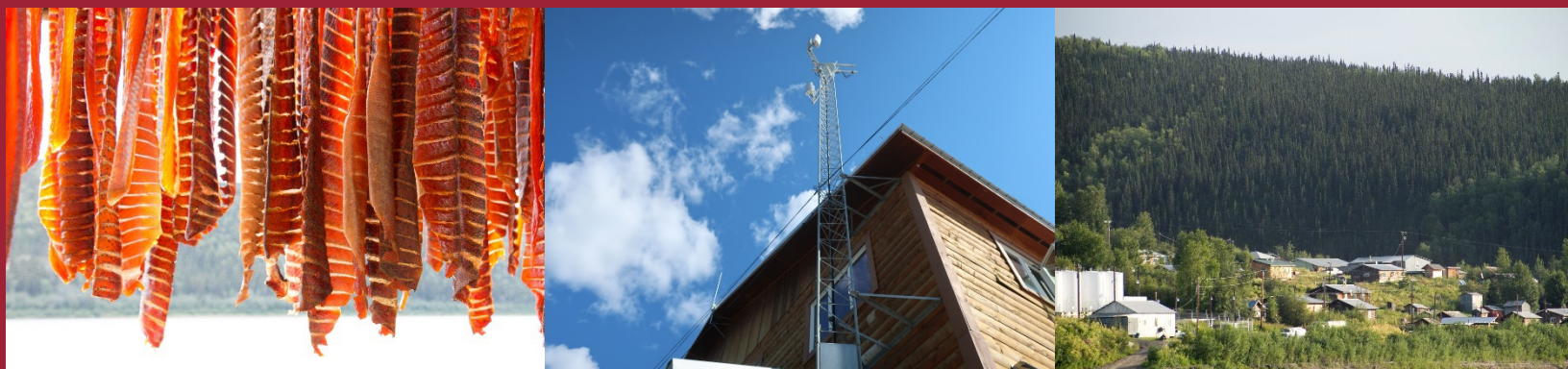


# Tanana Chiefs Conference

## Comprehensive Economic Development Strategy (CEDS) 2022-2026 PUBLIC REVIEW DRAFT: FULL CEDS November 2021



### How to Submit Comments on the Draft CEDS

Submit your electronic comments through the comment form:

- [https://www.surveymonkey.com/r/tccceds\\_draft](https://www.surveymonkey.com/r/tccceds_draft)

Email or call the project team:

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  - Email: [shelly@agnewbeck.com](mailto:shelly@agnewbeck.com)

**Comment deadline: December 19<sup>th</sup>, 2021**

Project website: [www.tananachiefs.org/ceds/](http://www.tananachiefs.org/ceds/)

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  - Paul Mountain, Nulato Tribe Member

# Acronyms

ACS	American Community Survey
ANCSA	Alaska Native Claims Settlement Act
ANTHC	Alaska Native Tribal Health Consortium
BIA	Bureau of Indian Affairs
CCHRC	Cold Climate Housing Research Center
CEDS	Comprehensive Economic Development Strategy
EDA	U.S. Economic Development Administration
FNA	Fairbanks Native Association
FNSB	Fairbanks North Star Borough
FHWA	Federal Highway Administration
HUD	U.S. Department of Housing and Urban Development
IDEA	Interior Distance Education of Alaska
IHS	Indian Health Service
IRHA	Interior Regional Housing Authority
LEO	Local Environmental Observer (ANTHC program)
NAHASDA	Native American Housing and Self Determination Act
PCE	Power Cost Equalization Program
QCEW	Quarterly Census on Employment and Wages
SWOT	Strengths, Weaknesses, Opportunities and Threats
TCC	Tanana Chiefs Conference
UAF	University of Alaska Fairbanks
VPSO	Village Public Safety Officer

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# Chapter 1: Introduction

## What is a CEDS?

A Comprehensive Economic Development Strategy (CEDS) is a tool for community based and regionally driven economic planning, with strategies and an implementation plan for creating stronger and more resilient communities, regions, and states. CEDS are often required to be eligible for federal and grant funding. CEDS go through a robust update every five years, with smaller updates prepared annually.

A CEDS provides an overview of economic indicators and identifies projects and actions that will 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 economic development potential of the region. Tanana Chiefs Conference and its member Tribes and communities will use the CEDS to collaborate and work strategically to leverage the resources and strengths of the region.

### Coming Soon: TCC Economic Recovery Plan

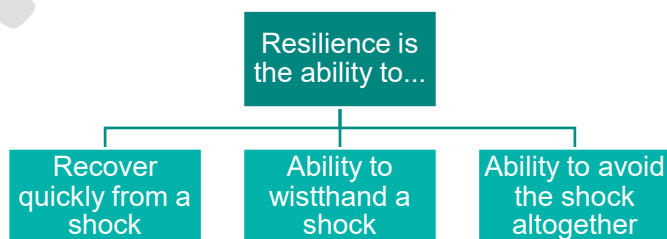
In late 2020, TCC was awarded funds by the U.S. Economic Development Administration to develop an Economic Disaster Recovery and Resiliency Plan. The purpose of the plan is to quantify the economic impacts of the COVID-19 pandemic in the TCC region, and to provide a roadmap of goals, objectives, and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

An effective CEDS should also address resilience and where appropriate, recovery-focused policies. As such, following the release of this public review draft, the project team will develop additional recovery-focused content to supplement the CEDS, including pandemic-focused data, pandemic response strategies, and a summary of recovery resources. The complete CEDS and Recovery Plan will also be released for public comment in the spring of 2022.

## Resilience and Recovery

### Economic Development Administration Definition

According to the U.S. Economic Development Administration, 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 a return to what was “normal” before the disturbance. TCC partners cited the reopening and return to normal operations for schools and local businesses as crucial in this respect. Still, for all

*“Interior people are adaptable.”*  
*“I’d like to see more robust planning for future events, pandemics, and disasters.”*  
-CEDS Committee Discussion

TCC communities, the pre-pandemic baseline is generally not a sufficient target. The influx of COVID relief funds and new federal funding for transportation, broadband, and other infrastructure provide an opportunity to kickstart local economies and reduce 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 and recover from disturbances that will inevitably occur. Resilience can also include building 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 not only providing the infrastructure, resources, and training that will grow local capacity and self-reliance, but also supporting the things people are already doing to make their families and communities strong. Investing in youth and preparing the next generation to take on leadership roles is central to this goal.

*“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?

Tanana Chiefs Conference (TCC) developed this CEDS Update with assistance from Agnew::Beck Consulting, Information Insights, and Northern Social-Environmental Research. See the appendix to learn more about the planning process.

Tanana Chiefs Conference (TCC) is organized as *Dena’ Nena’ Henash* or “Our Land Speaks”; an Alaska Native non-profit 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 non-profit 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 and employment, public safety, and natural resource programs. TCC also provides for public safety through Alaska’s Village Public Safety Officer (VPSO) program.

