

Alaska Statewide

Comprehensive Economic Development Strategy 2022-2027



October 2022

Alaska Department of Commerce, Community, and
Economic Development

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I. INTRODUCTION

Dutch Harbor

Photo by Bill Jacobson

Alaska 2022-2027 Strategic Plan Introduction

Introduction

The Alaska Statewide Comprehensive Economic Development Strategy (CEDS) is a five-year economic development plan for Alaska, active from 2022-2027. Driven by the need to improve the resilience of the state's economy and intentionally lay a foundation for future growth, this plan follows the U.S. Economic Development Administration's Comprehensive Economic Development Strategy (CEDS) guidelines. It takes the place of the prior Statewide CEDS, which was in effect from 2017 to 2022.

Developed between January and July of 2022, the present Statewide CEDS reflects different, but still challenging, economic circumstances than the prior CEDS written in 2016 and 2017. At that time, Alaska faced a recession due to low oil prices, causing employment loss, outmigration, and reduced state government revenues. As of mid-2022, the state economy is recovering from the COVID-19 pandemic and reeling from macroeconomic headwinds in the form of inflation, supply chain challenges, and labor scarcity.

The State of Alaska Department of Commerce, Community, and Economic Development (DCCED) oversaw the development of the 2022-2027 Alaska Statewide CEDS, in partnership with the Alaska Development Team in the Governor's Office. The University of Alaska Center for Economic Development, under contract with DCCED, performed the background research, public process, and drafting of the document. A Strategy Committee, made up of state leaders from business, government, and the nonprofit sector, provided strategic guidance throughout the process.

The Alaska Statewide CEDS is the product of a six-month process reflecting extensive analysis of the state economy, the input of hundreds of Alaskans, and the involvement of dozens of business, government, education, and nonprofit leaders. Although led by state government, it is designed to be used broadly by anyone working to strengthen the Alaska economy.



Anchorage

Photo by Daniel Case

Vision

The Alaska Statewide Comprehensive Economic Development Strategy provides an equitable and unified approach to a competitive business environment, growth of the state's Economic Engines and Emerging Industries, and an enduring economic structure where all Alaskans can actively participate and benefit.

Mission

To create a shared approach to Alaska's future prosperity that is locally based, regionally driven, and state connected.

Inspire

The goals and strategies laid out in this CEDS are rooted in extensive evaluation of the state's economic situation and have been vetted through a public process and guided by a vision of being locally based, regionally driven, and state connected. By presenting an analysis of Alaska's economic challenges, opportunities, and strategic directions, this CEDS may inspire civic leaders in the state to act in thoughtful ways that promote opportunity and support a cohesive strategy.

Invest

This strategy will be used to attract greater investment in Alaska from public and private sources. Federal agencies often require a CEDS or other broadly recognized strategic plan to be in place as a prerequisite for certain types of grant funding. Grants can then be utilized to leverage investment from the private sector to produce jobs and sustained economic growth.

Collaborate

Many (but not all) regions of Alaska already have robust CEDS plans in place. A primary reason for the development of the Statewide CEDS is to connect local and regional strategies from the "bottom up" and encourage collaboration between them. Most of the state's industries span more than one region, as do its foundational gaps like affordable housing. In these cases, collaborative statewide strategies may be required to make progress.

CEDS Strategy Committee

State/Local Government and Education

Alan Weitzner, Executive Director, Alaska Industrial Development and Export Authority

Andrea Noble, Executive Director, Alaska State Council on the Arts

Bill O'Leary, CEO, Alaska Railroad Corporation

Curtis Thayer, Executive Director, Alaska Energy Authority (AEA)

D.J. Fauske, Director, Government & External Affairs, North Slope Borough

Dr. Nettie La Belle-Hamer, Vice Chancellor for Research, University of Alaska Fairbanks

Gwen Holdmann, Associate Vice Chancellor for Research, University of Alaska Fairbanks

Jon Bittner, Executive Director, Alaska Small Business Development Center University of Alaska Anchorage

Kyla Pomrenke, Acting Executive Director, Alaska Workforce Investment Board

Mark Billingsley, Director, Office of Intellectual Property and Commercialization, University of Alaska Fairbanks

Mark Romick, Deputy Executive Director, Alaska Housing Finance Corporation

Mike Brown, Borough Manager, Matanuska Susitna Borough

Milton Keeter, Jr., CEO, Alaska Aerospace Corporation

Steve Noonkesser, Superintendent, Southwest Region School District Alaska Broadband Task Force

Steve Ribuffo, Port Director, Port of Alaska

Trudy Wassel, Division Operations Manager, Ted Stevens Anchorage International Airport

Alaska Regional Development Organizations (ARDORs)

Barbara Nickels, Program Director, Bering Strait Development Council

Bill Popp, President & CEO, Anchorage Economic Development Corporation

Brittany Smart, Special Assistant to the Mayor, Fairbanks North Star Borough Economic Development Commission

Fritz Westlake, Director of Community and Economic Development, Northwest Arctic Borough Community & Economic Development Department

Jason Hoke, President of the Board, Copper Valley Development Association

Kristin Carpenter, Executive Director, Prince William Sound Economic Development District

Robert Venables, Executive Director, Southeast Conference

Shirley Marquardt, Executive Director, Southwest Alaska Municipal Conference

Tim Dillon, Executive Director, Kenai Peninsula Economic Development District

Business, Industry, and Nonprofit Associations

Alec Mesdag, Vice President, Alaska Electric Light & Power

Alicia Amberg, Executive Director, Associated General Contractors of Alaska

Amy Seitz, Executive Director, Alaska Farm Bureau

Ana Hoffman, Co-Chair, Alaska Federation of Natives

Chris Rose, Executive Director, Renewable Energy Alaska Project (REAP)

Christine O'Connor, Executive Director, Alaska Telecom Association

Dan McCue, President, Alaska Credit Union League

David Karp, Senior Vice President, Saltchuk Family of Companies

Deantha Skibinski, Executive Director, Alaska Miners Association

Hallie Bissett, Executive Director, Alaska Native Village Corporation Association

Hans Vogel, President/CEO, Triverus/Trijet

Isaac Vanderburg, CEO, Launch Alaska

Joe Michel, Executive Director, Alaska Trucking Association

Julie Decker, Executive Director, Alaska Fisheries Development Foundation, Alaska Mariculture Alliance

Kara Moriarty, CEO, Alaska Oil and Gas Association

Kati Capozzi, CEO, Alaska Chamber of Commerce

Laurie Wolf, President & CEO, The Foraker Group

Leila Kimbrell, Executive Director, Resource Development Council

Mike Huston, Chief Lending Officer, Northrim Bank, Alaska Bankers Association

Rebecca Logan, CEO, Alaska Support Industry Alliance

Scott Habberstad, Board Chair, Alaska Travel Industry Association (ATIA)

Tanya Kaquatosh, Senior Vice President, Doyon, Ltd.

Tessa Axelson, Executive Director, Alaska Forest Association

Tracy Welch, Executive Director, United Fishermen of Alaska

Elected Officials

Calvin Schrage, State Representative, District 25

Dan Ortiz, State Representative, District 36

Jesse Kiehl, State Senator, District Q

Robert Myers, State Senator, District B

CEDS GOAL AREAS

Goals

The following six goals emerged from the process of analyzing Alaska's current economic situation, and systematically gathering feedback and input from stakeholders around the state. Each goal can be thought of as a broad "bucket," further broken down into objectives and actions that are SMART: specific, measurable, achievable, relevant, and time-bound.



Strengthen Economic Engines. Economic Engines is the term used throughout this CEDS to describe Alaska's major basic sectors, which bring money into the state by selling goods or services outside of it. They include oil and gas, mining, seafood, tourism, defense, air cargo, and forestry.



Cultivate and Grow Emerging Sectors. Emerging Sectors are those small or nascent industries with high growth potential based on Alaska's competitive advantages. They include mariculture, aerospace, energy technology, and agriculture, among others, which have the potential to diversify the state economy and ultimately become Economic Engines.



Support a Strong Business Climate and Entrepreneurial Ecosystem. Industries large and small depend on a climate that makes a state a good place to start and run a business. This goal is concerned with these factors, including access to capital and training for entrepreneurs.



Build and Update Economic Foundations. Economic Foundations are the assets and elements like infrastructure (including broadband), housing, quality of life, and cost of living that must be in place for any commercial activity to take place. These factors are not specific to one industry, but broadly support all economic activity.



Develop Alaska's Workforce and Human Capital. Economies exist for the good of the people and depend upon a workforce that is prepared and well-trained. This goal strives to improve the readiness of the workforce to permit the greatest possible opportunity to make a good living and meet the needs of an expanding economy.



Build a Resilient Economy. Resilience relates to the ability of an economy to avoid or withstand negative events like natural disasters or recessions. It includes proactive and responsive measures to reduce harm to workers, employers, and communities.

CEDS goal icons by Averyl Veliz

ALASKA 2022-2027 STRATEGIC PLAN SUMMARY

In October 2022, the State of Alaska released the Alaska 2022-2027 Comprehensive Economic Development Strategy. The State Strategy Committee oversaw the development of 6 goals and 49 objectives for the 49th state, along with economic analysis and a SWOT summary. The inclusive planning processes represents input from small businesses, industries, tribes, Native organizations, municipalities, education institutions, nonprofits, and elected officials involved in various elements of the planning process. The Plan's goals and objectives are listed below.

STRENGTHEN ECONOMIC ENGINES

Regulatory: Ensure a stable and predictable regulatory, permitting, and tax structure for the development of natural resources.

Oil & Gas: Develop Alaska's North Slope natural gas and heavy oil.

Stranded Resources: Improve access to facilitate the development of stranded resources.

Mining: Expand exploration for, and production of, critical minerals.

Alternative Energy: Develop alternative, low-emission uses for existing natural resources

Military: Attract new public and private investment in Alaska's defense sector.

Timber: Revitalize Alaska's forest products industry.

Air Cargo: Leverage the state's international air cargo hub to grow new business opportunities.

Seafood: Maximize the value of Alaska's seafood industry

Tourism: Grow and develop Alaska as a world-class visitor destination.



CULTIVATE & GROW EMERGING SECTORS

Mariculture: Accelerate the growth of mariculture production for shellfish, kelp, and aquatic plants.

Aerospace: Develop an in-state aerospace sector based on space launches, unmanned aircraft, and aviation technology.

Agriculture: Grow Alaska's agricultural output and value to increase food security, substitute for imported food, and develop export products.

Maritime: Expand the maritime industrial sector to perform more boat and ship building and repair work in-state.

Manufacturing: Expand the capacity of Alaska's manufacturers to substitute imported products as well as expand to markets outside the state.

Minerals: Position Alaska as a key processing location for critical minerals.

Sustainable Energy: Develop Alaska as a global center of clean, sustainable energy innovation to attract and grow innovative firms.



