.S. Department of Education Johnson-O'Malley Act funds for cultural and place-based education and programming that occurs during the school year.
- Many regional partners support health and wellness, including TCC, the Fairbanks Native Association (FNA), the Chief Andrew Isaac Health Center, and Denakkanaaga, Inc. Recent improvements to increase medical care access in villages include clinic improvements and increased use of telemedicine.
- The region is home to many events that bring people together, such as the TCC Annual Convention, First Alaskans Institute Elders and Youth Conference, and the annual Alaska Federation of Natives Convention.
- The statewide Village Public Safety Officer (VPSO) program helps rural communities meet their public safety and emergency response needs.
- The Morris Thompson Cultural and Visitor Center showcases Alaska Native culture in Interior Alaska and promotes tourism.
- Head Start programs are available in 14 TCC communities.

"Our region has become more together, we are working together, and to me, that is what counts, like we are family; I love living here."

- Survey Participant

"There is nowhere else in the world that feels like home."

- Interview Participant

Natural Resources and Natural Hazards – Strengths

- The Yukon River Inter-Tribal Fisheries Commission and the Hunting and Fishing Task Force have recently been combined into the Tribal Resource Commission to better and more comprehensively support subsistence fishermen, hunters, and gatherers throughout the TCC region.

¹⁰ To learn more about TCC's self-governance policies and programs, visit <https://www.tananachiefs.org/services/self-governance/>

- Many salmon fishermen and local stakeholders are becoming more involved and advocating for salmon subsistence fishing in state and federal regulatory and policy-making processes.
- Subsistence resources provide healthy, affordable food to households throughout the region. According to Alaska Department of Fish and Game, Division of Subsistence data from 2018, Rural Interior residents collect a per capita average of 293 pounds of subsistence harvests, above the average rural area subsistence harvest statewide of 276 pounds.¹¹
- Some communities take advantage of small export markets for birch products, arts and crafts, furs, and timber.
- National parks, wildlife refuges, and state parks attract visitation, provide employment, protect subsistence resources, and offer recreation opportunities. Resident hunting and guiding have increased in the region, providing cash income that stays in the region.
- The region has extensive mineral deposits. Based on U.S. Bureau of Labor Statistics data, the region has a well-developed mining industry cluster, meaning the region has a higher concentration of mining-related establishments, employment, and wages than other parts of the country. In the first quarter of 2021, the mining industry employed 661 people in the Southeast Fairbanks Census Area; data for the Yukon-Koyukuk Census Area is not available due to data suppression.¹²
- The region has significant renewable energy resources including solar and biomass potential.

"The natural beauty. I am drawn to the boreal forest, with its hot summers, freezing snowy winters, and abundant wildlife, berries, and mushrooms!"

-Survey Participant

"Even though resource development can be controversial, it really helps the region for workforce development and economic opportunities."

-Interview Participant

Business and Workforce Development – Strengths

- Even though subsistence is a prevalent and common activity, TCC region residents take advantage of the regional and statewide cash economy and wage employment opportunities. Employment opportunities include wildland firefighting, North Slope oilfield work rotation, construction, and tourism in the summer months, and trapping, artisan crafts, and other small-scale retail sales during the winter months.
- The Doyon Foundation and several village corporation education foundations provide shareholder scholarships for both vocational/technical and higher education programs.
- The region's Alaska Native corporation, Doyon, Limited has over 19,000 shareholders.
- Doyon invests in the region through oil and gas exploration, mining exploration joint ventures, and tourism joint ventures in and around Denali National Park.

"Helping our residents achieve higher education and job training goals would improve our local and regional economy."

- Interview Participant

¹¹ Alaska Department of Fish & Game, Wild Harvest Notebook, 2019.

¹² U.S. Bureau of Labor Statistics, 2021 Quarterly Census on Employment and Wages.

- Doyon distributes annual dividends to shareholders. In 2020, Doyon disbursed over \$21 million in dividends. Other distributions include over \$300,000 for family potlatch assistance and \$200,000 for pandemic impacts.
- There are 30 village corporations in the TCC region. Village corporations support their communities in many ways, including through dividends, scholarships, land management, and employment opportunities.
- TCC offers education, workforce development, and financial literacy programs and has financial assistance for secondary education.
- The University of Alaska Fairbanks, College of Rural and Community Development, Interior Alaska Campus provides courses aimed at meeting the needs of rural communities, including Tribal Governance, trades like construction, and allied health training.
- The Iditarod Sled Dog race and the Yukon Quest bring visitation, tourism, and publicity to TCC communities along the middle Yukon River Iditarod route and to the communities of Eagle, Circle, and Central.

Infrastructure – Strengths

- The Power-Cost Equalization (PCE) program helps reduce the cost of electricity in rural communities for residential homes and eligible community buildings. According to the Interior Regional Energy Plan, all TCC communities are eligible for the PCE program except for Nenana, which is connected to the Railbelt electrical grid.
- Several villages have recently constructed and installed solar arrays to help displace and reduce diesel power generation consumption.
- State and federal government projects employ regional residents directly and bring in additional funds through grants, infrastructure funding, statewide programs, and more. Access roads to several villages in the region have helped lower living costs, provided construction and maintenance jobs, and have stimulated the local economy.
- Ice roads have recently been constructed, maintained, and frequently used by residents and visitors in villages along the Yukon River.
- Many residents have access to local health care via community clinics, under TCC Health compacting and contracting with the IHS and the U.S. Department of Health and Human Services.

“I like being near the health clinics and the opportunities for subsistence lifestyles.”

- Survey Participant

Land and Housing – Strengths

- Doyon, Limited, is the largest private landowner in Alaska with 12.5 million acres of land.
- Village corporations own a combined 3.6 million acres in TCC villages.
- All TCC region village corporations except for ten have completely conveyed Municipal Land Trust lands to current or future local municipal government incorporation, under requirements of the Alaska Native Claims Settlement Act. Three of the ten villages have made partial conveyances, according to a Municipal Land Trust Office annual report from 2019. By completing these conveyances, communities are better positioned to address critical land needs such as housing.

“The corporations help people a lot and want to see their people succeed.”

- Survey Participant

- TCC’s real estate program offers extensive expertise and guidance to Tribes in the region, including traditional land use planning services. The TCC Cadastral Survey Program provides professional land surveying services.
- The Interior Regional Housing Authority (IRHA) and the TCC Housing Department offer services and support to Tribal councils to help with funding, grants, and other housing-related projects.
- Some communities have purchased logging equipment that are available for residents to use to cut their own logs for home construction.

“Interior Alaska is my ancestral homelands. Being able to get on the land for fishing, hunting and berry picking is the best life.”

- Survey Participant

Weaknesses

Self-Governance, Tribal Sovereignty, and Leadership – Weaknesses

- Villages often do not communicate, coordinate, or collaborate on community development projects. Competitive federal and state grant opportunities often exacerbate this lack of communication between villages.
- Limited internet access created barriers that prevented some residents from participating in advocacy and civic engagement during the pandemic, when more decision-making and meetings were held online. This was especially true for Elders.

“I believe that we come together in times of hardship but don't come together enough to advance success prior to hardships.”

- Survey Participant

Health, Culture, and Wellness – Weaknesses

- Many communities face high rates of depression, substance abuse, domestic violence, and diabetes. The pandemic has exacerbated these challenges.
- Many TCC region communities and residents struggle with ongoing negative impacts to physical health, mental health, and motivation due to historical and individual trauma and disenfranchisement. The pandemic has exacerbated this intergenerational trauma.
- Villages in the region have limited early education programs and a shortage of child care. During the pandemic, access to child care was further reduced, impacting working families and making it harder for households to practice subsistence.
- Tanana and Galena are home to Elder and assisted living homes, but no other TCC villages have senior housing. For those in need, when the Tanana and Galena facilities are full, seniors must reside outside of the region.
- There is high turnover in education (public education administrators, teachers, and support staff) and health care (health providers, professionals, and paraprofessionals). These trends are largely attributed to lack of

“We need child care for working single parents. Also more substance abuse resources.”

- Survey Participant

available housing, high living costs, the unfamiliarity of the region/rural lifestyles, and stress associated with working a challenging job in a new place.

- There is limited access to fresh and healthy foods and an abundance of processed foods in village stores. Aside from subsistence harvests, most food is imported and therefore subject to supply change disruptions, resulting in food security concerns throughout the region.
- The TCC region has limited access to specialty medical care for all ages.

Natural Resources and Natural Hazards – Weaknesses

- The TCC region sees cold winter temperatures and increasingly unpredictable weather throughout the year. In the winter, temperatures can dip as low as negative 60 degrees Fahrenheit.
- There is high competition for wild resources between commercial, sport, and subsistence users.
- Households in the region have a heavy reliance on fish and game populations. These resources are subject to natural fluctuations and vulnerable to other external changes, as exemplified by the Chinook and chum salmon run crashes during the 2020 and 2021 seasons.
- The Alaska Energy Authority has found that the TCC region is the only region in Alaska that is nearly 100 percent dependent on diesel for power generation.
- Limited availability of predator and prey baseline data make it challenging to understand and track trends and limit effective resource management, impacting both commercial and subsistence users.

“Our water was freezing for the village laundromat and going without water in the middle of winter. We get really cold temps here.”