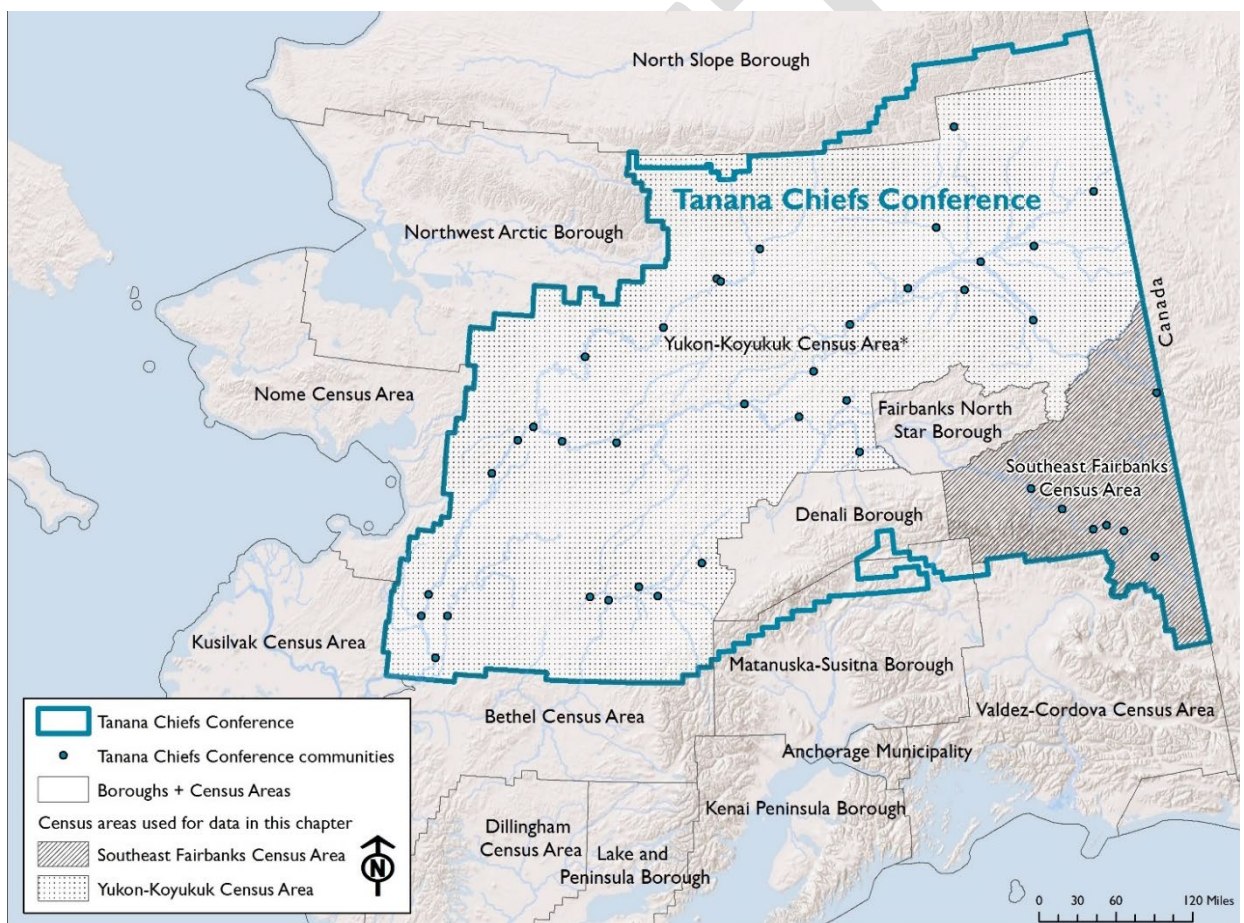
Learn more about Tanana Chiefs Conference at [www.tananachiefs.org/](http://www.tananachiefs.org/)

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

## Project Area Overview

The TCC region covers an area of 194,500 square miles, which is equal to about 30 percent of the entire state of Alaska (Figure 1). It shares boundaries with Doyon, Limited, the ANCSA regional corporation. The TCC outlining borders were set by the passage of ANCSA in 1971. 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 1, the TCC region overlaps with all or part of the Fairbanks North Star Borough (FNSB), Denali Borough, Matanuska Susitna Borough, and the North Slope Borough. However, no TCC communities are in the boundaries of these boroughs. The FNSB creates their own CEDS; the FNSB CEDS is currently going through a five-year update.<sup>1</sup>

**Figure 1: Maps of the Tanana Chiefs Conference, Boroughs and Census Areas**



Map produced by Agnew::Beck Consulting

<sup>1</sup> 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, 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

## 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; this section will be expanded with action planning details during the next phase of planning

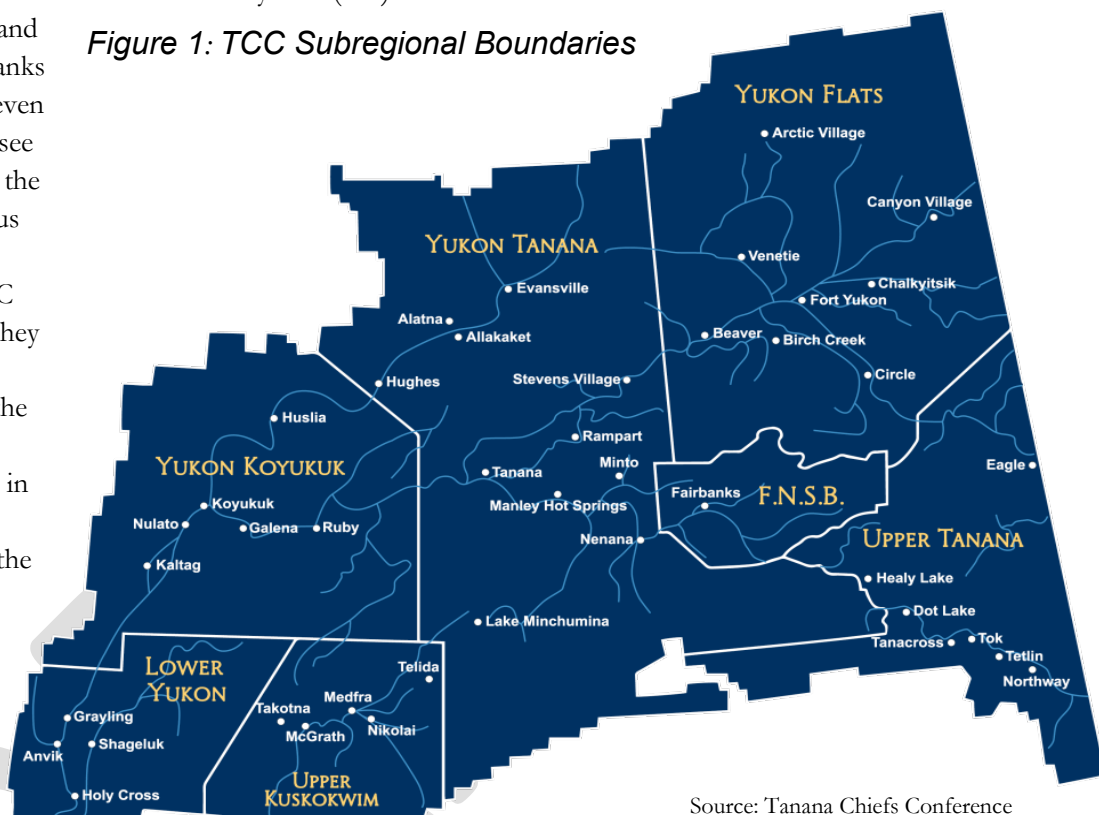
## Appendix (coming soon)

- Survey results, outreach materials and detailed background data

# 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 1). In some instances, we have presented data by subregion. In other cases, we have used census areas to identify general socioeconomic trends in the region. 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 (see Figure 2). 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. For additional data, see the appendix.

Figure 1: TCC Subregional Boundaries



Source: Tanana Chiefs Conference

Figure 2: 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.