SUPPORT A STRONG BUSINESS CLIMATE & ENTREPRENEURIAL ECOSYSTEM

University: Utilize the assets of the University of Alaska System to grow knowledge-economy firms in Alaska.

Training: Ensure the availability of advising, training, and technical assistance services to small businesses.

Start-ups: Increase the number of investable startup companies based in Alaska.

Access to Capital: Ensure adequate access to capital for Alaska's small businesses and entrepreneurs.

Technical Expertise: Enhance the digital competencies of Alaska's businesses and entrepreneurs.

Inclusivity: Continue to support programs for rural business enterprises, minority, women-owned, and disadvantaged businesses.

Regulatory: Reduce the regulatory burden on small businesses and entrepreneurs.

Entrepreneurs: Ensure a supportive business environment for startup companies.

Promote Alaska: Promote Alaska's advantages as a place to do business.



BUILD & UPDATE ECONOMIC FOUNDATIONS

Broadband: Ensure access to broadband in all Alaska communities that meets an acceptable standard for speed, reliability, and affordability.

Ferries: Ensure the continuation of the Alaska Marine Highway System as a commercial artery for the communities of coastal Alaska.

Air: Preserve the Bypass Mail and Essential Air Service programs, which have a significant beneficial impact for Rural Alaska families and businesses.

Housing: Increase the supply of affordable housing for urban and rural communities throughout Alaska.

Marine Infrastructure: Upgrade and, where needed, expand port, harbor, and waterfront infrastructure.

Affordable Energy: Reduce the cost of energy.

Affordable Health Care: Reduce the cost of health care.

Transportation Infrastructure: Improve transportation infrastructure throughout Alaska.

Recreation: Strategically invest in recreational and quality of life amenities.



DEVELOP ALASKA'S WORKFORCE & HUMAN CAPITAL

Workforce Coordination: Align and coordinate statewide workforce development efforts.

Education: Maximize the educational opportunities of Alaskans.

Workforce Attraction: Attract working-age individuals and families to Alaska.

Remote Workers: Develop and expand opportunities for remote work in Alaska.

Childcare: Expand the availability of quality, licensed childcare

WIOA: Implement the Alaska Workforce Innovation and Opportunity Act (WIOA).

Infrastructure Bill Preparedness: Prepare Alaskans for job opportunities to be created by federally-funded infrastructure projects.

Planning: Develop or update and implement workforce development plans.

Alternative Energy Workforce: Prepare the Alaska workforce for job opportunities in low- and no-emissions energy technologies

Regulatory: Streamline and simplify regulatory processes.



BUILD A RESILIENT ECONOMY

Resiliency Planning: Develop a resiliency framework for economic recovery from external shocks and persistent economic deficiencies.

Resilience Capacity: Leverage economic engines and emerging sectors to respond to supply chain disruptions, natural disasters, and external shocks.

Resilient Infrastructure: Build new, and upgrade existing, infrastructure capable of withstanding natural disasters and the impacts of climate change.

Rural Resilience: Increase economic opportunity and self-sufficiency in Rural Alaska while preserving subsistence lifestyle.



ALASKA'S STRENGTHS WEAKNESSES OPPORTUNITIES THREATS

A strengths, weaknesses, opportunities, and threats (SWOT) analysis is used to critically examine the position of a state economy, to assist in the formation of goals, objectives, and strategies. Strengths and weaknesses are internal to the state, while opportunities and threats are external elements that exert influence. The followings SWOTs consider background research, community and industry forum input, and Strategy Committee discussion.

ALASKA'S BUSINESS AND INDUSTRY ENVIRONMENT SWOT

Strengths

- Active Startup Ecosystem
- Aerospace and Aviation
- Agriculture
- Alaska Native Corporations
- Business and Entrepreneurship Programming
- Energy Innovation
- Federal and Defense Spending
- Global Logistics
- Natural Assets
- Plentiful and Responsibly Managed Natural Resources
- Low tax Burden

Weaknesses

- Access to Capital
- Access to Resources
- Digital Competency
- Equitable Access to Business Resources
- High Operating Costs
- Lack of Human Resources
- Lack of Economic Diversity
- Regulatory Burden on Small- and Mid-Sized Businesses

Opportunities

- Arctic Opening
- Critical Minerals
- Energy and Climate Technology
- Establishment of New Economic Engines
- Expanding Startup Programming
- Research and Development
- Using Known Resources in New Ways
- Value-Added Product Development
- World-Class Destination
- Mariculture

Threats

- Federal Permitting and Regulation
- Geopolitical Threats
- Oil Production Decline
- Climate Change Disruptions
- Supply Chains, Operating Costs, Specialized Needs

ALASKA'S HUMAN CAPITAL & ECONOMIC FOUNDATIONS SWOT

Strengths

- Diverse Population
- Established (though aging) Infrastructure
- Higher Education and Vo-Tech Providers
- Highly Educated Workforce
- Recreational Amenities
- Strong Economic Development Networks
- Subsistence
- Vibrant Nonprofit Sector
- Workforce Participation Rate

Weaknesses

- Aging Infrastructure
- Arctic Infrastructure
- Broadband
- Childcare
- Cost of Living
- Distance and Isolation
- Early Childhood Education
- Energy and Transportation Costs
- Health Care Costs
- Housing
- Import Dependence
- Net Outmigration

Opportunities

- Access to Vo-Tech Education
- Expanding Broadband Access
- Federal Infrastructure Spending
- Gig and Teleworkers
- Leveraging Lessons Learned from Pandemic

Threats

- Climate Change
- Federal Visa Policies
- Inflation
- Labor Shortages
- Natural Disasters
- Slow Wage Growth
- State Operating and Capital Budget Funding
- Supply Chain Disruptions

An aerial photograph of Adak Island, Alaska. The image shows a long runway in the foreground, an airport terminal and other buildings in the middle ground, and a large body of water to the left. The background features rugged, green mountains under a blue sky with scattered white clouds. The text "II. ECONOMIC SUMMARY BACKGROUND" is overlaid in large white letters in the upper center of the image.

II. ECONOMIC SUMMARY BACKGROUND

Adak

Photo by Bill Jacobson

ECONOMIC SITUATION ANALYSIS

Where Does the Money Come From?

A relatively small number of base industries—sectors that bring money into the state from outside—drive Alaska’s economy. Economist Scott Goldsmith famously used the metaphor of a three-legged stool to describe Alaska’s economic base: oil and gas, federal spending, and everything else. (This latter category includes tourism, fisheries, and mining.) In 2008, the three “legs” each generated about a third of all the jobs in Alaska, as they brought money into the state which circulated through the other industries. Though these proportions have likely shifted since 2008, the same set of basic industries continue to fuel the state economy.

A simple way to think about the economy of any state or region is to consider three flows of money. First, money flows into the state when goods or services produced there are sold outside. Second, money circulates internally as organizations and households purchase the goods and services they need locally. Third, money leaves the state when goods or services must be purchased from outside. Strengthening the industries bringing new money to the state while minimizing “leakages” therefore results in economic growth and greater employment.



Alaska’s established Economic Engines and Impacts

Oil and Gas: State government tax revenue, including the Permanent fund. Supports employment in production, construction, engineering, and support services.

Federal government (including defense): Federal personnel and contracting activities of military and civilian agencies. Transfer payments (like Social Security), health insurance, grants to nonprofits and governments, infrastructure spending, land management.

Seafood: Processing and harvesting jobs, state and local revenues, marine trades like vessel repair.

Tourism: Accommodation, food service, transportation, tours, state and local tax revenues.

Mining: Construction, engineering, support services, state and local revenue.

Air Cargo: State revenue, refined fuel sales, logistics and warehousing employment.

Forestry: Timber harvesting and milling, contractual services.

Other sources of new money to Alaska and examples

In addition to Alaska's established economic engines, other types of activities also bring new money to Alaska. These include investments held by Alaskans, remote workers, and some small firms with out-of-state customers.

Investments Income-producing investments owned by Alaskans generate wealth that is spent locally. Examples include in-state financial institutions and investment funds with outside holdings, Alaska Native Corporations with outside holdings, the Alaska Permanent Fund, and the holdings of individual households.

Remote workers: Alaska residents working remotely for an employer based out of state. Income is spent locally.

Small exporting firms: Alaska-based firms in various industries, such as manufacturing and engineering, that serve customers in other states or abroad.

Import Substitution: Plugging the Leaks

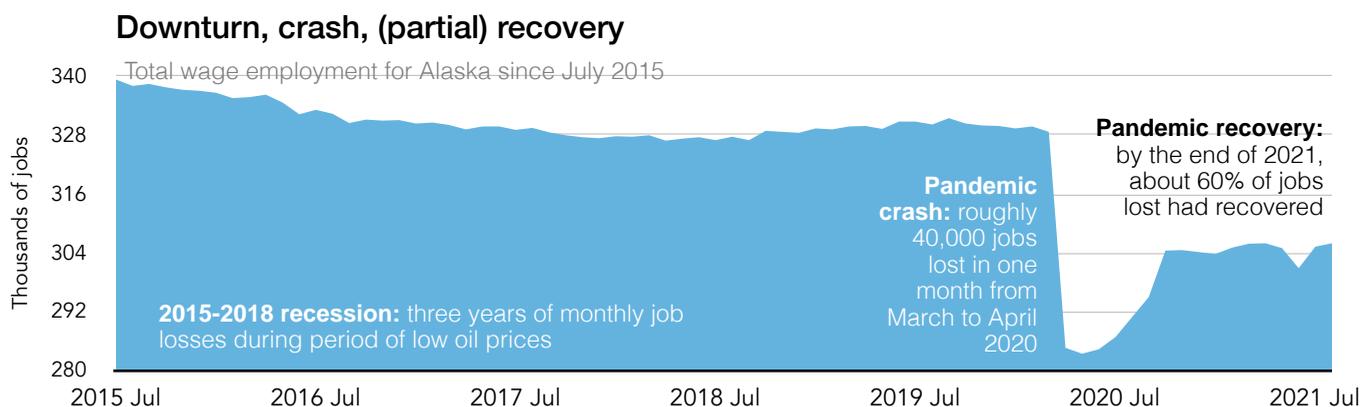
In addition to growing and sustaining the basic sectors, economic development practices that reduce leakages can also result in economic growth. As a state without a large manufacturing or agricultural base, Alaska heavily depends on imported goods. This is not inherently a bad thing economically, but the opportunity to replace imported goods with those produced in-state will usually create local jobs. Some examples of this include natural gas fields in Cook Inlet and near Utqiagvik, which meet energy needs locally while creating high-paying jobs for Alaskans. Without these sources, these communities would likely need to purchase imported LNG or refined fuel produced out-of-state, creating jobs elsewhere.