- Survey Participant

Business and Workforce Development – Weaknesses

- The region lacks diversity in employers and has limited private sector employment
- The TCC region’s average per capita income of \$26,366 per year remains approximately 25% lower than the average per capita income for Alaska and Fairbanks North Star Borough during this period (\$34,966 and \$34,958 respectively).¹³
- There is a significant income disparity between the two census areas that make up the TCC region. The five-year average for the Southeast Fairbanks Census Area’s per capita income is \$32,193, and the Yukon-Koyukuk Census Area’s per capita income is almost \$10,000 less at \$22,718.¹⁴ Median household incomes follow a similar trend.
- An average of 18 percent of households experience poverty in the TCC region, compared with 11 percent for the state of Alaska. This number varies greatly between communities, ranging from under 10 percent to over 50 percent.
- Many wage-earning opportunities are seasonal, with unemployment often rising during the winter months.

“There is a clear lack of career opportunities in our villages.”

- Interview Participant

¹³ U.S. Census Bureau: 2015-2019 American Community Survey Five-Year Estimates.

¹⁴ U.S. Census Bureau: 2015-2019 American Community Survey Five-Year Estimates.

- Organizations in the region struggle to accurately capture the value of traditional and subsistence lifestyles and/or non-cash activities that contribute to individual, community, and cultural well-being.
- Most residents lack access to start-up capital for small businesses, and many do not have adequate credit to be eligible for a loan.
- Of current job opportunities, many are entry-level and minimum wage. Employers in the region are challenged to attract and retain qualified employees, and do not have the resources like housing or the ability to pay higher wages because of the high costs of shipping equipment and goods.
- Educational attainment in the TCC region is lower than the state averages. A smaller proportion of the population has earned a Bachelor's degree or higher when compared with the state average.¹⁵

Infrastructure – Weaknesses

- The region lacks reliable internet connectivity and cell phone service. High speed internet is only available in some communities in specific buildings, health clinics and schools. Broadband is not currently available communitywide anywhere in the region. The recently completed TCC Tribal Broadband Plan found that only 17 percent of TCC communities have access to an affordable residential internet plan. This has become an amplified challenge during the pandemic. As a result, many residents are not adequately equipped to work from home, participate in distance education and training, conduct basic business functions, or access telehealth.

“Make sure communities have reliable internet for school and video conference meetings.”
-Survey Participant
 - The region experiences high energy and fuel prices, mostly due to the rural setting and little to no road access in the region. Most fuel and heating oil shipments are delivered only during the summer months by barge, and during winter shortages, fuel and heating oil must be delivered by air cargo.
 - Villages that were electrified in the 1960s through the 1980s are now struggling to maintain the electrical infrastructure at the end of its design life. Many rural utilities have not kept repair and reserve accounts to keep up with deferred maintenance, so electrical costs will need to go up to keep small electric utilities operating.
 - There are 13 communities in the TCC region with homes that do not have access to piped water. Still, most communities do not have 100% residential water and sewer service delivery for each occupied household.¹⁶
 - Due to high shipping and transportation charges and short summertime seasons, construction costs are expensive. There is often a shortage of workers during the construction season due to a lack of a fully trained and experienced local workforce.
 - The construction and maintenance equipment in many TCC villages is old and needs repair. When equipment fails, delivering replacements and/or repairing existing equipment can be expensive, logistically difficult and can cause delays during the short construction season. Contractors often use old equipment at job sites due to the high shipping costs of bringing in more modernized equipment.
- “The cost of living is high in our village.”***
- Interview Participant

¹⁵ U.S. Census Bureau: 2015-2019 American Community Survey Five-Year Estimates.

¹⁶ Alaska Department of Environmental Conservation: Map of Unserved Communities. Last updated October 2020. Available at <https://adec.maps.arcgis.com/home/webmap/viewer.html?webmap=956417115e9e4acc8726cc865153ff03>

- Many Tribal office buildings and community halls were built in the 1970s and 1980s are now in poor condition, with expensive repairs needed and high energy costs.
- Postal mail service is often slow and unreliable.
- There are only ten communities in the TCC region that are road accessible, and of those, several are only accessible in the summer months. Air and barge transportation is both expensive, increasing the cost of travel, goods, and materials.
- The region has a small number of air taxi companies serving communities. Flights are becoming increasingly expensive, and service is often unreliable.
- Tourism is limited by high transportation costs and limited accommodation options.
- Many households and communities are reliant on PCE to achieve affordable electricity costs.

“The distance it takes to get to some of our regions in a challenge. I was never able to take my children to visit their great grandfather, while they were growing up, it was too costly to travel to my Village. It costs less to fly out of state than to fly in state.”

-Survey Participant

Land and Housing – Weaknesses

- Many houses need improvements and maintenance. Priority concerns include indoor air quality, insulation, window, roofing, electrical upgrades, and mold. In some homes, residents pay as much or more for their heating bills than the cost of their mortgage.
- Communities have limited availability of land, especially for residential housing. In many communities the corporation or city owns the only available land.
- Many communities face a lack of housing for VPSOs, teachers, and health professionals.
- Several TCC communities have needed to relocate homes and other community infrastructure due to river erosion.
- There is a lack of data regarding permafrost melting and riverine erosion in many communities, which creates challenges for making land use, siting and construction decisions when constructing new facilities and infrastructure.
- The lack of formal land surveys in many communities is an added barrier to constructing new facilities and housing.

“Not having adequate housing in our villages makes it difficult to take a job out there.”

- Interview Participant

Opportunities

Self-Governance, Tribal Sovereignty, and Leadership – Opportunities

- The University of Alaska Fairbanks (UAF) College of Rural and Community Development, Interior Alaska Campus has established a refreshed Tribal Governance degree and certificate program. The program is designed to optimize flexibility so residents practicing a subsistence lifestyle and/or those who already have full-time employment can participate.

“More of our village residents could be trained in Natural Resources management.”

- Interview Participant

Natural Resources and Natural Hazards – Opportunities

- Over the past five years, there has been an increase in the availability of resources for documenting, understanding, and mitigating climate change impacts in Alaska through the Denali Commission, Alaska Native Tribal Health Consortium (ANTHC) Center for Environmentally Threatened Communities, and other state and federally agency programs. The Infrastructure Investment and Jobs Act of 2021 creates a significant increase in funding for the Bureau of Indian Affairs (BIA) Tribal Climate Resilience Program, exclusive to Tribal governments' local climate change adaptation and planning initiatives. Some funding sections address erosion, permafrost thaw, and impacts to subsistence.
- Several mining exploration operations are on the Kuskokwim, Tanana, and Yukon Rivers, with several operated by a joint venture with Doyon, Limited as the land- and subsurface landowner.
- Locally sourced timber could be better utilized by creating sawmills, which would employ residents and provide lower-cost building materials. Biomass projects in Galena, Hughes, Tanana, and Tok have been successful projects for offering cash opportunities to residents while lowering heating costs for public facilities like schools, washeterias, and local government offices for Tribes and city councils.
- Surveys show that numbers for moose, a key subsistence resource, more than doubled from 2010 to 2018 in the western Yukon Flats.¹⁷

"We need to protect our rights to live by our traditional ways."

- Interview Participant

Business and Workforce Development – Opportunities

- There are many existing secondary education opportunities through TCC, the Galena Interior Learning Academy, the University of Alaska Fairbanks College of Rural and Community Development Interior Alaska Campus, and other distance delivery education and training programs like Ilisagvik College, which has open enrollment to all Alaska Native and Native American students.
- There is high regional demand for heavy equipment operators, mechanics, plumbers, commercial drivers and small engine repair technicians, accountants, social service providers, carpenters, nurses, bookkeepers, and people with business training or experience.

"Providing opportunities to learn to fly to become a bush pilot would be a huge help. Then we could possibly get more planes flying to and from the villages with food and passengers. Would be very helpful when villages without a health aide in case of emergencies."

- Survey Participant

¹⁷ Bryce Lake, Yukon Flats National Wildlife Refuge (from: Lake, B. et al. 2018. Moose population survey of the western Yukon Flats – November/December 2018. Yukon Flats National Wildlife Refuge Report)

- Village and subregional-based wildland firefighting crews and support operations have recently been opened to private contractors, helping streamline crew and support organization, training, and assignment to wildfire suppression activities.
- Consolidating small village utilities into larger consortia or cooperatives could help reduce costs, increase operational and maintenance efficiencies while building more funding capacity and reliable management structures.
- Expansion of broadband will increase employment opportunities for rural residents who can apply for and conduct remote work for companies outside the community, and make it easier to access remote training and education opportunities

“We can collaborate with UAF and the Wildfire Science program to train our locals in wildfire response.”

- Interview Participant

Infrastructure – Opportunities

- There are multiple funding programs available for Tribally-owned and operated broadband connectivity projects and service delivery.
- The Infrastructure Investment and Jobs Act of 2021 presents many opportunities in the TCC region. For example, it includes up to \$75 million for the Denali Commission to assist with broadband rollout and connectivity in rural Alaska. It also is estimated to provide enough funding for every village in Alaska to reach 100% water and sewer service delivery over the next ten years.
- State, federal, and regional partners are considering new road connections in the region, including Rampart, and the Ambler access road. There are multiple ice road opportunities from the Yukon River Bridge to Rampart, Stevens Village, and Beaver during the winter months.
- Many communities in the region have renewable energy potential, ranging from biofuels (wood), hydroelectric from river currents, geothermal, and wind. Technology is advancing, and it is becoming easier to integrate renewable energy into existing electric grids.
- Multiple statewide energy efficiency programs are available to support home energy efficiency upgrades and weatherization.