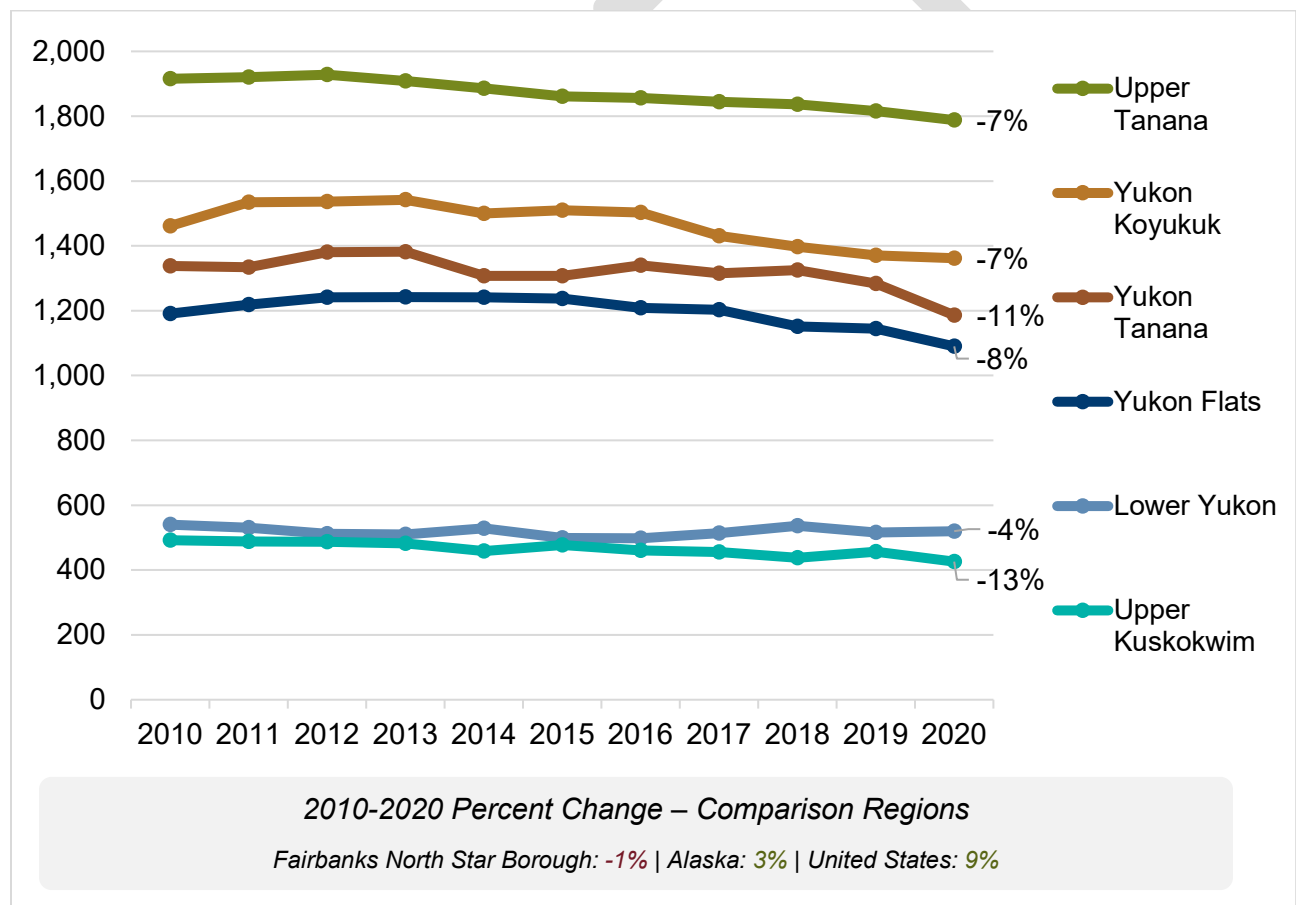
NOTE: While not formally a TCC community, the Village of Anaktuvuk Pass is a member of the TCC/Indian Health Service compact and has a TCC partner clinic. Anaktuvuk Pass is in the North Slope Borough.

# Population

**Key Takeaway: The TCC region population declined by 8 percent between 2010 and 2020.**

- 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%).

Figure 3. Population Trends across Tanana Chiefs Conference Subregions, 2010-2020



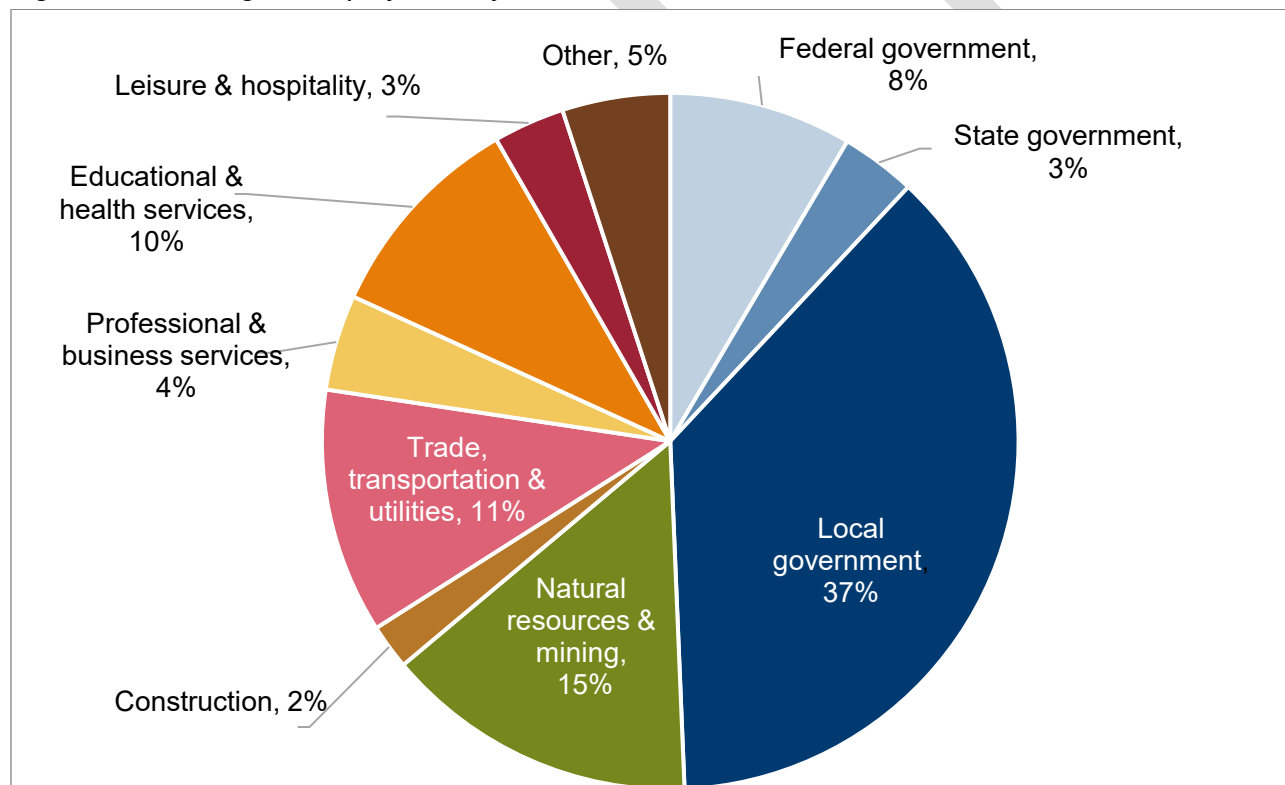
Source: Alaska Department of Labor and Workforce Development, Research and Analysis, Alaska Population Estimates by Borough, Census Area, City, and Census Designated Place (CDP), 2010 to 2020

## Economy

**Local government is the largest employment sector in the TCC region, providing 37 percent of total employment; this sector has grown since 2014.**

- 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%).