Alaska's small agricultural sector is another example. Vegetables and meat produced in Alaska create income for farmers who continue to circulate money locally when they hire labor and purchase supplies. Other import substitution opportunities include the in-state use of timber and energy resources, value-added food product manufacturing, and production of construction materials.

Recent Economic Trends

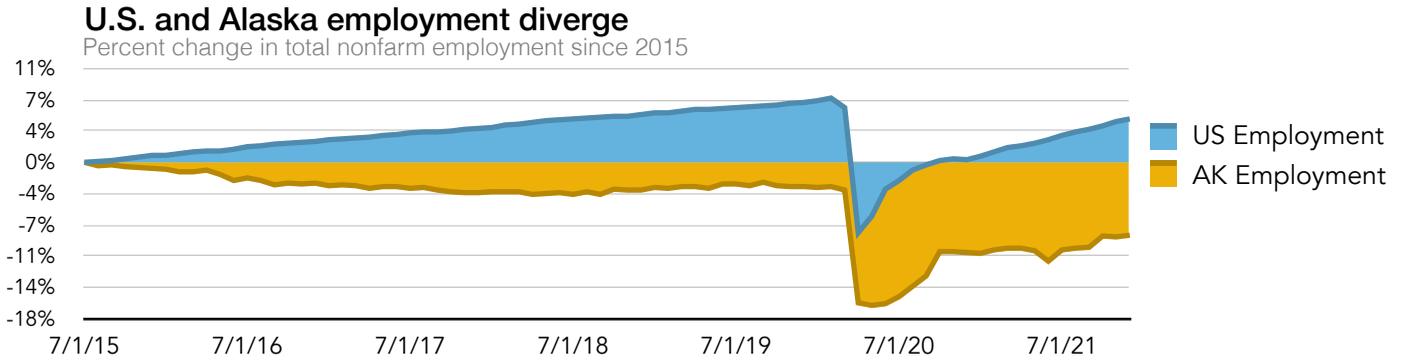
- Prior to the pandemic, Alaska suffered a recession linked to low oil prices from 2015-2018.
- COVID-19 caused a loss of roughly 40,000 jobs during the pandemic low point.
- Alaska's economy has underperformed that of the U.S. as a whole since 2015.

Alaska's recent economic performance has brought to light certain vulnerabilities. Since 2015, two downturns have defined the state economy, leaving an economy in 2021 with 30,000 fewer jobs than in 2015.



Source: Bureau of Labor Statistics (BLS)

Like nearly all regions in the world, the COVID-19 pandemic caused a sharp decrease in employment in Alaska in early 2020. However, prior to the pandemic Alaska's economy had been in a recession from 2015 to 2018, followed by sluggish growth in 2018 and 2019. By contrast, the U.S. economy as a whole saw strong employment growth from 2015 to 2019. In February 2020, just prior to the COVID-19 recession, U.S. employment was 7.4% higher than in July 2015, while Alaska employment was still almost 3% lower (see graph below).



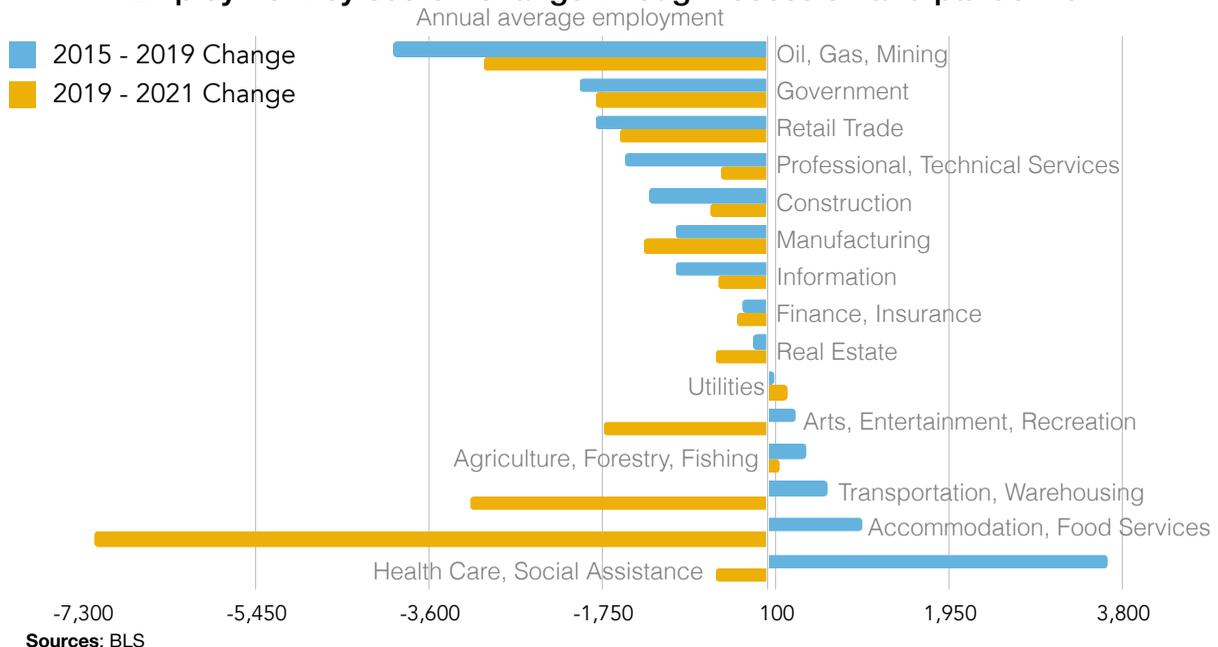
Employment then fell sharply in April 2020, when the state lost nearly 40,000 jobs in one month—greater than one job in 10. Recovery from that low point has been slower in Alaska than nationally. By December 2021, the US had recovered almost 98% of its pre-pandemic employment, versus only 94% for Alaska. For 2022, Department of Labor and Workforce Development (DOLWD) forecasts employment growth of 3.2%, which would leave employment below pre-pandemic levels.

Industry Performance During Two Downturns

From an industry sector standpoint, it is instructive to look at two recent time periods: 2015 to 2019, encompassing the state recession, and 2019 to 2021, a period that includes the COVID-19 pandemic. During the 2015 to 2019 timespan, oil and gas shed the greatest number of jobs, followed by government, retail, professional services, and construction. Most of these losses are tied to the relatively low price of oil during those years. This rippled through the economy as the oil and gas companies reduced employment and contractual spending, and state government oil revenues slumped. While most sectors lost jobs between 2015 and 2019, health care and accommodation and food services saw notable gains—the latter tied closely to tourism.

The COVID-19 pandemic disrupted all industries to some degree, but the greatest losses from 2019-2021 were in accommodation and food service, transportation and warehousing, and oil and gas. The pandemic itself caused a sharp reduction in spending on travel, many types of services, and activities that require congregating indoors, like dining. The state's tourism industry, bars and restaurants, and non-grocery retailers were hit especially hard.

Employment by sector: change through recession and pandemic

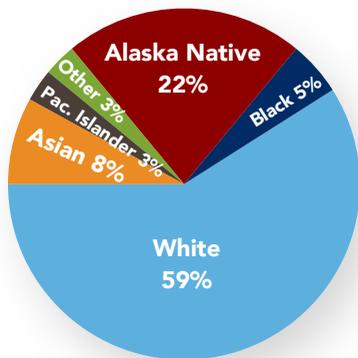


ALASKA'S POPULATION

Unalakleet



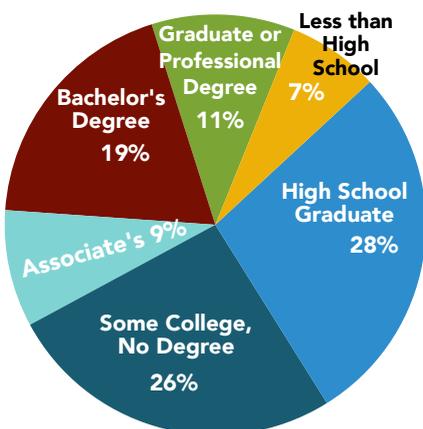
Population by Ethnicity



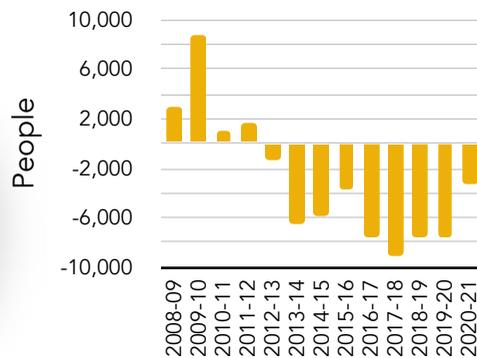
The majority (59%) of Alaskans identified as "White only" in the 2020 Census. The second largest racial group in the state identify as "Alaska Native or American Indian" (22%).

About a quarter (25%) of Alaskans over 25 years old have some college education but no degree.

Highest Level of education completed aged 25+



Net Migration in Alaska



- Alaska's total population increased steadily from 2008 to 2013, but has seen a decline since 2014 to 734,323 in 2021.
- Since 2012, more people have moved out of Alaska than have moved into the state every year. Between 2020 and 2021, the state saw net outmigration of 3,300 people.
- The number of prime working-age Alaskans fell by over 22,000 between 2010 and 2022, due to aging and outmigration.

-22,148
Net change in number of working-age Alaskans (ages 20-60) from 2010 to 2021

45,206
Net change in number of Alaskans aged 65+ from 2010 to 2021

AK POPULATION CHANGE

2011 TO 2021

Area	2011	2021	Change
Skagway	974	1,203	24%
Mat-Su	91,620	108,805	19%
Aleutians East	3,152	3,583	14%
North Slope	9,674	10,995	14%
Hoonah-Angoon	2,184	2,350	8%
Yakutat	650	697	7%
Kusilvak	7,710	8,139	6%
Bethel	17,539	18,416	5%
Kenai Peninsula	56,491	58,957	4%
Chugach Census Area	6,839	7,009	2%
Petersburg	3,303	3,368	2%
Ketchikan	13,760	13,895	1%
Haines	2,614	2,614	0%
Nome	9,747	9,691	-1%
Fairbanks North Star	98,178	97,515	-1%
Juneau	32,411	32,155	-1%
Northwest Arctic	7,691	7,575	-2%
Anchorage	296,058	289,697	-2%
Southeast Fairbanks	7,058	6,881	-3%
Dillingham	4,945	4,718	-5%
Aleutians West	5,431	5,169	-5%
Sitka	8,992	8,387	-7%
Kodiak Island	13,887	12,900	-7%
Yukon-Koyukuk	5,686	5,255	-8%
Denali	1,813	1,655	-9%
Prince of Wales-Hyder	6,421	5,729	-11%
Wrangell	2,376	2,096	-12%
Copper River	3,018	2,626	-13%
Lake and Peninsula	1,669	1,421	-15%
Bristol Bay	1,018	822	-19%
Total	722,909	734,323	1.6%

Sources: Alaska Department of Labor (ADOL); US Census, American Community Survey
Photography credit: Luc Mehl Unalakleet Nordic Ski Program



Juneau

COST OF LIVING

When assessing economic conditions in any region it is important to consider indicators of quality of life. A prosperous population can be a strong indicator of economic health. In addition, favorable quality of life indicators like low cost of living and access to services and amenities are important for attracting and retaining a qualified workforce.