“I think the best way to support our village businesses is to get broadband, faster internet would create more opportunities for our Tribal citizens.”

- Survey Participant

“Our residential and commercial buildings can improve energy efficiency and install solar panels.”

- Interview Participant

Land and Housing – Opportunities

- The Infrastructure Investment and Jobs Act of 2021 has a significant increase in funding for the block Native American Housing and Self-Determination Act (NAHASDA), which will increase base funding for each Tribally-designated housing authority like IRHA and individually contracting Tribes in the TCC region. The Act also includes a significant funding increase for the U.S. Department of Housing and Urban Development (HUD) to help small communities address intersections of housing and climate change issues, like erosion, permafrost thaw, or otherwise unstable housing foundations and sites.
- There are continuing advancements in construction and building techniques for affordable, energy-efficient, and culturally appropriate house and building models for rural Alaska. IRHA is currently

undertaking a region-wide housing assessment and evaluation to identify the unique needs of each village and subregion.

- The Fairbanks-based Cold Climate Housing Research Center (CCHRC) studies and develops models and techniques to build more efficient, resilient homes in cold climates. CCHRC is working on projects with the Yukon Flats School District, Galena, and Venetie. In addition, their research has the potential to benefit all TCC communities.

Threats

Self-Governance, Tribal Sovereignty, and Leadership – Threats

- Over the years, the State of Alaska has consistently not recognized Tribal governments as partners, nor is there an official or regulatory acknowledgment and respect for Tribal lands, Tribal sovereignty, rural resident subsistence, and other Tribal member priorities.
- Both state and federal agencies have resisted efforts to co-manage resources in the region.

“Self-determination is important for our communities to meet needs and values.”

-Interview Participant

Health, Culture, and Wellness – Threats

- The pandemic has significantly affected the health, culture, and well-being of TCC region residents. The loss of life due to the pandemic has and will likely continue to have damaging impacts on the region. COVID-19 mitigation measures such as social distancing protect the health of residents, but they also reduce social interactions, disrupt traditions, and can negatively impact businesses.
- The TCC region saw an eight percent decline in population over the last 15 years. Between 2019 and 20202, all but one subregion (Lower Yukon) had a net outward migration of people. Decreasing population contributes to several issues, including concerns about school closure for schools with enrollment below the state-mandated minimum of ten students.
- Based on estimates provided by the Alaska Department of Labor and Workforce Development, the population of residents over the age of 70 in the combined Yukon-Koyukuk and Southeast Fairbanks Census Areas are expected to double over 20 years. This increase in the senior population will likely increase demand for senior services and housing, which many communities already struggle to provide.

“One of the worst impacts from COVID-19 was not being able to gather for traditional activities like potlatches and funerals.”

-Survey Participant

“The pandemic has showed us that we should be more self-sufficient and sustaining.”

- Interview Participant

Natural Resources and Natural Hazards – Threats

- Climate change has already warmed Alaska by an average of three degrees Fahrenheit over the past six decades, with estimates that the daily maximum temperature (high temperature) statewide by 2065 will increase an additional four to eight degrees.¹⁸ Climate change brings many additional impacts to the region, including melting permafrost, negative changes on subsistence resources, erosion for communities along waterways, increased soot and air quality impacts, increased wildfire risk and changing weather conditions, and effects on winter travel routes. Communities are also seeing higher magnitude flooding due to worsened ice jams in spring and increased rainfall in fall months. According to the Alaska Center for Climate Assessment and Policy, the average wildfire area burned per decade in Alaska is projected to double by the middle of this century.
- Since 1988, the frequency of years that burned over 250,000 acres on Yukon Flats quadrupled.¹⁹
- Many TCC communities are located alongside riverbanks or deltas and are susceptible to flooding because of ice jams, snow, glacial melts, rising sea levels, and heavy rainfall. With climate change, scientists expect increased water flow, flooding, and woody debris.²⁰
- Yukon and Kuskokwim River salmon populations have been declining drastically since 1998, resulting in decreased allowable subsistence and commercial catch. In 2020 and 2021, the region experienced closures of subsistence fishing for Chinook and chum salmon runs. Run sizes are expected to continue declining into 2022.²¹
- The TCC region has several fault systems with the potential for major earthquakes; for example, in 2002, a magnitude 7.9 earthquake occurred along the Denali Fault.²²
- Road access proposals and projects could potentially result in a surge of non-resident hunting and fishing of subsistence harvesting areas. This possibility could impact species that are important for subsistence.
- Continued high worldwide oil prices and long-term declines in statewide oil exploration and production will likely result in a decrease in the availability of oil industry jobs for Alaska residents.

“The environment, we must protect it from global warming, more awareness should be shared in our communities! I can see change happening every year! What can we do now to protect our environment and way of life?”

- Survey Participant

“Make sure elders have enough wood and food for the winter. We need salmon/halibut in villages due to poor fishing.”

- Survey Participant

¹⁸ Fourth National Climate Assessment Volume II, Chapter 26: Alaska. 2018. Published by the U.S. Government Publishing Office. Available at <https://nca2018.globalchange.gov/>

¹⁹ Alaska Fire Science Consortium (data source: Alaska Interagency Coordination Center)

²⁰ Fox, J., M. Bertram, N. Guldager, R. Thoman, H. Carroll, R. Brown, B. Lake, Z. Grabinski & D. Vargas Kretsinger. (2021). Yukon Flats changing environment [outreach booklet]. H. R. McFarland, editor. Yukon Flats National Wildlife Refuge & International Arctic Research Center.

²¹ Sabrina Garcia, Alaska Department of Fish & Game (from: Murphy et al. 2021. Northern Bering Sea surface trawl survey, 2019. AKSSF Final Report, Project #51002. <https://bit.ly/3nRU90m>)

²² Alaska Earthquake Center. *Why Earthquakes Happen in Alaska*. 2015. Available at <http://earthquake.alaska.edu/earthquakes/about>.

- Mining and resource extraction efforts in the region are a potential source of income but may also bring a variety of environmental risks and can undermine traditional ways of life, especially for anadromous waterways and other important fish and game habitat used by subsistence gatherers.

Business and Workforce Development – Threats

- Recent State of Alaska budget deficits will likely impact household net income for all Alaska residents, including potential changes to income taxes, sales taxes, and Permanent Fund Dividends. Other state policy changes may impact the ability to recruit, retain and expand businesses in the Interior.

Infrastructure – Threats

- TCC communities heavily rely on state and federal funding, including the Power Cost Equalization program and resources for Tribal transportation projects and annual maintenance.
- A potential loss of funding to the Alaska Bypass mail program could impact rural air carriers, rural residents, and stores, reducing the affordability of air travel and air cargo deliveries.
- Some rural electric utilities in TCC communities are on the verge of bankruptcy and struggle to maintain local utility infrastructure. Standalone utilities also lack oversight by any regional electric utility.

“The biggest problem with living in the village seems to be lack of housing and running water in some areas.”

-Survey Participant

Land and Housing – Threats

- The high cost of living makes it harder for residents to remain in the region and threatens the quality of life.
- Tribal housing programs in the region heavily rely on federal funding for support and have been unsuccessful at meeting local housing needs.

“Housing programs need more assistance and training to help the communities meet needs and grow.”

-Survey Participant

“Our younger generation is moving into cities, and our population if kids in school are shrinking. We need housing and good jobs so they could move back home.”

-Survey Participant

Chapter 4: Regional Future Direction

Tanana Chiefs Conference Regional Economic Vision Statement

Healthy, Strong, Unified Tribes.

Goals



Goal A

Promote Healthy Communities, Self-Sustaining Local Governments, and a High Quality of Life



Goal B

Strengthen Businesses and Develop a Stronger Workforce



Goal C

Support the Development, Maintenance, and Improvement of Critical Infrastructure



Goal D

Promote a Healthy Environment and Carefully Manage Natural Resources

Priority Strategies

Broadband Connectivity



STRATEGY	WHY
1. Establish reliable, high-speed, and affordable internet connectivity in the region by implementing recommendations in the TCC Tribal Broadband Plan, prioritizing local ownership of communications infrastructure.	The pandemic has exacerbated the need for reliable, fast, and affordable broadband connectivity in the region. In the TCC CEDS regional survey, improving the internet was the number one suggestion when asked about supporting new and existing businesses. Dependable broadband is essential for delivering primary and secondary education, phone service, distance training, business operations, government operations, retail, and even renewable energy microgrid operations. Tribes and Tribal cooperatives have growing opportunities for funding, and the Infrastructure Investment and Jobs Act of 2021 has an estimated \$75 million for rural Alaska broadband connectivity.

Natural Resource Careers



STRATEGY	WHY
2. Encourage young people to pursue careers in natural resource sciences and management; establish a clearinghouse of training and employment opportunities in the sector.	“Natural resources and mining” is the largest private-sector industry in the region, and there are many opportunities for regional, state, and federal employment. Subsistence resources such as salmon are essential to the region but often managed by individuals not from the region. Filling natural resource monitoring and management positions by individuals who also are familiar with traditional ecological knowledge and subsistence practices can help advocate for and protect community interests.