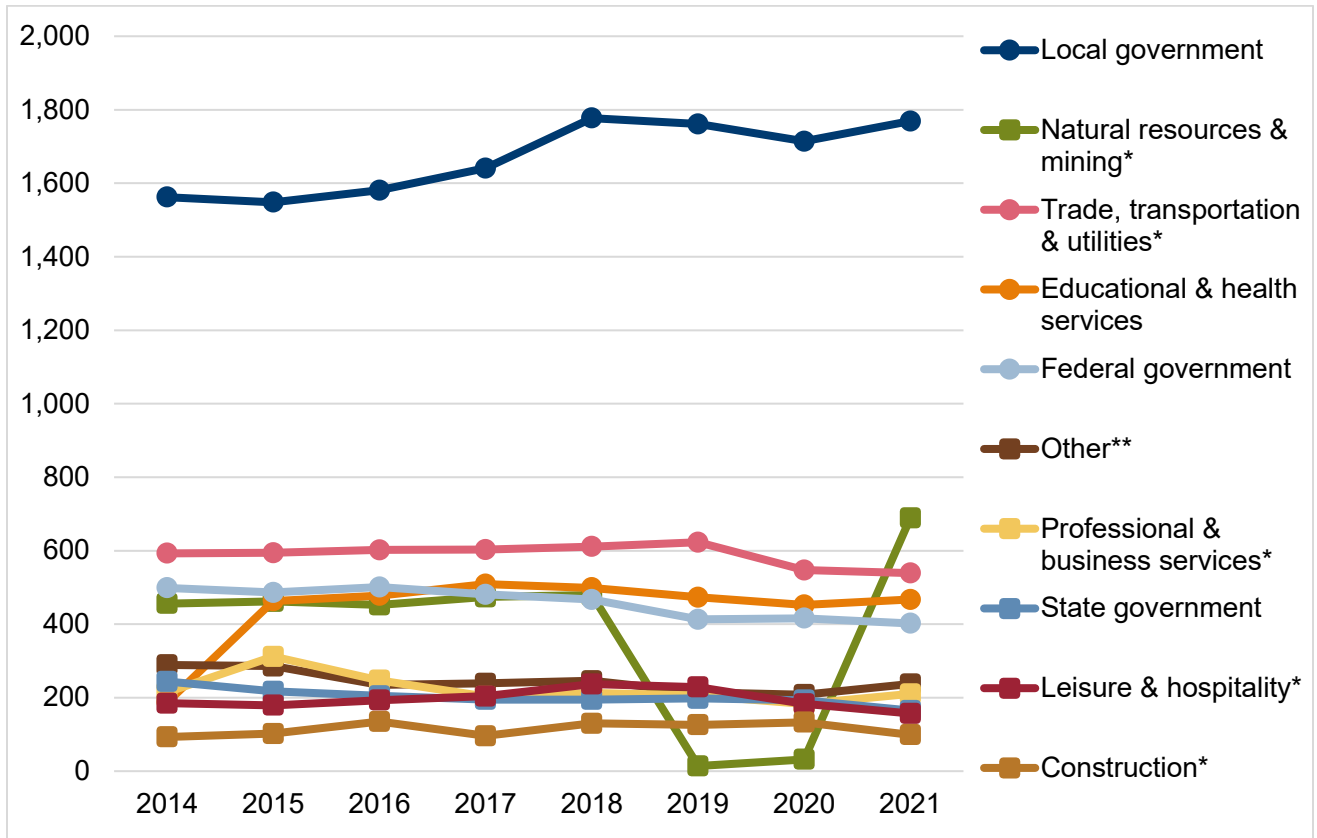
Figure 4. TCC Region Employment by Sector, 2021



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 5. 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 the case 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 5. This likely accounts for the extreme variation in natural resources & mining employment in Figure 5.

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

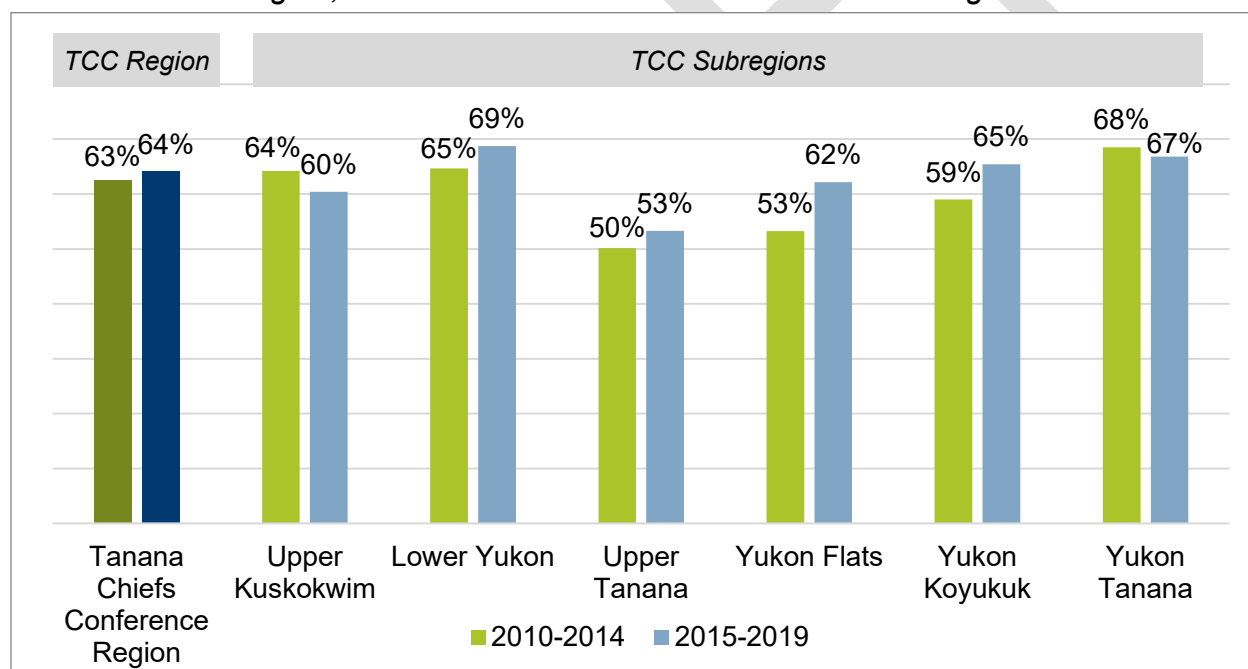
Source: Alaska Department of Labor and Workforce Development, Research and Analysis, Quarterly Census of Employment & Wages (QCEW), 2014-2021. <https://live.laborstats.alaska.gov/qcew/index.html>

## Labor Force

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

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



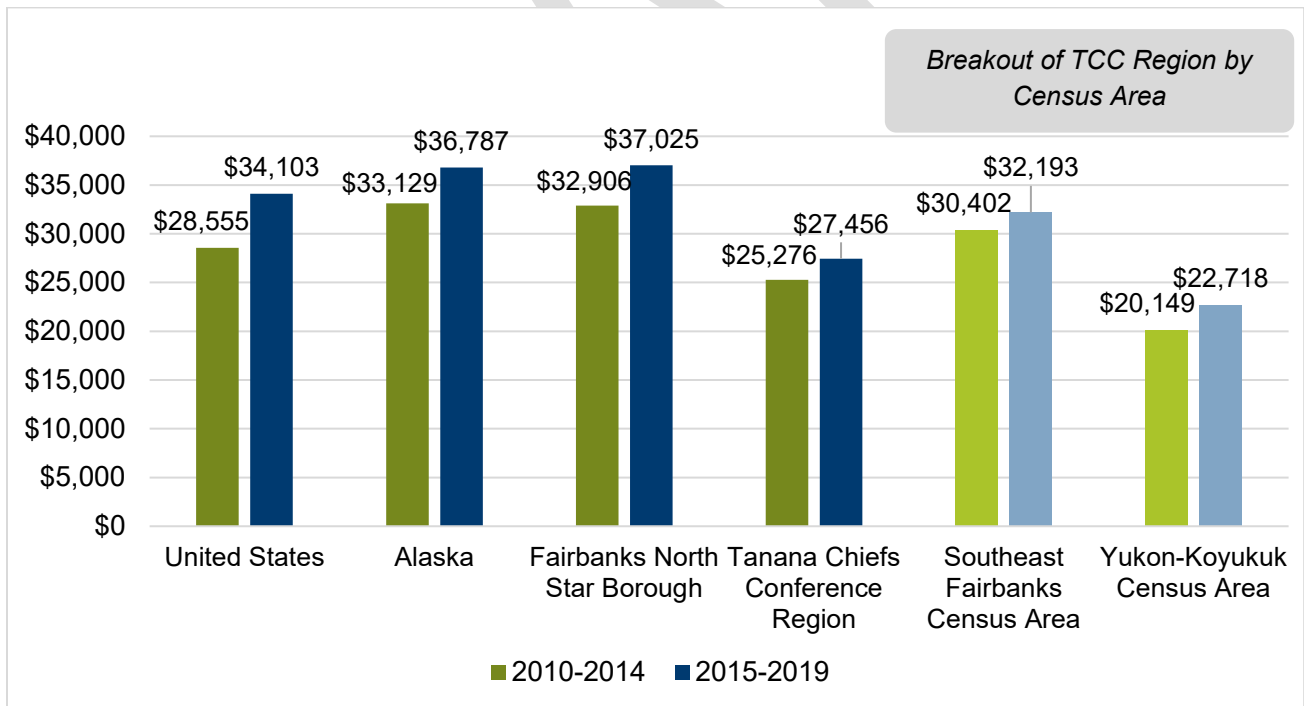
“Tanana Chiefs Conference” Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