Alaska has historically struggled with high costs of living across the state. Energy, health care, housing, retail goods, services, and more are typically more expensive than in the Lower 48, and sometimes unavailable at all. This impacts both firms and households who must spend more on basic necessities than their counterparts in the rest of the country. These challenges are especially prevalent in the state’s rural communities, where costs can be crippling for households and make many forms of commercial activity infeasible.

These variables are balanced to some degree, however, by other quality of life indicators, some of which can be difficult to measure. Alaska is well known for its access to outdoor recreation opportunities, subsistence bounty, and natural beauty. These are amenities that attract visitors to the state, but also improve quality of life for residents.

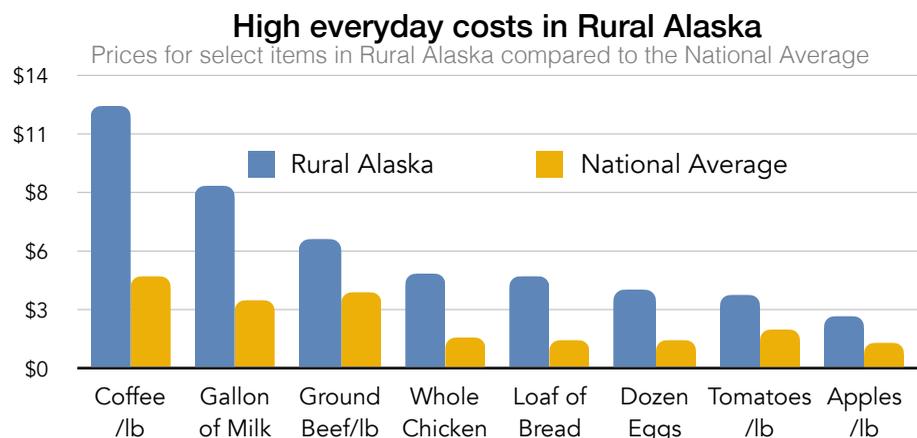
STATE COST OF LIVING INDEX COMPARISON, 2021	
State	Percent Above U.S. Average
District of Columbia	60%
Hawaii	50%
California	35%
Massachusetts	32%
Alaska	31%

More detailed COLI data is available for the four Alaska cities that participate in the index: Anchorage, Fairbanks, Juneau, and Kodiak. All four communities rank among the 25 most expensive cities in the U.S. for overall living costs. Unfortunately, the COLI does not include data for other cities in the state.

LIVING COSTS, PERCENT ABOVE NATIONAL AVERAGE IN 2022							
City	Groceries	Housing	Utilities	Transportation	Health Care	Misc. Goods	Overall
Juneau	41%	43%	37%	15%	53%	7%	30%
Anchorage	26%	39%	27%	12%	49%	18%	28%
Kodiak	48%	23%	30%	0%	56%	21%	27%
Fairbanks	23%	8%	118%	14%	55%	16%	27%

Rural Cost of Living

Most consumable items in rural Alaska are prohibitively expensive—if they are available at all. Unfortunately, few data sources systematically track costs for rural Alaska. Reports of \$12 for a gallon of milk and \$6 for a loaf of bread are not uncommon. One report from 2018, the Indian Country Food Price Index, recorded the cost of grocery items in select parts of rural Alaska, and reported a high cost divergence from national averages. In many cases, common food items were two to three times more expensive than national averages.



Sources: C2ER, ADOL, AHFC, Indian Country Food Price Index
Photography credit: Sean Neilson Photography



Hoonah

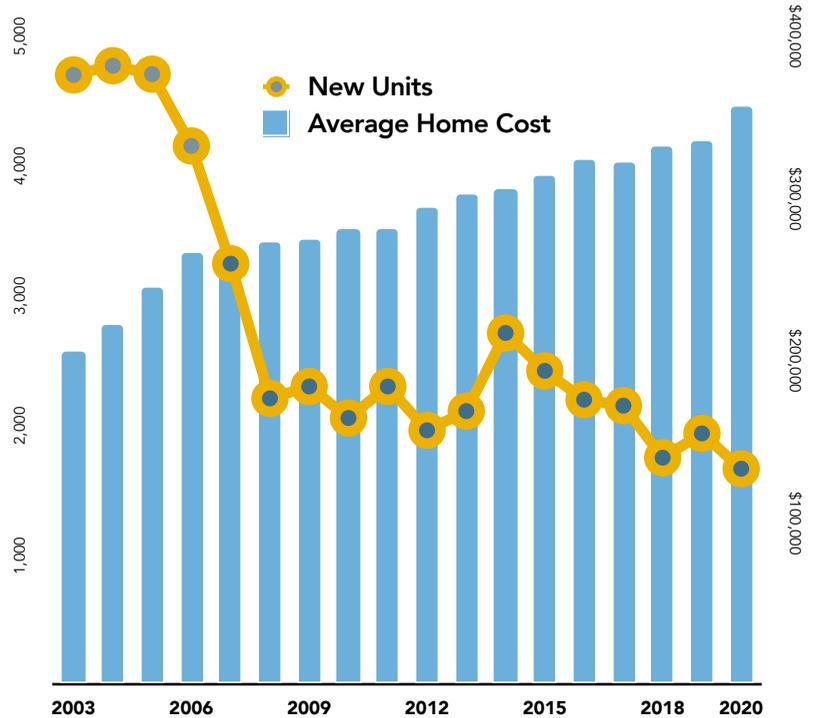
Housing

Housing costs and availability are two of the most important factors in the cost of living. Housing costs across Alaska are variable, but high almost everywhere compared to the rest of the U.S. As with most of the U.S., average home sales prices increased sharply in 2020 and 2021, with low interest rates and pandemic factors driving high demand. Statewide, the average sales price for a single-family home in 2021 was \$388,648, about 8% higher than 2020. Sales prices vary across the state according to local housing market conditions—from \$313,802 in the Fairbanks North Star Borough to \$439,961 in the Ketchikan Gateway Borough.

In 2021, median statewide rent cost was \$1,179/month. At \$950 per month, the Wrangell-Petersburg area had the lowest rent, with the highest being Sitka at \$1,323 per month. Statewide, the rental vacancy rate fell from 9.2% in 2020 to 5.9% in 2021.

Both rental and owner-occupied housing appear to suffer from limited building activity. Over the last two decades, new housing construction fell from a high of nearly 4,800 units statewide, to only 1,669 in 2021.

New Housing Units Built and Average Home Cost in Alaska



Health Care

Health care costs are a heavy burden on households and employers alike. Alaska's health care system is challenging in terms of both cost and availability. Across Alaska, residents struggle with accessing both basic health services in rural/remote areas and specialty services in more urban areas. Alaska's health care costs are the highest in the nation by any number of measures. The COLI data ranks Anchorage, Fairbanks, Juneau, and Kodiak as the four most expensive cities in the country for health care. Annual average health insurance premiums totaled \$8,635 in 2020, the most of any state.

Employers in government, nonprofits, and businesses alike struggle with the high cost of providing health insurance for employees.

MOST EXPENSIVE HEALTH CARE PREMIUMS BY STATE, 2020	
State	Average Annual Total Premium
Alaska	\$8,635
New York	\$8,177
New Hampshire	\$7,991
Vermont	\$7,868
Wyoming	\$7,743
U.S. Average	\$7,149

Sources: Kaiser Family Foundation, ADOL, AHFC
Photography credit: Sean Neilson Photography

INFRASTRUCTURE



Alaska is the most sparsely populated state in the U.S., with communities spread across vast distances often not connected by roads and highways. While population density varies across the state, on average there are 1.2 people for every square mile. The majority of the population lives on the state's limited road system, which provides more immediate access to critical infrastructure and lowers the cost of living and the cost of doing business. However, for the hundreds of communities across the state outside the road system, airports and waterways provide access to natural resources, economic assets, and goods and services.

As oil revenues increased in 2021-2022 and federal infrastructure dollars move to Alaska from the 2021 Infrastructure Investment and Jobs Act (IIJA), forecasts for funding for infrastructure projects in the state are improving. In addition, increased investment and interest in the Arctic are creating opportunities for northern communities to improve infrastructure.

Gustavus

Transportation

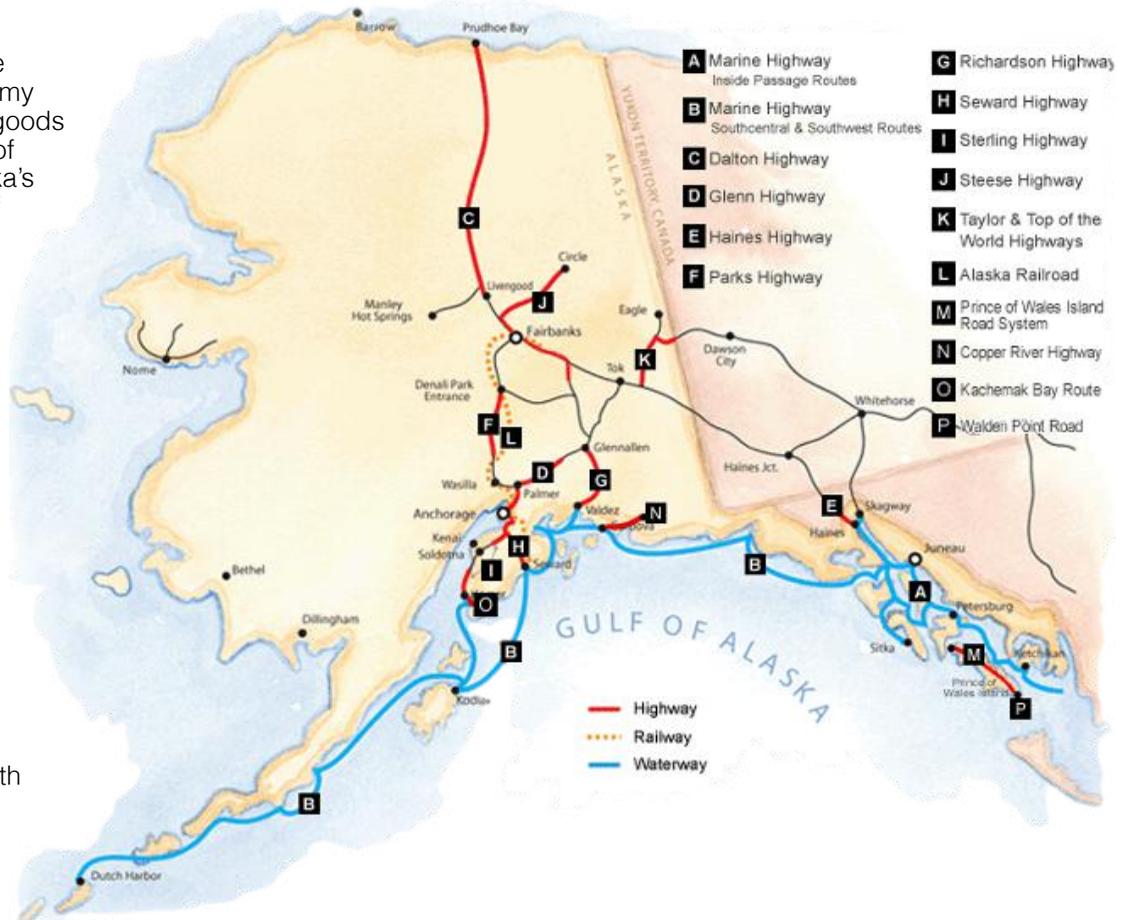
Transportation infrastructure is the platform on which Alaska's economy rests, enabling the movement of goods and people across the state, out of state, and across the world. Alaska's transportation networks consist of railroads, roads and highways, airports, and waterways.