Self-Governance



STRATEGY	WHY
3. Move forward with self-governance efforts, co-management agreements, and independent control of Tribal funds by providing education, advocacy, and support to TCC Tribes.	Self-governance protects, supports, and reinforces Tribal sovereignty by transferring programmatic authority and resources from the federal government to Tribes. Tribes must meet specific criteria and then negotiate with select federal agencies (Department of Interior, IHS, and Department of Transportation) to operate their own programs. Co-management agreements, established in partnership with state or federal agencies, promote full and equal participation of Tribes in natural resource management.

Energy



STRATEGIES	WHY
4. Support development of energy efficiency improvements and alternative energy systems by creating a Community Energy Action Plan for each TCC community.	Energy costs in the region remain high and contribute to high living costs. Much of the region’s building stock is aging and lacks sufficient insulation and ventilation, resulting in high energy bills and air quality challenges. The Alaska Housing Finance Corporation’s 2018 Alaska Housing Assessment identified residential home energy efficiency and retrofits as the top housing priority in the TCC region.
5. Advocate for continuation of the Power Cost Equalization program.	

STRATEGIES	WHY
<ol style="list-style-type: none"> 6. Form regional purchasing groups to conduct bulk fuel purchases to increase purchasing power and help lower fuel prices. 7. Construct a transmission line between Tok and Delta, connecting Alaska Power and Telephone with the Railbelt electrical grid. 8. Construct interties between nearby TCC region communities, including Tok-to-Northway and potentially a Nulato-to-Koyukuk intertie. 9. Reduce reliance on fossil fuels by continuing deployment of renewable energy investments. 10. Transition smaller standalone electric utilities to electric consortia. 	<p>Most TCC communities rely on fossil fuels to generate heat and power. Transitioning to renewable resources can stabilize costs, reduce emissions, and create higher-paying jobs. Interties between communities can also help reduce costs and increase the reliability of the electrical grid.</p>

Aviation Operations



STRATEGY	WHY
<ol style="list-style-type: none"> 11. Form a Tribal Air Taxi in the region. 	<p>Due to limited road connectivity, air travel is one of the primary ways to move around the TCC region. However, there are few air carriers, and flights are limited and expensive, driving up the cost of living. Transportation and access challenges were identified as the #2 priority in the survey for supporting and expanding businesses. A local airlines operation could potentially meet the need for increased and more affordable air service. Aviation-related occupations (pilots, mechanics, etc.) generally pay high wages; ideally, these jobs are filled by local residents.</p>

Regional Collaboration



STRATEGY	WHY
<ol style="list-style-type: none"> 12. Convene TCC, Doyon, Doyon Foundation, Interior Regional Housing Authority, and Denakanagga for collaborative meetings and/or an Economic Summit at least twice a year to 	<p>TCC regional organizations have unique missions and membership. However, there are likely shared regional priorities that could be more effectively advanced with a unified support and collaborative efforts around implementation. An annual Economic Summit would be an</p>

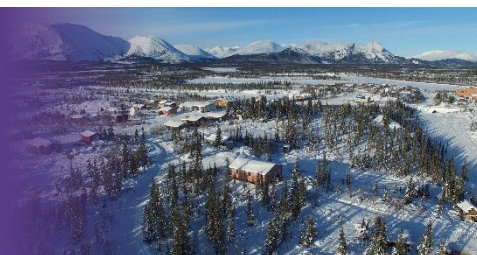
STRATEGY	WHY
identify and advocate for shared economic development priorities.	opportunity to identify priorities and determine how to work together to achieve them most effectively.

Child Care Expansion



STRATEGY	WHY
13. Expand the availability of child care by promoting training and business opportunities in the sector, including encouraging residents to get trained and licensed as child care providers.	Households in the region face a shortage of child care. During the pandemic, access to child care was further reduced, impacting working families and making it harder for households to practice subsistence. The lack of child care creates barriers for parents who would otherwise choose to enter the workforce.

Forest Management



STRATEGY	WHY
14. Manage local forests to maximize the productivity of local biomass for heating and construction materials (potentially via shared wood lots) and to reduce threats from wildfires.	There are many advantages to increasing access to biomass resources. First, local harvests could be used as a source of construction materials, reducing the cost of importing materials and creating more timber jobs in the region. Local biomass can help offset other heating fuels, reducing home heating costs. Finally, strategic timber harvests can help reduce wildfire risk, especially in areas impacted by spruce bark beetle die-offs.

Water-Sewer



STRATEGY	WHY
15. Continue to expand water-sewer infrastructure in underserved communities, including advocating for continued funding of key programs and offering technical	There are 13 TCC villages categorized as “unserved communities” by the State of Alaska that lack water and wastewater services. Many additional TCC communities have related water and sewer infrastructure needs, including repairs and upgrades to washeterias. Additionally, the lack of water and sewer infrastructure drives up the cost of developing new housing. Ensuring households have water and

STRATEGY	WHY
assistance to communities seeking funding.	sewer service, whether through in-home systems or piped delivery, is an essential improvement for health, safety, and quality of life.

Community Halls



STRATEGY	WHY
16. Support planning initiatives for building and sustaining community halls and multipurpose centers, so villages have a central gathering space.	<p>Community halls are the central gathering location in many TCC communities. They are places where residents come together for cultural events such as celebration potlatches, during the loss of a community member, and as a planning area for emergency situations. During the 2021 planning process, many residents expressed a strong desire to see the return of these gatherings as an essential component of individual and community wellness.</p> <p>Some TCC villages do not have community halls; in others, existing facilities are energy inefficient and lack key amenities. These halls have traditionally been standalone buildings, but some villages are moving toward multipurpose buildings which can contain spaces for Tribal offices, local businesses and meet other needs.</p>

Other Strategies

The following strategies come from interviews, survey results, and a review of relevant data and regional planning documents.

GOAL #A: Promote Healthy Communities, Self-Sustaining Local Governments, and a High Quality of Life

Health and Wellness

1. Increase the availability of alcohol treatment services in the region and improve outpatient support for those returning to villages after treatment.
2. Improve access to telemedicine in rural clinics.
3. Expand policing and Village Public Safety Officer (VPSO) programs to increase rural law enforcement in Interior Alaska.
4. Increase food security by providing education, technical assistance, and small grants to promote food security (gardening, growing in a greenhouse, gathering, hunting, fishing) modeled after the [Alaska micro-food security grant program](#).
5. Support both individual and community driven food security efforts.

Local Governance

6. Encourage school districts to incorporate Tribal government programming into the curriculum, including information about Alaska Native Claims Settlement Act (ANCSA) and how Tribal governance works.

7. Create a sustainable model to increase Tribal capacity to manage and construct capital improvement projects.
8. Work with Tribal Councils to build administrative and governance capacity through policies that promote equity and transparency.
9. Encourage efforts for co-management of local resources by village entities with federal and state fish, game, and land management agencies.
10. Improve communications and increase coordination between local community entities (Tribes, village corporations, and municipalities).
11. As leaders in Tribal administrative positions approach retirement age, prioritize youth mentorship and workforce development to ensure smooth leadership transitions and preserve institutional knowledge.

Housing

12. Develop additional long-term care facilities for elders in underserved subregions.
13. Increase availability of affordable housing, including multi-family housing.
14. Support efforts to identify housing options for VPSOs, community health aides and teachers where necessary.
15. Convene subregional housing meetings to identify priority needs for each village and determine how to leverage current and anticipated federal funding to meet the needs.

Culture

16. Conduct culture, subsistence, and language learning programs, including activities that strengthen youth and elder communications by mentor-apprenticeship opportunities.
17. Advocate for increased U.S. Department of Education Johnson O'Malley Act funding and encourage more TCC Tribes to apply for and utilize the cultural education and performance program for school-age youth.

GOAL #B: Strengthen Businesses and Develop a Stronger Workforce

Business Development and Entrepreneurship

18. Develop and grow cultural and ecotourism.
19. Develop culturally appropriate resource development opportunities, like wildland firefighting crew organization and support businesses.
20. Support local agriculture, including the construction of greenhouses and community gardens.
21. Expand small business development by offering small business loans, training, and ongoing support.
22. Support Alaska Native artists with sales and marketing support and training to help sell products online.
23. Establish a Community Development Financial Institution (CDFI) to provide financial products and banking services and promote financial literacy to underserved communities throughout the region.
24. Establish Tribally-owned collaborative business ventures to meet key industry needs in the region, such as construction, energy, and transportation delivery.

Workforce

25. Continue to offer and expand TCC job training programs, especially where participants are given training and then have paid time toward a job in the community.
26. Reduce barriers to training participation requiring travel, such as offering guidance and support for child care, and providing stipends for room, board, and transportation costs.
27. Increase financial literacy in the region through youth-oriented classes in schools and adult-focused programs.
28. Encourage residents to pursue secondary education and/or training for jobs with high regional demand. Relevant regional jobs include construction-related trades, equipment and building operations and maintenance, power plant operators and utility managers, teachers, VPSOs, natural resource managers, accountants, water/sewer operators, foresters, health occupations, bookkeepers, food service, tourism, grant writing, bookkeeping, child care, computer skills, and renewable energy.