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.**

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



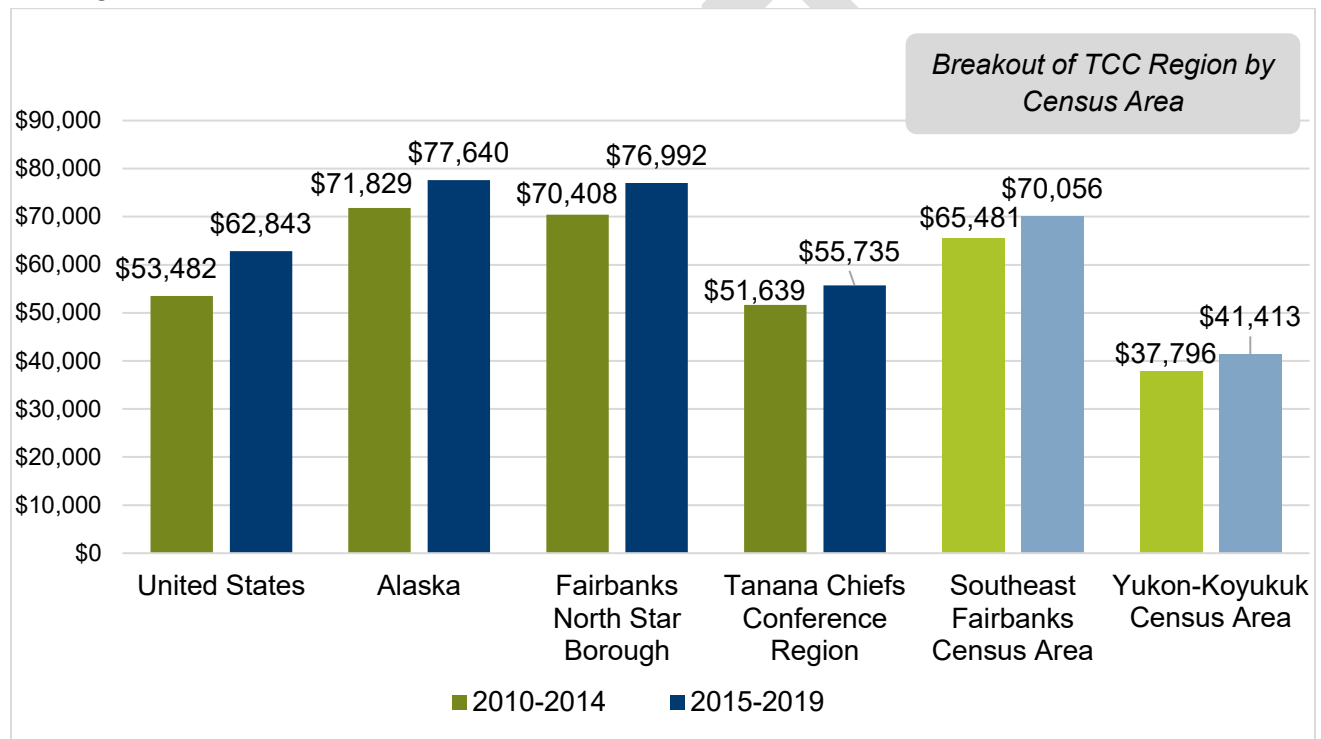
“Tanana Chiefs Conference” Region is defined as the average between Yukon-Koyukuk and Southeast Fairbanks census areas.

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.**

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



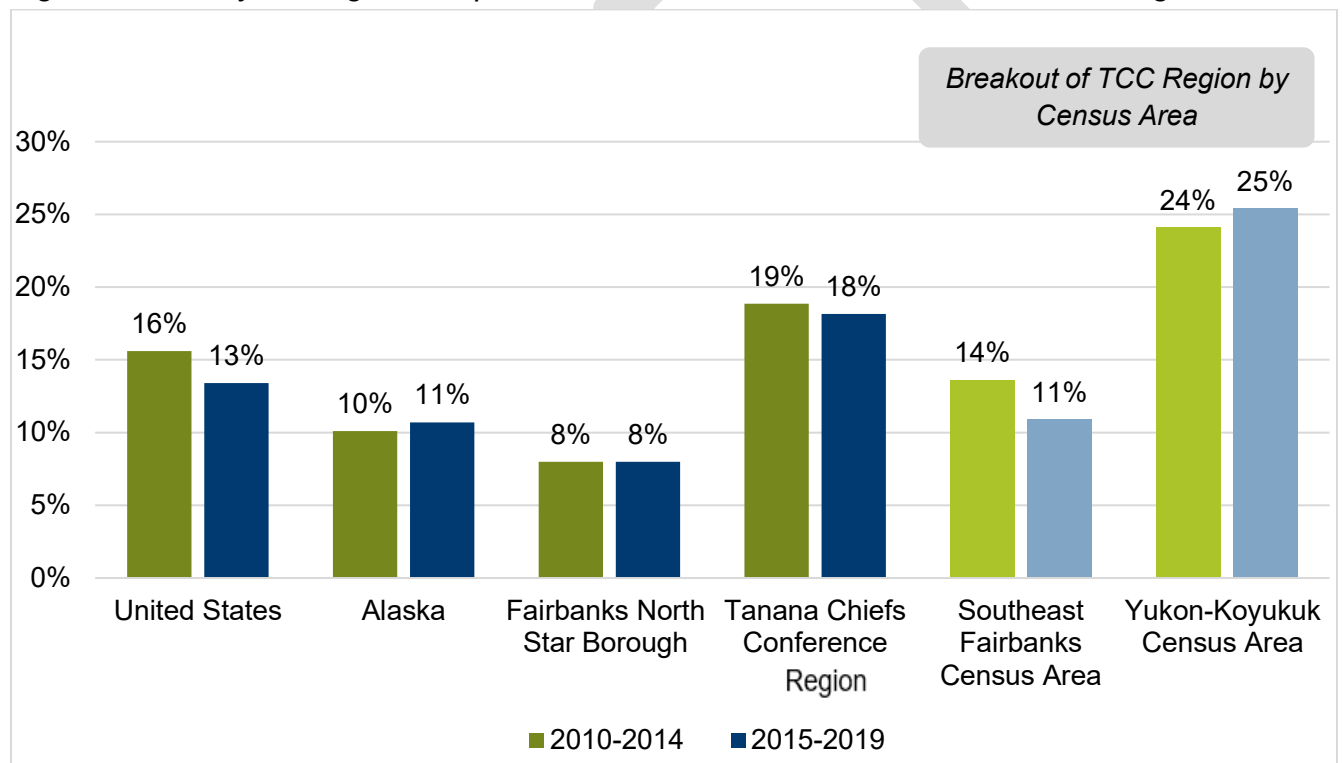
Source: U.S. Census Bureau, ACS 5-Year Estimates Detailed Tables

“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.**

- 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 9. Poverty Among All People, 2010-2014 and 2015-2019 Five-Year Averages*