Rail

- The Alaska Railroad has 656 miles of track.
- More than 500,000 passengers served per year (pre-pandemic).
- More than 3.2 million tons of cargo moved (pre-pandemic).

Roads and Highways

- 12 major highway routes and 1,529 bridges.
- 17,050 miles of public roads with 5,000 miles of paved roads.



Sources: BTS, ADOT, Alaska Public Lands Information Centers

Photography credit: Sean Neilson Photography, Map by Department of Transportation & Public Facilities



Alaska's Airports, Ports, Harbors, and Broadband Access

Adak

Airports

- 26 major airports.
- 82% of communities in Alaska depend on the 235 airports in the rural aviation system.
- 2.4 million square miles of airspace.

Marine Infrastructure

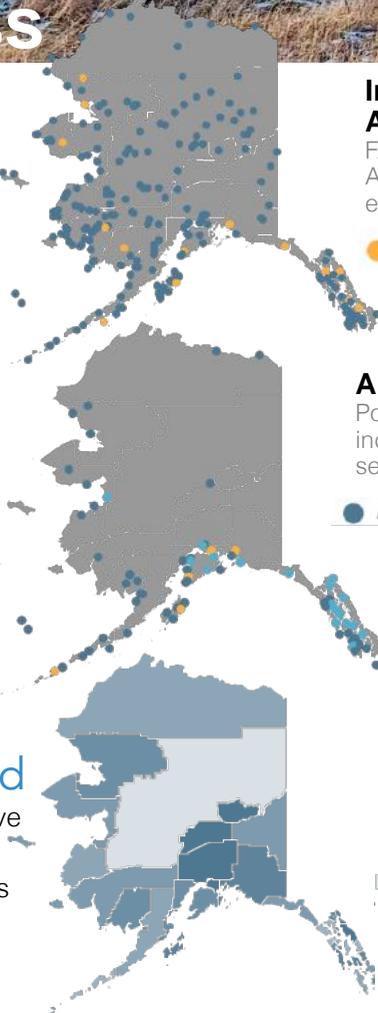
- Alaska has 90 ports total, including 22 with container liner service and six deep draft ports.
- The Port of Alaska (Anchorage) handled 50% of all inbound cargo from all modes of transportation in 2019, serving 90% of the state's population.
- AMHS serves 33 communities in the state, most of which lack highway access.
- \$250 million in federal infrastructure funding has been allocated to the development and construction of an Arctic deep-water port in Nome.

Communications and Broadband

- As many as 90% of households in urban Alaska have broadband subscriptions.
- Rural households lag the statewide average, with as few as 43% of households holding broadband subscription in the Yukon-Koyukuk Census Area.

New Developments in Broadband:

- The IJA includes \$65 billion for broadband infrastructure development nationally, with Alaska getting a minimum of \$100 million in formula funds.
- GCI's TERRA Project began in 2011 and has since connected 84 communities and 45,000 Alaskans to terrestrial broadband infrastructure. GCI continues to expand the network and plans to build out to additional villages in the future.
- USDA launched the ReConnect Loan and Grant Program, which offers funds for the construction, improvement, or acquisition of facilities and equipment needed to provide broadband service in eligible rural areas. To date, 11 awards for grants have been announced for over \$200M in funding to extend Alaska's broadband networks.
- HB363 was signed by the Governor August 9th, authorizing a state Office of Broadband and a Statewide Broadband Advisory Board. The Office is responsible for administering significant funds from the Bipartisan Infrastructure Law.



Intrastate Air Travel Across Alaska

FAA identified airports across Alaska with commercial passenger emplacements, 2021

● Major Airport ● Other Airport

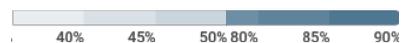
Alaska's Ports and Harbors

Ports and harbors across Alaska including those with container liner services and deep draft ports

● All Other ● Container Liner Service ● Deep Draft

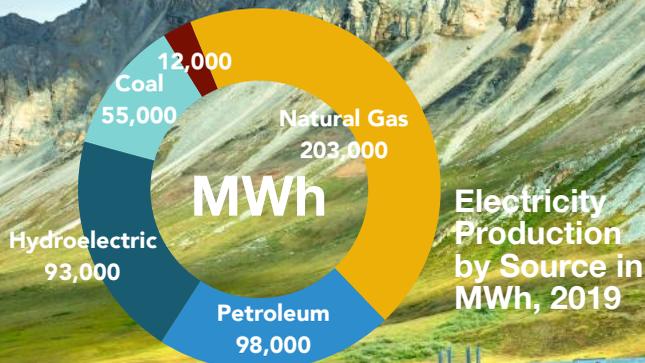
Broadband Access in Alaska

Percent of households with broadband subscriptions by region, 2019



Sources: FAA, World Port Source, ADOT, ACS 2019 5-Year Estimates Photography credit: Bill Jacobson, Adak airport

Energy



Resilience

“Resilience” is a broad term with multiple meanings, but this CEDS refers to economic resilience as described by the U.S. Economic Development Administration (EDA). According to the EDA, economic resilience has three attributes, entailing the ability to recovery quickly from a shock; withstand a shock; and avoid a shock altogether.

Dalton Highway

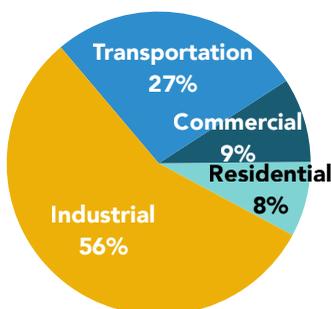
Energy

- The largest portion of Alaska energy consumption, 56%, comes from the industrial sector.
- 77% of all energy produced in Alaska is derived from fossil fuels—natural gas, diesel, and coal. The remaining 23% comes from renewable sources including hydroelectric, wind, and solar.
- Cost of power is higher than national averages with the average cost of residential electricity at \$0.23/kWh statewide in 2019. Costs range more widely across the state, from \$0.08/kWh in Nuiqsut to \$1.77/kWh in Lime Village before the PCE subsidy is applied.

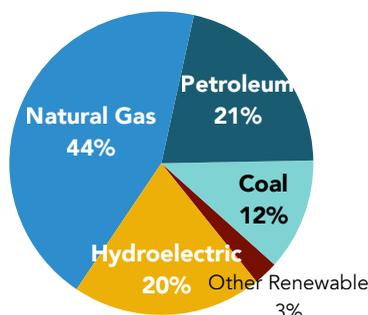
New Developments in Energy:

- Governor Mike Dunleavy set a goal of creating renewable portfolio standards for the Railbelt and introducing a sustainable power goal of 80% by 2040.
- As of 2020, approximately 3.2 MW of solar power generation was installed across Alaska with the ACEP Solar Power Technologies Program.

Statewide Energy Consumption by Sector, 2019



Energy Production by Source, 2019



Resilience

Alaska’s economy has faced a series of shocks in recent years. Some were caused by natural occurrences, like wildfires, earthquakes, and the COVID-19 pandemic. Others were the result of national and global political and market forces, like volatile oil prices, rapid inflation, and workforce shortages. Though many of these events were individually unpredictable, disruptive occurrences are a reality, elevating Alaska’s need for economic resilience.

Resilience Threats

- COVID-19 and other public health crises
- Inflation, recession, and cost of living
- Job loss and workforce shortages
- Infrastructure vulnerability
- Climate change
- Seismic events
- Wildfires
- Floods and coastal erosion
- Storms and severe weather events
- Fisheries disasters
- Single-industry dependence
- Subsistence resource threats

Resilience Action Strategies

- Pre-disaster planning
- Import substitution
- Access to capital
- Broadband access and affordability
- Streamlining job access and training
- Ensure infrastructure reliability
- Emerging Sectors
- Support and grow entrepreneurs
- Connectivity, communication, and coordination

Sources: Energy Information Agency (EIA), Alaska Energy Authority (AEA)
Photography credit: Ovidiu Hrubaru

III. ECONOMIC ENGINES



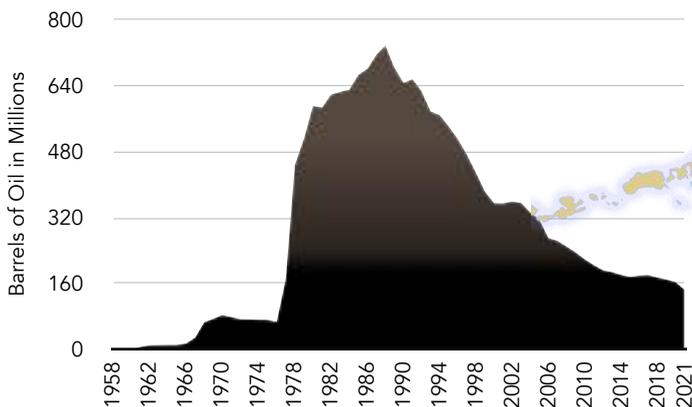
Red Dog Mine from the air



Oil and Gas

- The oil and gas sector is the largest industry in Alaska, creating about 77,600 in 2018.
- Between 2019 and 2021, Alaska produced an average of approximately 160 million barrels of oil each year. In 2021, Alaska produced the sixth largest quantity of crude oil of any US state.
- Between 2019 and 2021, approximately 76 million barrels equivalent of natural gas were extracted annually in the Cook Inlet Region of Alaska.
- In 2021 alone, over 3.1 billion barrels equivalent of natural gas were extracted in the North Slope region, but most of this oil was reinjected into the ground, not sold.
- The industry is the largest source of revenue for state government, paying \$2.7 billion in taxes and royalties in FY 2019. Local governments collected \$449 million in oil and gas revenues the same year.
- Oil and gas contributions to the Alaska Permanent Fund were \$46.9 billion cumulatively at the end of FY 2021.