29. Identify TCC-specific jobs (i.e., administration, self-governance, and other support roles) that can be done by staff in villages instead of by Fairbanks-based staff.

GOAL #C: Support the Development, Maintenance, and Improvement of Critical Infrastructure

Energy

30. Create subregional energy working groups with Tribal, public, and private sector partners to facilitate ongoing conversations around energy opportunities, challenges, and potential projects.
31. Support efforts to replace old diesel generators and upgrade community generator systems.
32. Achieve targeted climate reductions through a large TCC renewable energy project (e.g., solar).
33. Support the public-private partnership Interior Energy Project and related efforts to bring natural gas heat and power generation to Interior Alaska.

Transportation

34. Support seasonal ice road construction and maintenance to improve winter access to villages.
35. Improve transportation routes and expedite delivery of goods and quality services to TCC villages.
36. Encourage better coordination between community entities to reduce transportation and shipping costs, by sharing air cargo charters and sharing heavy equipment and materials for projects.
37. Increase safety along snowmachine trails by increasing signage along key routes.
38. Identify cost-effective ways to improve village roads, including equipment-sharing and road maintenance training.
39. Improve existing road infrastructure for TCC communities on the road system.

Other Utilities

40. Advocate for the continuation of the bypass mail program and work with the U.S. Postal Office to ensure all villages have adequately staffed post offices.
41. Expand cell phone service in the region.

Goal #D: Promote a Healthy Environment and Carefully Manage Natural Resources

Emergency Preparedness and Mitigation

42. Support emergency preparedness in TCC villages through hazard mitigation planning, emergency response planning, and other resilience-building efforts.
43. Expand wildfire response efforts and facilities in TCC villages.

Natural Resources

44. Collect data on climate change impacts to communities and to subsistence harvests within the region.
45. Encourage Tribal members and community environmental coordinators to participate in ANTHC's Local Environmental Observer (LEO) network.
46. Collect and establish baseline natural resources data throughout the region, with a priority on resources critical for subsistence.
47. Encourage residents to pursue subsistence as a means of self-employment and self-sufficiency.
48. Advocate for increased local involvement in conversations around potential mining and resource extraction projects.
49. Develop tools to assess and communicate the economic value of subsistence harvesting and other traditional cultural practices.

Chapter 5: Action Plans & Evaluation Framework

The following priority actions will support implementation of the priority strategies identified in the Regional Future Direction (Chapter 4).

The action plans consider existing and anticipated resources and provides direction to TCC leadership, staff, member Tribes, and other partners. The action plans also identify performance measures so Tribal members, TCC staff, businesses, and partners have a shared understanding of where the region is today and desired progress toward shared goals over the next five years. Each action plan includes the following components:

- **Capital Project:** Identifies whether the action includes an infrastructure or facility component
- **Actions:** Near-term steps that organizations, businesses, and partners can take to help move a strategy forward.
- **Lead (Support):** The lead organization responsible for the action, plus supporting partners, and community entities that can support implementation.
- **Estimated Resources:** Estimated costs to implement the action steps over the next five years, and/or estimated staffing resources (FTE = full time equivalent).
- **Possible Funding Sources:** A list of potential funding sources that could be used to accomplish the action, including public, private, and nonprofit funding sources
- **Target Completion:** Estimated year when the action will be complete.
- **Performance Measure(s):** How the region will measure progress on the strategy, with quantifiable benchmarks/ targets.

Broadband Connectivity

Strategy #1: Establish reliable, high-speed, and affordable internet connectivity in the region by implementing recommendations in the TCC Tribal Broadband Plan, prioritizing local ownership of communications infrastructure.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Expand regional working group and define roles and responsibilities to enhance collaboration, strategic decision making, and resource-sharing on broadband infrastructure investments.	TCC, Doyon (village corporations, key Tribal organizations currently engaged in broadband planning at the village and subregional levels)	\$5,000 to \$30,000, or 0.50 FTE TCC/Doyon staff time	Denali Commission	6 months to 1 year
✓	b. Commission economic and technical feasibility studies in preparation for broadband infrastructure funding opportunities.	TCC (Doyon, Tribes, village corporations, subregional and regional organizations, telecom cooperatives and firms)	Depends on scope of project	Denali Commission	Ongoing
✓	c. Continue to invest in local, “shovel-ready” project development and support communities in securing grant funding for projects such as: <ul style="list-style-type: none"> Benhti Economic Development Corporation - wireless or fiber to the home (FTTH) Council of Athabascan Tribal Governments (CATG) – T’ee teraan’in - microwave in subregion TCC – Low Earth Orbit satellites (LEOs) for Eagle TCC – microwave and/or fiber middle mile and FTTH systems for Evansville, Alatna, Allakaket, Hughes, and Huslia TCC – FTTH systems for Northway, Tanacross, Dot Lake, and Nenana Doyon, Limited – fiber for villages on the Yukon River TCC - Koyukuk River Fiber Network Northway Tribal Government – FTTH in partnership with TCC and Matanuska Telecom Association 	TCC (Doyon, Tribes, village corporations, subregional and regional organizations, telecom cooperatives and firms)	Depends on project scope (\$3 million to \$100 million)	U.S. Department of Agriculture (USDA) Rural Development Broadband ReConnect Program, USDA Community Connect Grant Program, USDA Distance Learning & Telemedicine Grants, USDA Farm Bill Broadband Loans & Loan Guarantees, USDA Emergency Rural Health Care Grants, Rural Health Care Program, 5G Fund for Rural America, Rural Digital Opportunity Fund, E-Rate, National Telecommunications and Information Administration (NTIA) Tribal Broadband Connectivity Program, FCC Connect America Fund – Alaska Plan	3 to eight years after grant award depending on project scope
✓	d. Invest in community “hub” spaces in central buildings to provide faster internet service for the community. <ul style="list-style-type: none"> Invest in additional bandwidth during high volume times. Prioritize improving speed at community “hotspots” before advancing plans for widespread access Consider investing in LEOs as an interim solution for supporting local “hubs” until fiber can be deployed 	TCC (Tribes, school districts)	Depends on current internet provider and existing facilities	Denali Commission, Universal Service Administrative Company, Tribes	6 months to 2 years

Strategy #1: Establish reliable, high-speed, and affordable internet connectivity in the region by implementing recommendations in the TCC Tribal Broadband Plan, prioritizing local ownership of communications infrastructure.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	<p>e. Advocate for projects and cooperative management models that prioritize Tribal ownership of broadband infrastructure.</p> <ul style="list-style-type: none"> Actively work to develop projects that lower the cost of high-speed internet for clinics, schools, and other facilities to move away from the uncertain future and reporting burden of E-Rate and Universal Service Administrative Company programs Work collaboratively with statewide, regional, and Tribal partners to develop and implement projects that install backhaul fiber in closer proximity to more villages 	TCC (Doyon, Tribes, village corporations, and key Tribal organizations engaged in broadband planning at the village, subregional, and state levels)	N/A	N/A	Ongoing
	f. Advocate for streamlining the permitting process for broadband deployment projects to improve financial viability and shorten broadband deployment timelines.	TCC (Doyon, Tribes, village corporations, and key Tribal organizations engaged in broadband planning at the subregional and state levels)	N/A	N/A	Ongoing
	g. Advocate for a state matching program to help school districts capture an additional 10 percent in federal E-rate Program support for broadband special construction projects, per the FCC's 2014 E-rate Modernization orders.	TCC (Tribes, school districts)	N/A	N/A	Ongoing
	h. Partner with Alaska employers to create workforce development programs and web-based job opportunities for Alaskans, particularly in village communities.	TCC (Doyon, other Native Corporations, and Native Associations)	Depends on project scope	Denali Commission	Ongoing

Performance Measure: access to unlimited, high-speed internet

Where this is at today	Objective: where we want to be in five years
<ul style="list-style-type: none"> 78% of TCC villages have schools with 25/3 speeds 62% of TCC village clinics have broadband speeds of 25/3 and above 17% of TCC communities have access to an affordable residential internet plan (including those with internet speeds of less than 25/3) 0% of TCC communities have documented 25/3 speeds for households 17% of TCC communities have access to an affordable residential internet plan (defined as under 2% of median household income) <p><i>25/3 = at least 25 megabits per second (Mbps) download, at least 3 megabits per second upload</i></p> <p><i>Source for all the above: 2021 TCC Tribal Broadband Plan</i></p>	<ul style="list-style-type: none"> Every household will have the ability to purchase unlimited, high-speed internet packages (at least 25/3) for less than \$100 per month Schools, clinics, and businesses will have the option to purchase plans