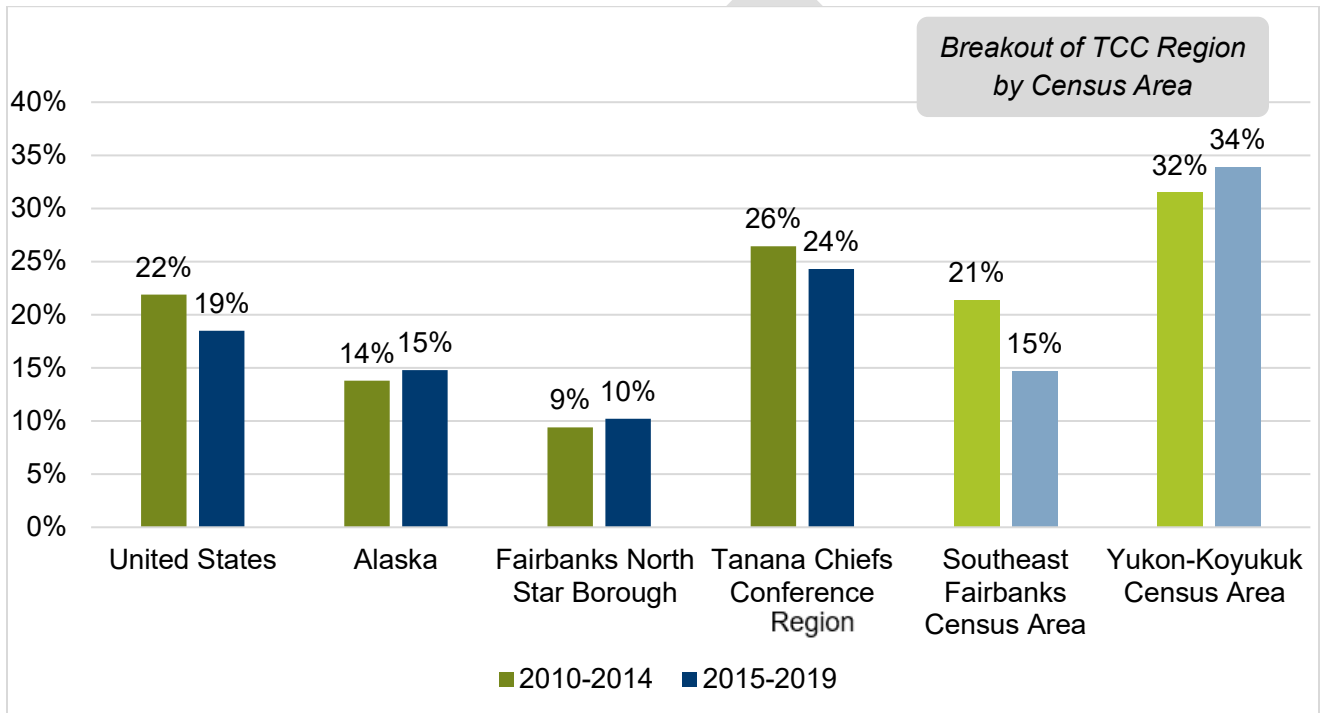
Source: U.S. Census Bureau, ACS 5-Year Estimates Detailed Tables

“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.**

- 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 11. Poverty Among Those 18 Years Old and Under, 2010-2014 and 2015-2019 Five-Year Averages**



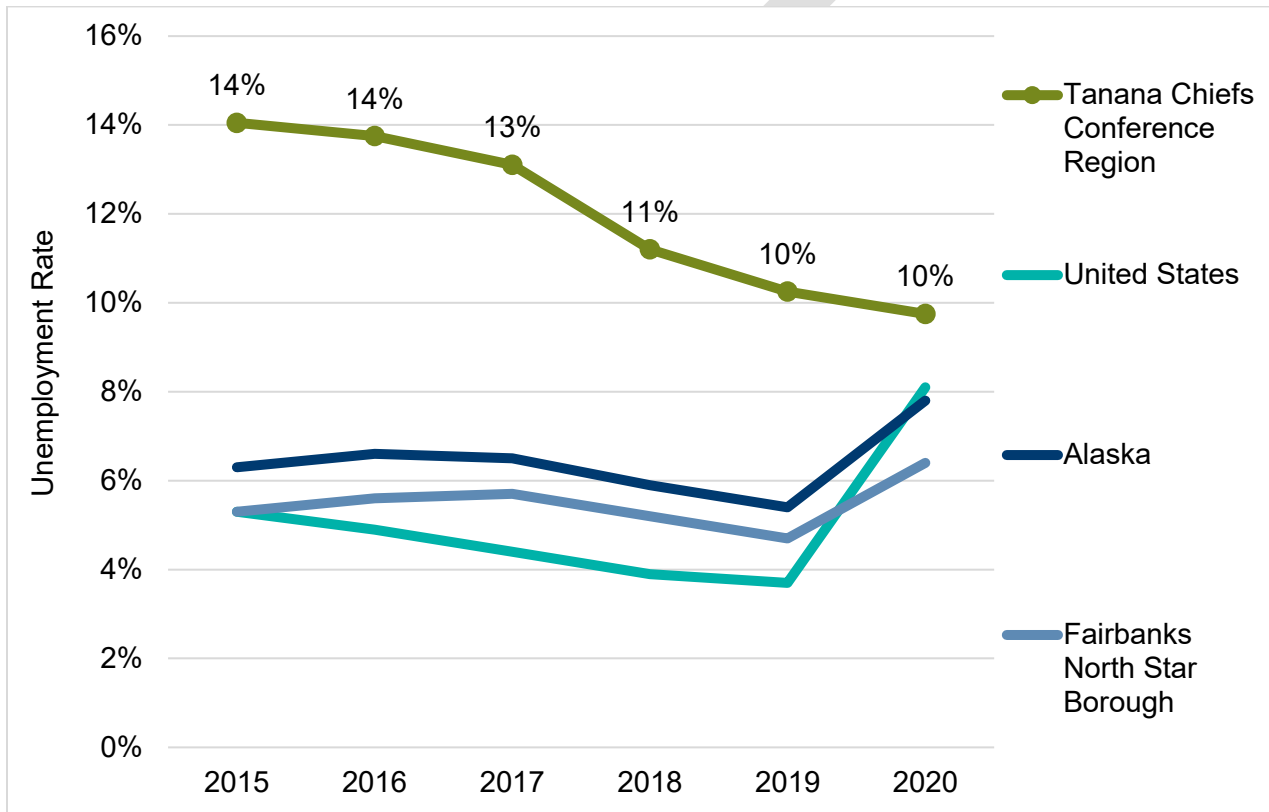
Source: U.S. Census Bureau, ACS 5-Year Estimates Detailed Tables

“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.**

- In 2015, the TCC region experienced rates of unemployment 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 as a whole, while appearing to have a lesser impact on TCC region employment.

*Figure 12. Average Annual Unemployment Rate, 2015-2020*



Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section, Unemployment rates, U.S., Alaska, and Borough and Census Areas (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

The Yukon-Kuskokwim and Southeast Fairbanks Census Areas make up the unorganized borough 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 the Alaska Reorganization Act was passed by Congress, federally recognized Tribes were formed and organized throughout Alaska, including Interior Athabaskan villages. Although not government 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 both 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.<sup>2</sup>

## 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, there are approximately 16,654 pre-K to high school students 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.

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

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

## Natural Resources

### Subsistence

The TCC region is minimally connected to the road system and helps make up the 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.<sup>3</sup>

The Yukon and Koyukuk Rivers are major drainages in the TCC 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 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 compared to Chinook. Chum salmon are primarily used to feed sled dogs which are common in many TCC region villages. During the 1980s, TCC region residents were able to 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 exploration and prospects on the Lower and Upper Tanana River and the Middle and Upper Yukon River. Doyon, Limited has recently began joint venture mining exploration programs with junior mining companies, located in the Upper Tanana and Upper Yukon Rivers on Doyon-owned lands.

### Forestry

There is one state forest south of Tok on the Tok Cutoff Highway, and at least one timber harvesting business operates in the area. 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.

### 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,

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<sup>3</sup> Alaska Department of Fish and Game: Wild Harvest Notebook. 2019.

plus the smaller Clear Air Force Base and Fort Greely. Roughly two million acres (one percent of the land area) within Interior Alaska is military owned. Approximately three percent of the labor force is employed in the armed forces.

## 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; in general, 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.

There are several new transportation projects 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/>.
- Yukon-Kuskokwim Energy and Freight Corridor Plan, which 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. This project is being led by the Association of Village Council Presidents. Learn more at <https://www.avcp.org/tribal-resources/yk-corridor/>.

### 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 which 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 providing significant kW hour power generation community-wide, helping displace expensive diesel-power generation. Some TCC villages are members of the Alaska Village Electric Cooperative, while many others are served by Alaska Power and Telephone.

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.

# Chapter 3: Regional SWOT Analysis

To develop 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.”<sup>4</sup> The TCC region can accomplish this by leveraging the region’s existing strengths and opportunities, and by mitigating weaknesses and potential threats.

## Key Themes from the SWOT Analysis

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

## 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.
- Most TCC villages have a current community plan.

*“Our tribes, regional & subregional, works together for solutions of mutual benefit with TCC as moderator.”*

- Survey Participant

<sup>4</sup> 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>

- 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 and include 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.