Annual Oil Production in Alaska



Sources: Alaska Oil and Gas Conservation Commission, ACEP, BLS
 Photo credits: Photos courtesy ConocoPhillips and Kensington Mine

Mining

- Zinc, lead, and gold exports ranked in the top five exports by value from Alaska, with \$1.5 billion in exports in 2020 across the three commodities.
- In 2020, the mining industry supported 9,600 jobs in Alaska and \$890 million in wages.
- Alaska is home to six major operating mines, with a further two in the advanced permitting stages.



Mining has deep roots in Alaska. From the gold rush beginning in the late 1800s which brought thousands of people to Alaska seeking riches, to the construction of Red Dog Mine in the 1980s, the resource wealth of the state has been a cornerstone of Alaska's economy. Today, zinc, lead, and gold rank among the top five commodities exported from Alaska by value, with copper and other precious metals also ranking among the top 20.

Map Credit: Alaska Miners Association and the Council of Alaska Producers



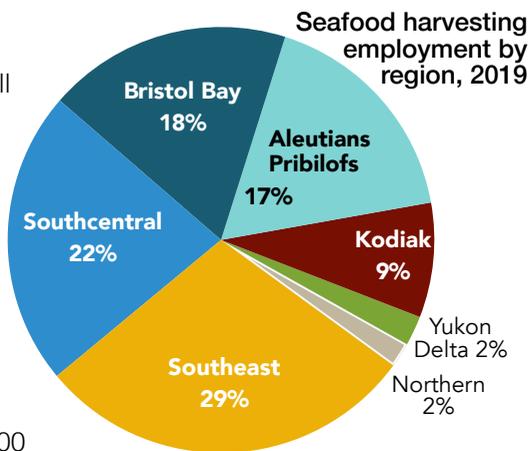
Aleutkina Bay near Sitka



Glacier Bay

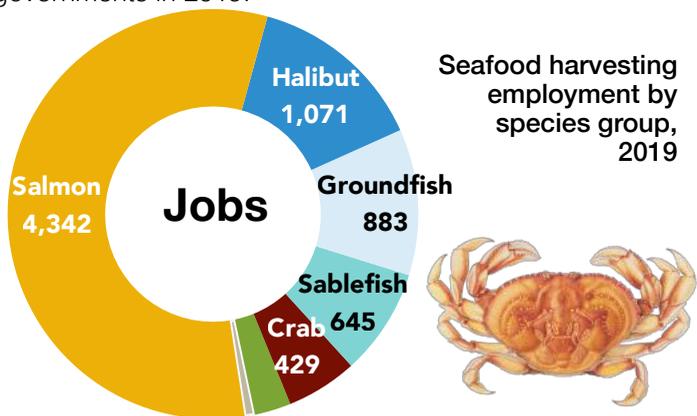
Seafood

- Alaska leads all states in both pounds harvested and total value of landings, with more pounds landed in the state than the rest of the U.S. combined.
- 17 of the top 100 fisheries ports in the US are Alaskan ports, including three of the top five—Unalaska, Aleutian Islands, and Kodiak (by pounds landed) in 2021.
- In 2019, the seafood industry directly employed a total of 62,200 workers (37,400 full-time equivalent) in Alaska throughout the year, including almost 20,000 resident fishermen.
- The seafood industry's economic output in Alaska was \$5.7 billion in 2019.
- Seafood processors contributed \$81 million in tax revenues to state government, and \$45 million to local governments in 2019.

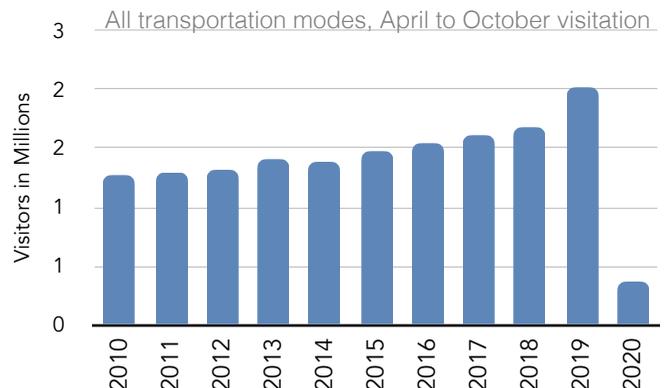


Visitor Industry

- The number of tourists arriving in the state increased steadily from 2010 to 2019, reaching 2.4 million before falling to 427,000 in 2020 as result of the COVID-19 pandemic.
- No large cruise ships visited Alaska in 2020, and only 116,000 passengers visited in 2021, about one-tenth of the pre-pandemic volume. Other forms of transportation to the state were also dramatically reduced, air travel in the state was down 57% over the previous year in 2020 and with the border closure and travel restrictions in Canada, visitors to the state by road were also reduced.
- Visitors directly or indirectly contribute to a variety of state and local government revenues through taxes and fees. In 2019, these amounted to \$143.3 million to state government, and \$45 million in local government bed taxes in FY 2020.
- Tourism created roughly 35,000 direct jobs in Alaska in 2019, and approximately 50,000 total jobs.



Annual summer visitors to Alaska



Sources: ADOL NOAA Fisheries, McKinley Research, FAA, DCRA
 Photo credits: Tyler Eddy and L. Embi, Crab illustration by ASMI

Cargo in Yakutat



Sawmill in Klawock



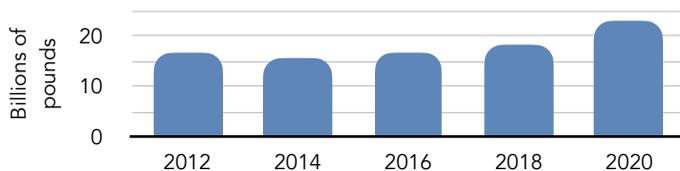
Logistics and Air Cargo

- Logistics-related industries in Alaska supported 11,615 direct jobs in 2020.
- Air transportation supported approximately 5,100 jobs in 2020, a 18% drop in employment compared to 2019.
- Ted Stevens Anchorage International Airport ranked second in the U.S. and fourth in the world for cargo volume in 2020, after a 25% increase over 2019.

TOP U.S. CARGO AIRPORTS BY VOLUME, 2020

Airport	State	Cargo Volume (Millions of Lbs.)
Memphis International	TN	25,157
Ted Stevens Anchorage International	AK	22,883
Louisville Muhammad Ali International	KY	16,757
Los Angeles International	CA	13,172
Miami International	FL	9,930

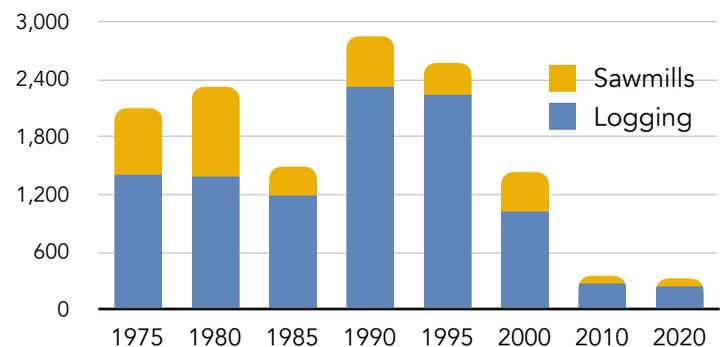
Cargo landed at Ted Stevens Airport



Forest Products

- There are 129 million acres of forested land in Alaska, predominantly owned by federal, state, and local governments, and Alaska Native Corporations.
- The timber industry supported 329 jobs in 2020, an 88% decline from its peak in 1990.
- 10 million board feet of logs harvested from Tongass National Forest were exported from Alaska in 2021.

Alaska Logging and Sawmill Employment



Defense Sector

- Alaska is home to a large defense presence, with major Air Force, Army, and Coast Guard installations hosting more than 30,000 personnel in 2021.
- The state's strategic position in the Arctic and Pacific Rim have attracted large defense investments in the state, such as F-35 aircraft and a Long-Range Discrimination Radar.
- Defense spending in Alaska—including contracts and payroll—was \$3.7 billion in federal fiscal year 2020.
- The estimated number of jobs in Alaska tied to defense is 58,000—roughly one in six jobs in the state.



Sources: DOD, UACED, BLS, FAA, State of Alaska Division of Forestry, USFS
Photo credits: Bill Jacobson and Viking Lumber



IV. EMERGING SECTORS



Homer oysters

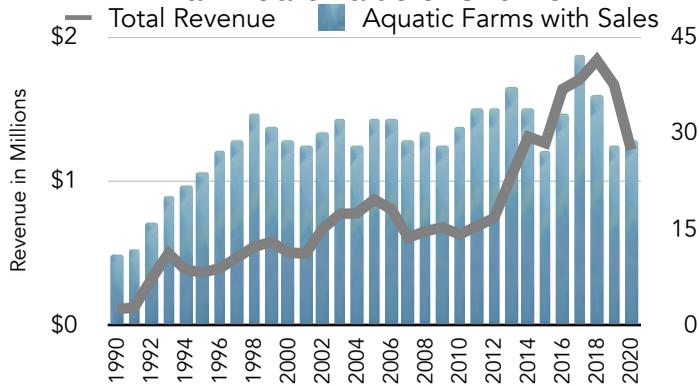


Welder at Ketchikan shipyard

Mariculture

- In 2021, there were 49 applications for mariculture operations in Alaska, 31 operations with production, and one hatchery/nursery.
- Seaweed production in Alaska grew by 232% in 2021, to 536,390 lbs sold.
- Oyster production declined for the third year in a row in 2021, with 4.6 million oysters sold.

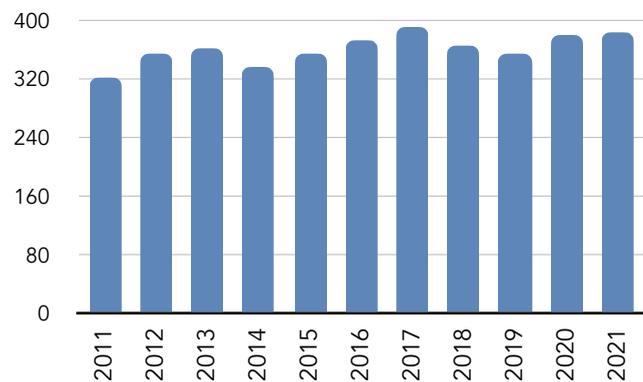
Alaska Aquatic Farm Production:
Farm Gate Value of Shellfish



Marine Services Industry

- Approximately 380 jobs in boat and ship building and repair statewide in 2020.
- Alaska has a fleet of over 9,000 vessels greater than 28ft in length.