Natural Resource Careers

Strategy #2: Encourage young people to pursue careers in natural resource sciences and management; establish a clearinghouse of training and employment opportunities in the sector.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. As part of TCC website revisions, add a jobs announcement page for employment opportunities within the region (not just TCC). Promote via social media, The Council, and through partner networks.	TCC (major regional employers to submit postings)	No additional cost - staff already maintain a printed list	N/A	2022
	b. As part of TCC website revisions, add a trainings announcement page for regional opportunities (not just TCC) or virtually. Promote via social media, The Council, and through partner networks.	TCC	No additional cost - staff already maintain a printed list	N/A	2022
	c. Encourage increased partnerships between schools and natural resource employers, including having individuals working in natural resource fields visit classrooms or bring students out to participate in field work and supporting job shadowing. Expand culture camps where science is integrated, such as the Henshaw Science Camp.	Schools (Doyon, Alaska Department of Natural Resources [DNR], Bureau of Land Management [BLM], U.S. Fish and Wildlife Service [USFWS], U.S. National Park Service [NPS], UAF's Tamamta program)	Varies	U.S. Dept. of Education Rural Alaska Village Entrepreneurs (RAVE) grants	Ongoing
	d. Encourage young residents to shadow and participate on key natural management boards. Participants should be given travel stipends and assigned a mentor. Key boards include: <ul style="list-style-type: none"> TCC Tribal Resources Commission Yukon River and Kuskokwim River Inter-Tribal Fish Commissions USFWS Federal Subsistence Board and Regional Advisory Councils State of Alaska Board of Fish, Board of Game, and Advisory Councils National Park Service Subsistence Resource Committees Planning efforts such as regional management plans Alaska Migratory Bird Co-Management Council Alaska Arctic Policy Commission 	TCC Tribal Resources Commission (DNR, BLM, USFWS, NPS, Alaska Federation of Natives)	Varies	TCC's Summer Youth Employment program (funded via Workforce Investment Act), Navigating the New Arctic Community Office (NNA-CO)	Ongoing
	e. Encourage major employers (state and federal agencies, private companies) to create flexible leave policies that accommodate subsistence activities for employment in the region.	TCC, DNR, BLM, USFWS, NPS	N/A	N/A	Ongoing

Strategy #2: Encourage young people to pursue careers in natural resource sciences and management; establish a clearinghouse of training and employment opportunities in the sector.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	f. Establish an associate degree program in wildland fire management at UAF.	UAF (TCC, State of Alaska, federal agencies Arctic Council wildland fire working group)	Unknown	State of Alaska, federal agencies	2026
	g. Establish a natural resources internship at Morris Thompson (there is already a cultural programs internship where TCC covers the salary and NPS covers supervision).	TCC/NPS	Need to identify	TCC, NPS	2023
	h. Maintain the TCC Growing Our Own (TCC GO) program and expand to include middle school students. Increase TCC GO partnerships with academic researchers, teachers, and natural/cultural resources staff at TCC.	TCC	\$4 million	Alaska Native Education (ANE) grants	2023-2025
	i. Encourage school districts to promote, expand, and facilitate STEM programming and job shadowing opportunities to students both in and outside of communities, including Alaska Summer Research Academy (hosted by UAF) and Alaska Native Science and Engineering Programing (ANSEP).	School districts (TCC, UAF, ANSEP, UAF's Tamamta program)	Alaska Summer Research Academy: \$700 per student; ANSEP: varies	ANE grants, NNA-CO funds	Ongoing
	j. Promote youth employment opportunities at Henshaw Weir and use the weir as a model for developing additional locally-operated natural resource monitoring sites.	TCC	Varies	Varies	Ongoing

Performance Measure: number of TCC scholarship recipients studying natural resources

Where this is at today	Objective: where we want to be in five years
Annual number of TCC scholarship recipients who are studying natural resources or a related STEM field: 1 <i>Source: Personal communications with TCC, 2022</i>	Annual number of TCC scholarship recipients who are studying natural resources or a related STEM field: 8

Performance Measure: total local employment in natural resources and mining sector

Where this is at today	Objective: where we want to be in five years
Number of residents employed in the natural resources and mining industry: 689 (2021) <i>Source: Alaska Department of Labor and Workforce Development, Research and Analysis, Quarterly Census of Employment & Wages (QCEW); includes combined employment for the Yukon-Koyukuk and Southeast Fairbanks census areas</i>	Number of residents employed in the natural resources and mining industry: 725 (represents 5% growth over the next five years)

Self-Governance

Strategy #3: Move forward with self-governance efforts, co-management agreements, and independent control of Tribal funds by providing education, advocacy, and support to TCC Tribes.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Increase access to training opportunities by providing distance options or conducting trainings locally in communities.	TCC (Doyon Foundation, Bureau of Indian Affairs [BIA])	N/A	Doyon Foundation BIA Tribal Resilience Program	Ongoing
	b. Support Tribes with self-assessment and self-governance goals through strategic planning, including development of strategic plans, identifying priorities, succession/transition planning, annual operation budgets, and filling open Tribal administrator positions.	TCC	N/A		Ongoing
	c. Advocate for reducing barriers to Tribal self-governance (e.g., contract support costs, eligibility requirements).	TCC	N/A	TCC Funding, Alaska Community Foundation (ACF)	Ongoing
	d. Support coordination among villages responding to competitive federal awards (Relates to Strategy 12).	TCC (ANTHC, Tribes, sub-regional and regional organizations)	N/A	TCC Funding	Ongoing
	e. Decrease turnover in Tribal offices through support of health and child care programs (Relates to Strategy 13).	ANTHC (TCC)	N/A	National Indian Health Board, ACF	Ongoing
	f. Invest in future leaders by promoting programs that engage youth in self-governance efforts (e.g., National Indian Health Board [NIHB] Policy Fellowship, Native Youth Community Adaptation and Leadership Congress [BIA and FWS]).	TCC (Tribes, school districts, Doyon Foundation)	N/A	National Indian Health Board, BIA, U.S. Fish and Wildlife Service, Doyon Foundation, Rasmuson Foundation, ACF	Ongoing
	g. Establish a dashboard and metrics to track annual self-governance progress. Metrics might include number of programs or amount of funds under a Memorandum of Agreement, Expanded Memorandum of Agreement, Contract for Services, and direct PL 93-638 contract, respectively.	TCC (Tribes)	N/A		Ongoing
	h. Enter into co-management agreements for managing local resources.	TCC (state and federal agencies)	varies	varies	Ongoing

Performance Measure: forthcoming

Where this is at today

Objective: where we want to be in five years

Forthcoming - TCC does not currently evaluate its self-governance efforts but is in the process of developing a dashboard for this purpose (see action 7 above). Recommended measures include number of Tribes with clean audits; number of Tribes who are fully staffed; number of programs or amount of funds under a Memorandum of Agreement, Expanded Memorandum of Agreement, Contract for Services, and direct PL 93-638 contract, respectively.

Energy

Strategy #4: Support development of energy efficiency improvements and alternative energy systems by creating a Community Energy Action Plan for each TCC community.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Coordinate with Tribal Administrators to complete existing energy action plan templates.	TCC Rural Energy (Tribes)	TCC Staff time (~ 400 hours)	TCC program funds or Denali Commission, if coordinated by external partner	Ongoing
	b. Apply for Energy Transitions Initiative Partnership Project technical assistance for interested communities (up to 6).	TCC Rural Energy (Tribes)	TCC Staff time (~ 60 hours)	TCC program funds	April 15, 2022
✓	c. Implement energy action plans by coordinating with Tribes to secure funding, issue requests for bids, and track/commission energy infrastructure.	TCC Rural Energy (Tribes)	N/A	Denali Commission, U.S. Department of Energy (DOE), Office of Indian Energy funding opportunities, USDA High Energy Cost Grants	Ongoing

Strategy #5: Advocate for continuation of the Power Cost Equalization program.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Develop and conduct a messaging campaign in TCC villages on the value of the Power Cost Equalization program and potential changes to it. Aim for a campaign that engages all ages.	TCC Rural Energy (TCC Communications)	Staff time (50 to 200 hours)	TCC program funds	Dec. 2022
	b. Request resolutions from every Tribal government in the TCC region, expressing their preferences for the Power Cost Equalization program continuing.	TCC Rural Energy (Tribal Administrators)	Staff time (200 hours)	TCC program funds	Dec. 2022
	c. Based on Tribal government resolutions, engage TCC leadership on inclusion of the Power Cost Equalization Program in TCC's priorities for advocacy with the Governor and state legislators.	TCC Rural Energy (TCC Government Relations)	N/A	N/A	Dec. 2023
	d. Commission a white paper on cross-cutting implications of the Power Cost Equalization reduction or elimination on the economic resilience of community utilities, facilities, and residents.	TCC Rural Energy (ANTHC)	\$10,000 to \$20,000	Denali Commission	Dec. 2022
	e. Engage with regional, state, and national organizations to send clear messages on the importance of the Power Cost Equalization Program. Organizations include Alaska Power	TCC Rural Energy (TCC Government Relations)	N/A	N/A	Dec. 2023

Strategy #5: Advocate for continuation of the Power Cost Equalization program.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	Association, Alaska Village Electric Cooperative (AVEC), Alaska Power & Telephone (AP&T), Tanadgusix Corporation (TDX), Renewable Energy Alaska Project, ANTHC, and U.S. Department of Energy - Office of Indian Energy and Arctic Energy Office.				