*“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.
- 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.

*“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

- Some communities are taking 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. Local resident hunting and guiding has 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.<sup>5</sup>
- The region has significant renewable energy resources including large potential for solar and biomass.

*“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 scholarships to shareholders for both vocational/technical and higher education programs.
- The region’s Alaska Native corporation, Doyon, Limited is the largest private landowner in Alaska with 12.5 million acres of land and 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.
- 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.

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

- Interview Participant

<sup>5</sup> U.S. Bureau of Labor Statistics, 2021 Quarterly Census on Employment and Wages.

- The Iditarod Sled Dog race brings visitation, tourism, and publicity to TCC communities along the middle Yukon River Iditarod route.

## 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, who 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 Indian Health Service 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

- The region’s Alaska Native corporation, Doyon, Limited is the largest private landowner in Alaska with 12.5 million acres of land and over 19,000 shareholders.
- Village corporations own a combined 3.6 million acres in TCC villages.
- All TCC region village corporations except for 10 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 10 villages have made partial conveyances, according to a Municipal Land Trust Office annual report from 2019.
- 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.

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

- Survey Participant

*“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 about community development projects. Competitive federal and state grant opportunities often exacerbate this lack of communication between villages.

*“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; these challenges have been exacerbated by the pandemic.
- 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. This intergenerational trauma has been exacerbated by the pandemic.
- Villages in the region have limited early education programs and a shortage of childcare. Access to childcare was further reduced during the pandemic, 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 available housing, high living costs, 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.

*“We need childcare for working single parents. Also more substance abuse resources.”*

- Survey Participant

### 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, non-Tribal and traditional hunters and fishermen.
- Households in the region have a heavy reliance on fish and game populations, which 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.

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

- Survey Participant

- 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.

## Business and Workforce Development – Weaknesses

- 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).<sup>6</sup>
- 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.<sup>7</sup> 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 in nature, with unemployment often rising during the winter months.
- 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 existing job opportunities, many are entry-level and minimum wage. Employers in the region experience challenges attracting and retaining qualified employees but 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, with a larger proportion of the TCC region population not completing high school, and a smaller proportion having earned a Bachelor’s degree or higher when compared with the state average.<sup>8</sup>

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

- Interview Participant

## Infrastructure – Weaknesses

- The region lacks reliable broadband connectivity and cell phone service. This has become an amplified challenge during the pandemic. Many residents are not adequately equipped to work from home, participate in distance education and training, or conduct basic business functions.
- 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

*“Make sure communities have reliable internet for school and video conference meetings.”*

-Survey Participant

<sup>6</sup> U.S. Census Bureau: 2015-2019 American Community Survey Five-Year Estimates.

<sup>7</sup> U.S. Census Bureau: 2015-2019 American Community Survey Five-Year Estimates.

<sup>8</sup> U.S. Census Bureau: 2015-2019 American Community Survey Five-Year Estimates.

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 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, and still most communities do not have 100% residential water and sewer service delivery for each occupied household.<sup>9</sup>
- Construction costs are expensive due to high shipping and transportation charges and short summertime seasons. During the construction season, there is often a shortage of workers, due to a lack of a fully trained and experienced local workforce.
- The construction and maintenance equipment in many TCC villages is old and in need of 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 high shipping costs of bringing in more modernized equipment.
- Many Tribal office buildings and community halls were built in the 1970s and 1980s and are now in poor condition, with expensive repairs needed and high energy costs.
- Postal mail service is often slow and unreliable.
- There are only 10 communities in the TCC region that are road accessible, and of those, several are only accessible in the summer months. Air and barge transportation are 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.

*“The cost of living is high in our village.”*

- Interview Participant

*“Distance it takes to get to some of our regions. 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 a limited availability of land, especially for residential housing. In many communities the only available land is owned by the corporation or city.
- Many communities face a lack of housing for VPSOs, teachers, and health professionals.

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

- Interview Participant

<sup>9</sup> 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=956417115e9e4ace8726cc865153ff03>

## 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, which is exclusive to Tribal governments’ local climate change adaptation and planning initiatives. Some funding sections include addressing erosion, permafrost thaw, and impacts to subsistence.
- There are several mining exploration operations on the Kuskokwim, Tanana, and Yukon Rivers, with several operated by joint venture with Doyon, Limited as the land- and subsurface landowner.

*“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

- Village and subregional-based wildland firefighting crews and support operations have recently been opened to private contractors, helping to streamline crew and support organization, training, and assignment to wildfire suppression activities.
- Locally sourced timber could be better utilized through the creation of sawmills, which would employ residents and provide lower cost building materials. Biomass projects in Galena, Hughes, Tanana, and Tok have been successful projects for both offering cash opportunities to residents, while lowering heating costs for public facilities like schools, washeterias, and local government offices for Tribes and city councils.
- 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.

*“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. There are at least two Alaska Native-owned cooperatives operating in the region, and there is plenty of funding availability, capacity, and need for more to organize.
- 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 to 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 see an increase in 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 acknowledgement and respect for Tribal lands, Tribal sovereignty, rural resident subsistence and other Tribal member priorities.

*“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 2020, 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 is expected to double over the next 20 years. This increase in the senior population will likely result in an increased 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 the year 2065 will increase an additional four to eight degrees.<sup>10</sup> Climate change brings many additional impacts to the region, including melting permafrost, negative changes on subsistence resources, erosion for communities along waterways, increase soot and air quality impacts, increased wildfire risk and changing weather conditions, and effects on winter travel routes. 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.

*“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

- 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.
- 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.
- 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.<sup>11</sup>
- 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.
- Mining and resource extraction efforts in the region are a potential source of income but 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.

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

- Survey Participant

## Business and Workforce Development – Threats

- Given the recent State of Alaska budget deficits, there will likely be some combination of an income tax, a sales tax, reduced Permanent Fund dividends or other changes that will impact household income for all Alaska residents. Other state policy changes may impact the ability to recruit, retain and expand businesses in the interior.

<sup>10</sup> Fourth National Climate Assessment Volume II, Chapter 26: Alaska. 2018. Published by the U.S. Government Publishing Office. Available at <https://nca2018.globalchange.gov/>

<sup>11</sup> Alaska Earthquake Center. *Why Earthquakes Happen in Alaska*. 2015. Available at <http://earthquake.alaska.edu/earthquakes/about>.

## Infrastructure – Threats

- TCC communities heavily rely on federal funding, including resources for Tribal transportation projects, and other state and federally funded 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. Stand-alone 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

- High cost of living makes it harder for residents to remain in the region and threatens quality of life.
- Heavy reliance on federal funding for Tribal programs, including housing programs that have independently been unsuccessful at meeting housing needs in the region.

*“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 1

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



#### Goal 2

- Strengthen Businesses and Develop a Stronger Workforce



#### Goal 3

- Support the Development, Maintenance, and Improvement of Critical Infrastructure



#### Goal 4

- Promote a Healthy Environment and Carefully Manage Natural Resources

### Priority Strategies

#### Broadband Connectivity



STRATEGY	WHY	MEASURES OF SUCCESS
<p>A. Establish reliable, fast, and affordable broadband connectivity in the region by implementing recommendations in the TCC Broadband Plan, prioritizing local ownership of communications infrastructure.</p>	<p>The pandemic has exacerbated the need for reliable, fast, and affordable broadband connectivity in the region. In the TCC CEDS survey, improving internet was the number one suggestion when asked about ways to support new and existing businesses. Dependable broadband is essential for delivery of primary and secondary education, 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.</p>	<ul style="list-style-type: none"> <li>• <b>Where this is at today:</b> forthcoming</li> <li>• <b>Where we want to be in five years:</b> Every resident will have the ability to purchase unlimited, high-speed internet packages for less than \$100 per month.</li> </ul>

## Natural Resource Careers



STRATEGY	WHY	MEASURES OF SUCCESS
<p>B. Encourage young people to pursue careers in natural resource sciences and management; establish a clearinghouse of trainings and employment opportunities in the sector.</p>	<p>“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 who are not from the region. Filling natural resource management positions by individuals who also are familiar with traditional ecological knowledge and subsistence practices can help advocate for and protect community interests.</p>	<ul style="list-style-type: none"> <li>• <b>Where this is at today:</b> forthcoming</li> <li>• <b>Where we want to be in five years:</b> forthcoming</li> </ul>