Ship, boat building, and repair
annual employment



Energy Innovation

- Alaska's energy innovation sector includes renewable energy, no- or low-emissions energy sources, electrification of transportation, carbon capture, utilization, and storage (CCUS), and decarbonizing industrial processes.
- Installed solar capacity on the Railbelt grew by nearly 600% from 2016-2021 to more than 11 MW. A further 8.5 MW is currently under construction.
- The state has more than 150 islanded microgrids in rural villages, several of which have pioneered the integration of diesel generators with wind turbines and other renewable energy systems.
- The Renewable Energy Atlas of Alaska testifies to rich biomass, geothermal, hydroelectric, ocean and river hydrokinetic, solar, and wind resources across the state.
- Federal legislation in 2021 and 2022, along with public concerns about climate change and rising fuel prices, are driving a push toward decarbonization, adoption of low-cost renewable energy resources, and electrification of transportation.

Sources: ADOL, ACEP, REAP, ADF&G, AFDF, McKinley Research Group
Photo credits: Jakolof Bay Oyster Company and Vigor Alaska



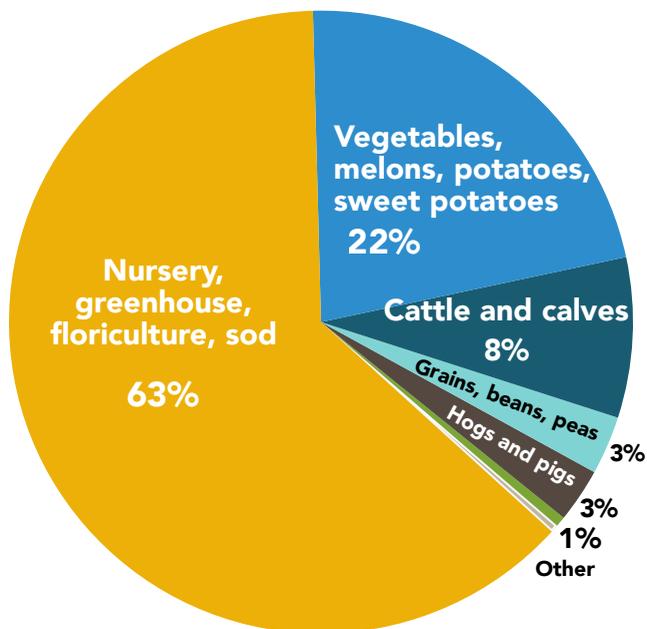
Barley harvest in Delta Junction

Denali

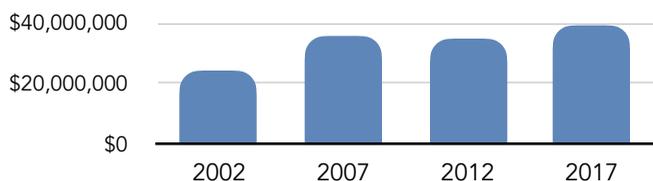
Agriculture

- Alaska has approximately 850,000 acres of operated farmland.
- Approximately 1,050 farms operated in 2021.
- Agriculture revenue has increased over the last two decades, reaching \$39 million in sales in 2017 in real 2021 dollars.

Alaska Agriculture Revenue by Type



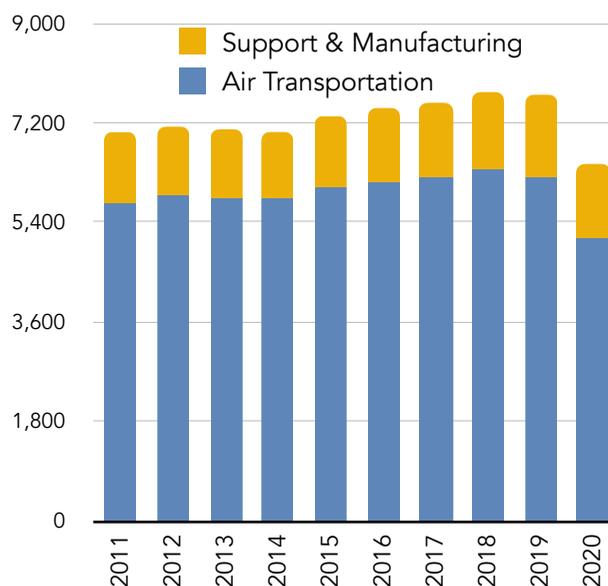
Agriculture Revenue by Year



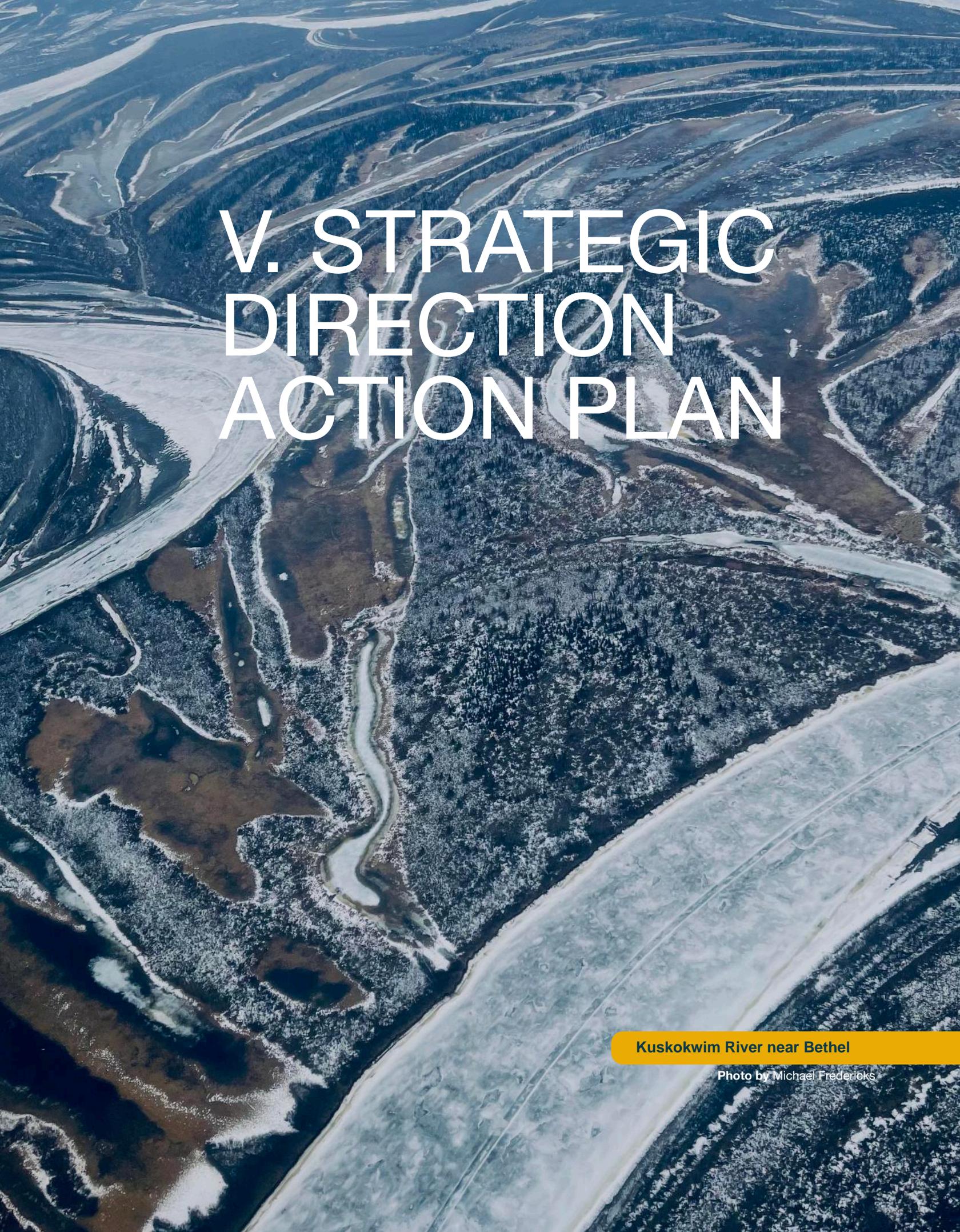
Aerospace and Aviation

- A total of 6,451 jobs were supported by aerospace and aviation-related industries in 2020.
- Aircraft engine and parts manufacturing exported \$96 million in products in 2020, ranking 14th in the state's total exports.
- FAA's Alaska Region has 2.4 million square miles of airspace.
- Alaska hosts an FAA-designated test range for unmanned aircraft, and the University of Alaska Fairbanks is a global leader in the field.
- The Pacific Spaceport Complex – Alaska hosted its first private sector launch in 2018. In 2021, the launch site hosted 2 launches, both commercial.

Aviation & Aerospace Jobs



Sources: USDA, ADOL, US Census, Alaska Aerospace Corporation 2021 Annual Report
Photo credits: Jim McCann and Bill Jacobson



V. STRATEGIC DIRECTION ACTION PLAN

Kuskokwim River near Bethel

Photo by Michael Fredericks

Goal 1: Strengthen Alaska's Economic Engines



For several decades, a handful of key industries have created the vast majority of employment opportunities, either directly or indirectly, by bringing “new” money to Alaska. These are oil and gas, federal spending (including defense), tourism, mining, timber, air cargo, and seafood. Large and small firms alike participate in these sectors, including Alaska Native Corporations.

Regulatory

Alaska is blessed with an abundance of natural resources as well as a track record of responsible development that preserves natural environments and improves the wellbeing of residents. A key priority for the state is that federal permitting and regulatory processes be efficient, timely, and well-coordinated when multiple agency involvement is required.

Objective 1.1. Ensure a stable and predictable regulatory, permitting, and tax structure for the development of natural resources. **Actions:**

- **Coordinated, efficient, timely permitting** needed at the federal level (strengthen “One Federal Decision” provisions across agencies).
- **Achieve federal recognition that Alaska is materially different** from the contiguous 48 states, thus the provisions and guarantees under ANILCA.
- **Develop strong messaging about responsible, socially beneficial natural resource development in Alaska** for national audiences, including the importance of critical minerals to low emissions technologies and national security.

Oil

Alaska’s North Slope fields contain 35 trillion cubic feet of proven natural gas reserves, and a further 12 to 18 billion barrels of heavy oil-in-place. Despite energy-

hungry domestic and international markets, these remain undeveloped resources.

Objective 1.2. Develop Alaska’s North Slope natural gas and heavy oil for in-state and export markets.

Actions:

- **Attract private co-investment to build a natural gas pipeline** and liquefaction facilities for export to the Lower 48 and abroad.
- Where economically feasible, **build infrastructure to supply natural gas to Alaska communities** to reduce greenhouse gas emissions and energy costs.
- **Support research, pilot testing, development, and production of North Slope heavy oil** using existing infrastructure.