Strategy #6: Form regional purchasing groups to conduct bulk fuel purchases to increase purchasing power and help lower fuel prices.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Establish a regional working group with TCC and other partners, such as utilities, ANTHC, school districts, CATG, and Tribes.	TCC Rural Energy (utilities, ANTHC, school districts, CATG, Tribes)	Staff time (.25 FTE) or contractor	TCC Program funds, Denali Commission	Mid 2023
	b. Identify organizational, legal, and data needs for standing up regional and/or subregional maintenance groups.	TCC Rural Energy (utilities, ANTHC, school districts, CATG, Tribes)	Staff time (.25 FTE) or contractor	TCC Program funds, Denali Commission	Dec. 2023
	c. Contract or conduct in-house research and design for regional maintenance groups.	TCC Rural Energy (utilities, ANTHC, school districts, CATG, Tribes)	Staff time (.25 FTE) or contractor	TCC Program funds, Denali Commission	Mid 2024
	d. Review results from action steps b and c and reconvene working group to determine next steps, including how to engage with workforce development and other programs.	TCC Rural Energy (utilities, ANTHC, school districts, CATG, Tribes)	Staff time (.25 FTE) or contractor	TCC Program funds, Denali Commission	Dec. 2024
	e. Develop and implement formal agreements/roles for maintenance groups.	TCC Rural Energy (TCC Legal Counsel, utilities, ANTHC, school districts, CATG, Tribes)	Staff time (.25 FTE) or contractor	TCC Program funds, Denali Commission	Mid 2025
	f. Establish a regional working group with TCC and other partners, such as utilities, ANTHC, school districts, CATG, and Tribes.	TCC Rural Energy (utilities, ANTHC, school districts, CATG, Tribes)	Staff time (.25 FTE) or contractor	TCC Program funds, Denali Commission	Mid 2023

Strategy #7: Construct a transmission line between Tok and Delta, connecting Alaska Power and Telephone with the Railbelt electrical grid.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
✓	a. Secure funding and a commission-revised engineering report based off the Roadbelt Intertie Reconnaissance Engineering Report (2020) for a smaller transmission line (69kV instead of the 245kV originally studied).	TCC Rural Energy (Contractor)	N/A	Denali Commission	Mid 2023
✓	b. Secure funding and a commission study of a transmission line route and design, environmental impacts, and quantitative cost/benefit evaluation of economic feasibility. Conduct additional public input sessions, collect resolutions from affected communities and letters/agreements of support from Alaska Power and Telephone (AP&T) and potential users.	TCC Rural Energy (Contractor)	\$120,000	Denali Commission	Beginning of 2024
✓	c. Secure funding, competitively select a construction contractor, and construct the Tok to Delta intertie.	AP&T (TCC Rural Energy)	\$40 million	AP&T, Denali Commission, DOE, Economic Development Administration (EDA)	Three years from start of construction

Strategy #8: Construct interties between nearby TCC region communities, including Tok-to-Northway and potentially a Nulato-to-Koyukuk intertie.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
✓	a. Based on the Tok-to-Northway Intertie Study, secure and commission a detailed transmission line design; study environmental impacts and quantitative cost/benefit evaluation of economic feasibility; conduct additional public input sessions; collect resolutions from affected communities and letters of support/ memoranda of agreement from Alaska Power and Telephone (AP&T) and potential users.	TCC Rural Energy (AP&T)	N/A	Denali Commission, EDA	Mid 2023
✓	b. Secure funding, competitively select construction contractor, and construct Tok-to-Northway intertie.	AP&T (TCC Rural Energy)	\$13 million	EDA	2 years from contractor selection
✓	c. Commission engineering report of Nulato-to-Koyukuk intertie.	TCC Rural Energy	\$100,000	Denali Commission, EDA	2024

Strategy #9: Reduce reliance on fossil fuels by continuing deployment of renewable energy investments.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
✓	a. Continue to secure funding for the design and construction of renewable energy generation projects by implementing priorities	TCC Rural Energy (Tribes, AVEC, TDX,	TCC staff time .75 FTE, construction	DOE, USDA (grants or loans to utilities)	Ongoing

Strategy #9: Reduce reliance on fossil fuels by continuing deployment of renewable energy investments.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	from community energy action plans and supporting local utilities in transitioning to renewable energy generation.	other local utilities, ANTHC)	is dependent on project		
✓	b. Design siting, engineering, and ownership models for solar PV systems and battery storage in the eight communities with AVEC-operated electric utilities.	TCC Rural Energy (AVEC, contract for technical assistance with the BIA Division of Energy and Mineral Development)	N/A	BIA Division of Energy and Mineral Development	2023
✓	c. Construct eight solar PV systems with battery storage in TCC communities.	AVEC (TCC Rural Energy)	\$1 to \$1.5 million per community	DOE, Office of Indian Energy, Denali Commission, USDA Rural Utility Service	2025
	d. Develop a designated energy coordinator position in each community with renewable energy generation, similar to the EPA Indian Environmental General Assistance Program (IGAP).	TCC Rural Energy (Tribes, AVEC, TDX, other local utilities, ANTHC)	TCC staff time .25 FTE or external contractor	DOE, USDA	2025, dependent on funding

Strategy #10: Transition smaller standalone electric utilities to electric consortia.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Work with standalone and regional electricity utilities (AVEC, AP&T, and TDX) to design and implement an Alaska Rural Utility Collaborative (ARUC) model to improve operations, maintenance, and enable a quicker transition to renewable energy generation.	TCC Rural Energy (ANTHC, AVEC, AP&T, TDX)	TCC Staff time, .5 FTE	TCC Program Funding, Denali Commission	Dec. 2023
	b. Hold workshops with Tribes and utility managers on ARUC and operations, costs, and staffing details for regional utilities, AVEC, AP&T, and TDX.	TCC Rural Energy (ANTHC, AVEC, AP&T, TDX)	Depends on scope of project	TCC Program Funding, Denali Commission	Mid 2024
	c. Conduct one-on-one meetings for detailed discussions on options for standalone utilities joining a consortium, request decision and resolutions on Tribal government and utility's position.	TCC Rural Energy (ANTHC, AVEC, AP&T, TDX)	Depends on scope of project	TCC Program Funding, Denali Commission	Dec. 2025

Performance Measure: completion of community energy action plans	
Where this is at today	Objective: where we want to be in five years
Six completed community energy action plans (Birch Creek, Hughes, Galena, Minto, Nikolai, Tanacross)	Every TCC community has a community energy action plan
Performance Measure: percentage of community electricity generated by renewable energy sources	
Where this is at today	Objective: where we want to be in five years
0% (February 2022)	15%
Performance Measure: amount of annual household income spent on energy	
Where this is at today	Objective: where we want to be in five years
\$5,254 (2018) <i>Source: 2018 Alaska Housing Finance Corporation Housing Assessment</i>	\$4,000 (below the 2018 statewide average)

Aviation Operations

Strategy #11: Form a Tribal Air Taxi in the region.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Convene Partners: Create a new Aviation Workgroup and identify co-investors.	Tribes, Village Corporations, Doyon (TCC)		Corporate/Tribal Investment	2022
	b. Create the Framework: Form new investment LLC, acquire business license, apply for airport lease; commit initial capital and identify existing Alaska Air Taxi operator/partner.	Tribes, Village Corporations, Doyon (TCC)	\$50,000-\$100,000, plus \$5-10 million initial capital	Corporate/Tribal Investment	2022
✓	c. Seed and Startup: acquire and develop assets, including: <ul style="list-style-type: none"> Structured multi-year acquisition of existing AK-based airline with 135 certificate and turbine operations Develop hangar/terminal facility and operations at Fairbanks International Airport Acquire three aircraft Start passenger operations in region Begin training program for pilots, airline operations, and mechanics with existing local partners 	Newly-formed LLC, with support from TCC region investors (Tribes, Village Corporations, Doyon, TCC)	\$15-\$25 million	Corporate/Tribal Investment, Commercial Loans, Capital (Asset) Leases, AIDEA Loans, BIA Guarantees, EDA Grants, Other Federal Grant Programs	2023
✓	d. Early-Stage Growth: Expand regional capabilities: acquire more aircraft and expand passenger service	Newly-formed LLC	\$20-\$30 million		
	e. Prepare an aviation workforce development plan with mentorship, apprenticeship, and provide scholarship and internship opportunities for long-term training programs; develop on-the-job maintenance and training programs	Newly-formed LLC, TCC, Alaska EXCEL, UAF Industry – Aircraft & Engine Manufacturers, FAA	\$1-2 million Scholarship seed funding: \$3-5 million		2022/23
✓	f. Support village aviation infrastructure investments	Newly-formed LLC Tribes, Village Corporations, Doyon (TCC), FAA	varies		ongoing

Performance Measures:	
Where this is at today	Objective: where we want to be in five years
Villages with scheduled service 5 days per week: 24 out of 41 <i>Source: TCC Tribal Air Taxi Study, 2022</i>	Villages with scheduled service 5 days per week: 100%
Totally passengers annually: <ul style="list-style-type: none"> • Lower Yukon Subregion: 1,063 • Upper Kuskokwim Subregion: 3,961 • Upper Tanana Subregion: 2,718 • Yukon Flats Subregion: 9,129 • Yukon Koyukuk Subregion: 6,934 • Yukon Tanana Subregion: 2,622 <i>Source: TCC Tribal Air Taxi Study, 2022</i>	<i>Aviation Workgroup will need to identify 5-year target</i>
New aviation career graduates from the region: unknown	New aviation career graduates from the region: 5 annually
Other metrics to be determined by Aviation Workgroup; possible metrics include average cost per seat, number of regional residents employed in aviation, number of Tribal airline staff who participated in apprentice program, reduction in mail delays.	