## Self-Governance



STRATEGY	WHY	MEASURES OF SUCCESS
<p>C. Move forward with self-governance efforts and independent control of Tribal funds by providing education, advocacy, and support to TCC Tribes.</p>	<p>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 can negotiate with select federal agencies (Department of Interior, Indian Health Service, and Department of Transportation) to operate their own programs.</p>	<ul style="list-style-type: none"> <li>• <b>Where this is at today:</b> forthcoming</li> <li>• <b>Where we want to be in five years:</b> forthcoming</li> </ul>

# Energy



STRATEGIES	WHY	MEASURES OF SUCCESS
<p>D. Support development of energy efficiency improvements and alternative energy systems by creating a Community Energy Action Plan for each TCC community.</p> <p>E. Advocate for continuation of the Power Cost Equalization program.</p> <p>F. Form regional purchasing groups to conduct bulk fuel purchases to increase purchasing power and help lower fuel prices.</p> <p>G. Support the public-private partnership Interior Energy Project and related efforts to bring natural gas heat and power generation to Interior Alaska.</p>	<p>Energy costs in the region remain high and contribute to high costs of living. 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.</p>	<ul style="list-style-type: none"> <li>• <b>Where this is at today:</b> four completed community energy action plans (Birch Creek, Minto, Nikolai, Tanacross)</li> <li>• <b>Where we want to be in five years:</b> every TCC community has a community energy action plan.</li> </ul>

# Aviation Operations



STRATEGY	WHY	MEASURES OF SUCCESS
<p>H. Establish an airline working group to research the feasibility of starting a Tribal airlines operation.</p>	<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. The need for increased and more affordable air service could potentially be met by a local airlines operation. Aviation-related occupations (pilots, mechanics, etc.) generally pay high wages; ideally these jobs are filled by local residents.</p>	<ul style="list-style-type: none"> <li>• <b>Where this is at today:</b> forthcoming</li> <li>• <b>Where we want to be in five years:</b> forthcoming</li> </ul>

## Regional Collaboration



STRATEGY	WHY	MEASURES OF SUCCESS
<p>I. 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.</p>	<p>TCC regional organizations have unique missions and membership. However, there are likely shared regional priorities that could be more effectively advanced with unified support and collaborative efforts around implementation. An annual Economic Summit would be an opportunity to identify priorities and determine how to most effectively work together to achieve them.</p>	<p>A shared annual list of priority projects supported by all participating members.</p>

## Childcare Expansion



STRATEGY	WHY	MEASURES OF SUCCESS
<p>J. Expand the availability of childcare by promoting training and business opportunities in the sector, including encouraging residents to get trained and licensed as childcare providers.</p>	<p>Households in the region face a shortage of childcare. Access to childcare was further reduced during the pandemic, impacting working families and making it harder for households to practice subsistence. The lack of childcare creates barriers for parents who would otherwise choose to enter the workforce.</p>	<p><b>Where this is at today:</b> forthcoming</p> <p><b>Where we want to be in five years:</b> forthcoming</p>

## Forest Management



STRATEGY	WHY	MEASURES OF SUCCESS
<p>K. Manage local forests to maximize productivity of local biomass for heating and construction materials (potentially via shared wood lots) and to reduce threats from wildfires.</p>	<p>There are many advantages to increase access to biomass resources. 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 be used to 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.</p>	<p><b>Where this is at today:</b> forthcoming</p> <p><b>Where we want to be in five years:</b> forthcoming</p>

## Water-Sewer



STRATEGY	WHY	MEASURES OF SUCCESS
<p>L. 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.</p>	<p>There are 13 TCC villages categorized as “unserved communities” by the State of Alaska, or lacking water and wastewater services. There are many additional TCC communities with 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 sewer service, whether through in-home systems or piped delivery, is an essential improvement for health, safety, and quality of life.</p>	<p><b>Where this is at today:</b> forthcoming</p> <p><b>Where we want to be in five years:</b> forthcoming</p>

## Community Halls



STRATEGY	WHY	MEASURES OF SUCCESS
<p>M. Support planning initiatives for building and sustaining community halls and multi-purpose centers so villages have a central gathering space.</p>	<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 a standalone building, but some villages are moving toward multipurpose buildings which can contain spaces for Tribal offices, local businesses and meet other needs.</p>	<p><b>Where this is at today:</b> forthcoming</p> <p><b>Where we want to be in five years:</b> forthcoming</p>

## Other Strategies

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

### GOAL #1: 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.

#### Local Governance

4. 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.
5. Create a sustainable model to increase Tribal capacity for management and construction of capital improvement projects.
6. Work with Tribal councils to establish policies that promote transparent governance, with systems in place to fairly resolve conflicts.

7. Encourage efforts for co-management of local resources by village entities with federal and state fish, game, and land management agencies.
8. Improve communications and increase coordination between local community entities (Tribes, village corporations and municipalities).

## Housing

9. Investigate options to develop additional long-term care facilities for elders in underserved subregions.
10. Increase availability of affordable housing, including multi-family housing.
11. Support efforts to identify housing options for VPSOs, community health aides and teachers where necessary.
12. 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

13. Conduct culture, subsistence, and language learning programs, including activities that strengthen youth and elder communications by mentor-apprenticeship opportunities.
14. 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 #2: Strengthen Businesses and Develop a Stronger Workforce

### Business Development and Entrepreneurship

15. Develop and grow cultural and ecotourism.
16. Develop culturally appropriate resource development opportunities, like wildland firefighting crew organization and support businesses.
17. Support local agriculture, including the construction of greenhouses and community gardens.
18. Expand small business development by offering small business loans, training, and ongoing support.

### Workforce

19. 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.
20. Reduce barriers to training participation requiring travel, such as offering guidance and support for childcare, and providing stipends for room, board, and transportation costs.
21. Increase financial literacy in the region through youth-oriented classes in schools and adult-focused programs.
22. 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, childcare, computer skills, and renewable energy.
23. 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 #3: Support the Development, Maintenance, and Improvement of Critical Infrastructure

### Energy

24. Create subregional energy working groups with Tribal, public, and private sector partners to facilitate ongoing conversations around energy opportunities, challenges, and potential projects.
25. Support efforts to replace old diesel generators and upgrade community generator systems.

26. Construct a transmission line between Tok and Delta, connecting Alaska Power and Telephone with the Railbelt electrical grid.
27. Construct interties between nearby TCC region communities, including Tok-to-Northway and potentially a Nulato-to-Koyukuk intertie.
28. Establish solar-diesel battery systems throughout the TCC region.
29. Transition smaller standalone electric utilities to electric consortia.
30. Achieve targeted climate reductions through a large TCC renewable energy project (e.g., solar).

## **Transportation**

31. Support seasonal ice road construction and maintenance to improve winter access to villages.
32. Improve transportation routes and expedite delivery of goods and quality services to TCC villages.
33. Encourage better coordination between community entities to reduce transportation and shipping costs, such as by sharing air cargo charters and sharing heavy equipment and materials for projects.
34. Increase safety along snowmachine trails by increasing signage along key routes.
35. Identify cost-effective ways to improve village roads, including through equipment-sharing and road maintenance training.

## **Other Utilities**

36. Advocate for continuation of the bypass mail program and work with the U.S. Postal Office to ensure all villages have adequately staffed post offices.

## **Goal #4: Promote a Healthy Environment and Carefully Manage Natural Resources**

### **Emergency Preparedness and Mitigation**

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

### **Natural Resources**

39. Collect data on climate change impacts to subsistence harvests within the region.
40. Encourage Tribal members and community environmental coordinators to participate in ANTHC's Local Environmental Observer (LEO) network.
41. Encourage residents to pursue subsistence as a means of self-employment and self-sufficiency.
42. Advocate for increased local involvement in conversations around potential mining and resource extraction projects.
43. Develop tools to assess and clearly communicate the economic value of subsistence harvesting and other traditional cultural practices.