Regional Collaboration

Strategy #12: Convene TCC, Doyon, Doyon Foundation, Interior Regional Housing Authority, and Denakanagga for collaborative meetings and/or an Economic Summit at least twice a year to identify and advocate for shared economic development priorities.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Consult with other Alaska regional collaborations such as the Northwest Arctic Leadership Team or the Annual YK Work Session to learn best practices for the design and operation of an Interior regional collaboration.	TCC	N/A	TCC funds	2023
	b. Identify key representatives and convene a preliminary meeting to identify shared economic development priorities and establish a twice-annual meeting schedule.	TCC (Doyon, Doyon Foundation, Interior Regional Housing Authority, Denakanagga)	N/A	TCC funds, EDA	2023
	c. Host collaborative meeting/economic summit with regional/subregional partners.	TCC (Doyon, Doyon Foundation, Interior Regional Housing Authority, Denakanagga)	N/A	EDA	2023

Performance Measure: a shared annual list of priority projects supported by all participating members	
Where this is at today	Objective: where we want to be in five years
No shared list	Lists released annually
Performance Measure: successful implementation of shared priority projects	
Where this is at today	Objective: where we want to be in five years
Regional project priorities advanced (funding secured and/or development/implementation progress): 0 projects	Regional project priorities advanced (funding secured and/or development/implementation progress): At least 1 project annually

Child Care Expansion

Strategy #13: Expand the availability of child care by promoting training and business opportunities in the sector, including encouraging residents to get trained and licensed as child care providers.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Promote child care as an economic opportunity in all TCC communities. TCC has secured funds to help providers become licensed, including covering the cost of upgrades needed to achieve licensing (e.g., new doors, appliances, etc.). Once a provider is licensed, they can receive child care assistance funding for providing care, which is further supplemented by TCC.	TCC (Thrivalaska, thread)	\$800,000/year	American Rescue Plan Act (ARPA) Child Care Development Funds to Tribes – already secured through 2023	ongoing
	b. Offer in-person training for families (especially new parents) and child care providers.	TCC (Thrivalaska, thread)	1 FTE	ARPA Child Care Development Funds, Head Start, Child Care Assistance, Tribal Temporary Assistance for Needy Families (TANF)	Ongoing
	c. Expand delivery of and encourage participate in American Red Cross babysitting and child care certificate courses, especially for middle and high school students. Classes are virtual and teach what to do in an emergency, basic child development, infant CPR, and more.	Tribes (TCC, school districts, Thrivalaska, thread)	Virtual basics is \$45/class	Alaska Department of Health & Social Services, Head Start, Child Care Assistance, TANF	ongoing
<i>See also Strategy #15, Water-Sewer Infrastructure, for recommendations on expanding home water and sewer systems. Securing a child care license requires running water, so lack of in-home plumbing means many potential providers are not eligible.</i>					

Performance Measure: number of Tribally licensed providers	
Where this is at today	Objective: where we want to be in five years
11 licensed providers in TCC communities providing child care (including both Tribally licensed providers and relative providers, who are family members certified to receive child care assistance payments) <i>Source: TCC Child Care Services Office</i>	30 Tribally licensed providers in the region providing child care assistance payments (including both Tribally licensed and relative providers)

Forest Management

Strategy #14: Manage local forests to maximize the productivity of local biomass for heating and construction materials (potentially via shared wood lots) and to reduce threats from wildfires.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Prepare Forest Stewardship Plans in communities, which is a necessary first step to understanding forest health, capacity to support projects like biomass, and more. The plan generally includes an inventory of forest resources, land designations using mapping, and a 10-year plan for land designations.	Village corporations (TCC Forestry, Alaska Division of Forestry, Doyon)	\$7,000 - \$58,000 (based on acreage)	USDA Forest Stewardship Program; USDA's National Resources Conservation Service (NRCS), ANTHC	Ongoing
	b. Encourage communities to work with the Alaska Wood Energy Development Task Group, a coalition of federal, state, and nonprofit representatives, to prepare prefeasibility studies for biomass projects.	Village corporations, Tribes, Municipalities (Alaska Wood Energy Development Task Group, TCC)	Up to \$15,000	Alaska Wood Energy Development Task Group, Alaska Energy Authority (AEA)	Ongoing
	c. Prepare Community Wildfire Protection Plans and conduct fuel reduction efforts around communities.	Tribes, Municipalities, Doyon (TCC)		BIA, BLM, Alaska Division of Forestry	Ongoing
✓	d. Implement recommendations from Forest Stewardship Plans, Community Wildfire Protection Plans and biomass prefeasibility studies to install wood energy systems and innovative wood product facilities.	Village corporations, Tribes, Municipalities (TCC, State of Alaska Division of Forestry)		NRCS, USDA Forest Service Community Wood Energy and Wood Innovation grants, AEA	Ongoing
	e. Pilot a single consolidated community forest plan that meets the Forest Stewardship Plan, Community Wildfire Protection Plan, and biomass prefeasibility requirements to reduce the planning burden and cost on communities. Explore further integration with FEMA Hazard Mitigation Plans.	TCC, State of Alaska Division of Forestry, USDA Forest Service, Doyon	N/A (would hopefully reduce costs)	n/a – see above	2024

Performance Measure: number of forest-based operations/ businesses in the region	
Where this is at today	Objective: where we want to be in five years
Acres under Forest Stewardship Plans: 23,359 acres. (Source: USDA Alaska State and Private Forestry Fact Sheet, 2022)	Acres under Forest Stewardship Plans: 29,810 acres (5 percent increase annually over five years).
Performance Measure: number of Interior Alaska communities with biomass projects	
Where this is at today	Objective: where we want to be in five years
Number of Interior Alaska communities operating community-level biomass projects: 14 (Anvik, Delta Junction, Fort Yukon, Galena, Hughes, Huslia, Koyukuk, Minto, Tanacross, Tanana, Tetlin, Tok). Source: Alaska Wood Energy Development Task Force	Number of Interior Alaska communities with operating biomass, as supported by the Alaska Wood Energy Development Task Force: 22.

Water-Sewer

Strategy #15: Continue to expand water-sewer infrastructure in underserved communities, including advocating for continued funding of key programs and offering technical assistance to communities seeking funding.

Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
✓	a. Expand the installation of new water and wastewater technologies like ANTHC's Portable Alternative Sanitation System and Alaska Department of Environmental Conservation's Village Safe Water's Alaska Simplett Pilot.	ANTHC, DEC Village Safe Water, TCC Office of Environmental Health (Tribes, Interior Regional Housing Authority, municipalities)	Varies	BIA, Denali Commission, U.S. Department of Housing and Urban Development, USDA Rural Development, IHS, Environmental Protection Agency, Alaska Native Villages grant program, Environmental Justice Grants, Revolving Loan Programs, Clean Water Act, Healthy Alaska Natives Foundation, ARPA Capital Projects Fund, ARPA State and Local Fiscal Recovery Funds	Ongoing
	b. Advocate for regional housing authorities to be eligible for water and sewer infrastructure funds to help offset installation costs for new homes.	Interior Regional Housing Authority (Tribes, TCC, ANTHC)	N/A	N/A	2022, 2023
✓	c. Maintain and upgrade washeterias as needed.	ANTHC, Alaska DEC's Village Safe Water, TCC Office of Environmental Health (Tribes, municipalities)	Varies; some costs identified in planning documents catalogued here	EPA, USDA Rural Development, State of Alaska, HIS, ARPA Capital Projects Fund, ARPA State and Local Fiscal Recovery Funds	Ongoing

Performance Measure: number of unserved communities

Where this is at today	Objective: where we want to be in five years
Thirteen unserved communities where 45 percent or more of homes are not served by pipes, septic tank, or covered haul systems (Alatna, Allakaket, Arctic Village, Birch Creek, Chalkyitsik, Circle, Eagle, Koyukuk, Ruby, Shageluk, Stevens Village, Takotna, Venetie) <i>Source: Village Safe Water, 2017 list of unserved communities</i>	All unserved communities have either had water-sewer infrastructure improvements or have planning underway to address the need

Community Halls

Strategy #16: Support planning initiatives for building and sustaining community halls and multipurpose centers, so villages have a central gathering space.					
Capital Project	Actions	Lead (Support)	Estimated Resources	Possible Funding Sources	Target Completion
	a. Offer resources (e.g., fact sheets) and technical assistance to communities seeking to construct or repair their community halls and multipurpose centers.	TCC	N/A	N/A	Ongoing
✓	b. Support communities applying for funds to construct or upgrade community halls and multipurpose centers, recognizing them as a critical gathering space in many communities.	Tribes (TCC)	varies	Rasmuson Foundation, ACF, First Nations Development Institute, ARPA Capital Projects Fund, ARPA State and Local Fiscal Recovery Funds	Ongoing
	c. Continue to encourage communities to create and maintain community plans that assess community facilities and identify local priorities.	Tribes (TCC)	400 hours per community	TCC	Ongoing
	d. Prepare an inventory of community halls/multipurpose centers to identify priority needs and overall status in the region.	TCC	N/A	N/A	Ongoing

Performance Measure: <i>forthcoming</i>	
Where this is at today	Objective: where we want to be in five years
Forthcoming – see action #4 recommending preparation of an inventory/assessment of community halls	