Stranded Resources

Rich natural resource deposits are often found in remote areas far from existing transportation infrastructure. Through entities like the Alaska Industrial Development and Export Authority (AIDEA), public capital can leverage private investment to help grow economic opportunity.

Objective 1.3: Improve access to facilitate the development of stranded resources and enable export to domestic and international markets. **Actions:**

- Complete the Ambler Mining District Industrial Access Project.
- Complete the West Susitna Access Project.
- Assess common infrastructure needs for industrial developments to access markets.
- Support mutually beneficial land swaps between local governments, federal government, native corporations, and state government to encourage development and reduce conflict between surface and subsurface ownership.

Mining

As of 2022, the U.S. Geological Survey has designated 50 minerals to be “critical minerals,” which are vitally important to national interests. Several of these minerals, including rare earth elements, are known to exist in Alaska and could be developed to increase national resilience as well as economic growth in the state.

Objective 1.4: Expand exploration for, and production of, critical minerals in Alaska. Actions:

- Work closely with federal agencies tasked with critical mineral surveys under IJJA.
- Attract private investment for critical mineral development in Alaska.
- Mining is a FAST-41 eligible sector. Facilitate access to program for strategic mine development.
- Promote the use of cost efficient renewable energy and low carbon fuel sources used in extraction and processing technologies.

Alternative Energy

As the global economy embraces the use of low- or zero-carbon fuel sources, hydrocarbons like oil and gas can continue to play a role. Potential use of Alaska natural gas for “blue” hydrogen production is one promising example.

Objective 1.5: Develop alternative, low emission uses for existing natural resources. Actions:

- Pursue public and private investment to utilize North Slope natural gas to produce hydrogen fuel.
- Continue R&D in the utilization of natural gas to produce hydrogen for world markets.
- Explore alternative uses for coal, such as gasification and hydrogen production.
- Pursue carbon capture and sequestration to make existing resources cleaner.
- Develop and implement Hydrogen Roadmap for Alaska.

Military

The military has historically been a major driver of economic growth in Alaska and remains so today. The state’s strategic position in the Arctic should be leveraged to strengthen and grow this Economic Engine, in part by establishing an Office of Military Commerce.

Objective 1.6: Attract new public and private investment in Alaska’s defense sector. Actions:

- Establish an Office of Military Commerce to work with the defense sector.
- Advocate for the full implementation of the Department of Defense’s Arctic Strategies for the U.S. Army, Air Force, and Navy, as well as the U.S. Coast Guard and Space Force.
- Secure the homeporting of icebreakers and Coast Guard cutters at Alaska ports.
- Support basing decisions for 5th generation aircraft capabilities in Alaska.
- Identify remaining barriers to employment for military spouses by simplifying occupational licensing portability between states.
- Implement quality of life improvements for communities hosting defense installations, such as recreational trails and affordable housing.
- Work to develop/expand programs that help military service members enter Alaska’s workforce at the end of their term of service (ex: Helmets to Hardhats).
- Support further opportunities for military defense/missile testing, unmanned aerial systems development, Arctic-wide information and communication systems, launch/ access to space, cold climate military capability enhancement, and rapid deployment from the Arctic via road, rail, air, and sea.
- Ensure Alaskan critical infrastructure and resources, such as North Slope Oil Fields and the Trans Alaska Pipeline System, are defended/ protected.

Timber

Alaska’s forestry sector once provided thousands of jobs but is currently a fraction of its former self. A new model for forest products in the state should include a smooth transition to new growth timber harvest and other uses of forest resources that benefit local communities and the state economy.

Objective 1.7: Revitalize Alaska’s forest products industry. Actions:

- Bridge the transition from old growth to new growth harvest in the Tongass National Forest by offering consistent timber sales from state lands.
- Implement the Spruce Root Sustainable Forest Products Industry Cluster initiative, to identify forest resources, establish processing infrastructure, and undertake R&D for sustainable harvesting and processing.
- Support access to other resources and uses in National Forests, such as hydroelectric development.
- Encourage utilization of local timber to meet in-state lumber and biomass needs, including from beetle-killed spruce.

Air Cargo

Ted Stevens Anchorage International Airport is one of the world’s busiest air cargo hubs. Industrial development at the airport, as well as adjacent development at the Fairbanks International Airport, could produce thousands of high-paying jobs.

Objective 1.8: Leverage the state's international air cargo hub to grow new business opportunities.

Actions:

- Implement Anchorage Pacific Air-to-Sea Service (ANC PASS) as an intermodal freight route, connecting Ted Stevens Anchorage International Airport (TSAIA) to backhaul shipping through the Port of Alaska.
- Attract maintenance, repair, overhaul (MRO) providers to TSAIA to service aircraft.
- Expand cargo storage, cold storage, and sorting facilities.
- Support international air cargo opportunities at Fairbanks International Airport.

Seafood



The state's seafood industry is one of its largest employers, and a mainstay for coastal communities. Increasing the value of seafood products and easing barriers to entry are key priorities.

Objective 1.9: Maximize the value of Alaska's seafood industry, and opportunities for resident employment.

Actions:

- Increase the commercial utilization of seafood by-products for new and existing markets.
- Continue DCCED loan programs for the purchase of permits, vessels, and equipment as a "last resort" capital source. Increase the loan cap on DCCED vessel loans.
- Assist small fisheries in rural areas in accessing buyers and markets.
- Explore new product and species development with changing ocean conditions.
- Sustain seafood marketing efforts through the Alaska Seafood Marketing Institute (ASMI), including a shift to more domestic marketing efforts.
- Partner with travel industry to serve Alaska seafood at tourism venues (e.g., cruise ships, lodges, etc.).
- Advocate for greater issuance of H-2B guest worker visas by federal authorities.

Tourism

Pandemic disruptions aside, visitation to Alaska has steadily grown for well over a decade, creating tens of thousands of jobs for Alaskans. The next five years should see further growth and expansion of visitor offerings.

Objective 1.10: Grow and develop Alaska as a world-class visitor destination. **Actions:**

- Develop a Statewide Alaska Tourism Strategic Plan bringing together diverse stakeholders to engage in conversations and research which will result in a roadmap describing how Alaska's tourism industry can gain a competitive advantage as the sector recovers from COVID-19.

- Invest in programs like Adventure Green Alaska, the state's only voluntary "green" certification program for the tourism sector.
- Expand railroad passenger facilities in rail-connected communities receiving cruise ships.
- Invest in a sustainable Alaska Marine Highway System (AMHS) as value-added transportation itinerary for travelers.
- Develop new attractions and assets for visitors: visitor centers for State lands (e.g., South Denali Visitor Center Complex).
- Develop new attractions and assets for visitors: Invest in long-distance trail and hut systems that connect communities via biking, hiking, skiing and paddling multi-day itineraries.
- Develop new attractions and assets for visitors: invest in wayfinding and communication to support outdoor recreation-interested visitors.
- Develop new attractions and assets for visitors: streamline permitting processes across federal, state, and local agencies to improve ease of building new outdoor recreation assets or improving existing (building trails, boat launches, etc.)
- Develop new attractions and assets for visitors: Cultural centers and cultural attractions.
- Develop new attractions and assets for visitors: programs supporting small businesses and entrepreneurs to foster new tour products.
- Continue sustained funding for Alaska's statewide destination marketing brand and program: Travel Alaska through the ATIA.
- Attract new passenger service to develop "stopover" tourism similar to Iceland, with expedited customs and immigration processing.
- Advocate for greater issuance of J-1 guest worker visas by federal authorities.
- Continue to expand opportunities in winter and shoulder-season tourism.
- Expand opportunities in Alaska Native cultural tourism.

Download Detailed Matrix

To review the estimated **project timelines**, desired **outcomes**, **organizations responsible** for completing project actions, and designated **project leads** for each of Alaska's **49** CEDS economic initiatives, download the Goals and Objectives Detailed Matrix at the State CEDS website: <https://www.commerce.alaska.gov/web/StatewideComprehensiveEconomicDevelopmentStrategy.aspx>

Goal 2: Cultivate and Grow Emerging Sectors



Emerging Sectors are those small or nascent industries with high growth potential based on Alaska's competitive advantages. They include mariculture, aerospace, energy technology, and agriculture, among others, which have the potential to diversify the state economy and ultimately become Economic Engines.



Mariculture

Despite the growth potential of the mariculture industry in Alaska, work remains to support the continued growth of the industry. Stimulating activities should include conducting Research and Development (R&D) on potential products, developing the supply chain of hatcheries and processors, marketing, building financing programs, and designing efficiencies in regulatory and permitting processes.

Objective 2.1. Accelerate the growth of mariculture production for shellfish, kelp, and aquatic plants.

Actions:

- Conduct R&D to develop new products from shellfish, kelp, and aquatic plants grown in Alaska (e.g., food, feed/fertilizer, bioplastics, nutraceuticals).
- Implement the Alaska Mariculture Cluster initiative led by Southeast Conference.
- Perform concierge services to assist aquatic farms with regulations, permits, and access to capital.
- Simplify the permitting process for aquatic farms and establish timeframes for approval.
- Assess the potential for new financial programs to support mariculture firms through Alaska Industrial Development and Export Authority (AIDEA) an Alaska Department of Commerce, Community, and Economic Development.
- Develop hatcheries, processing facilities, and marketing assistance for mariculture products and producers.
- Evaluate potential of kelp farms for carbon capture.

Aerospace

The aerospace sector is highly dependent on developed infrastructure to carry out business: launch sites, runways, and more are all important to a developed industry. Developing launch-specific infrastructure for rocket launches, tapping into Federal Aviation Administration (FAA) programs, and ensuring a qualified workforce to meet labor demand may all boost an already budding industry.

Objective 2.2. Develop an in-state aerospace sector based on space launches, unmanned aircraft, and aviation technology. **Actions:**

- Develop launch-specific infrastructure to support additional rocket launches from Alaska, such as low earth orbit launches.
- Work with the FAA to pilot a NextGen National Airspace System integration project.
- Grow aerospace instructional programming at the University of Alaska Fairbanks (UAF) and University of Alaska Anchorage (UAA).

Agriculture

The majority of Alaska's foods are imported. Activities which grow the share of food produced in-state increase the state's resiliency; furthermore, development of new agricultural products provides opportunities for export. Investment in cold storage and processing and agricultural support services would help to grow the industry. Policy revisions to cottage food laws provide another avenue to enable growth.

Objective 2.3: Grow Alaska's agricultural output and value to increase food security, substitute for imported food, and develop export products. **Actions:**

- Increase production and export of Alaska grown products, such as cut flowers including peonies.
- Increase the share of food grown in-state for local consumption to increase food security.
- Expand state support for local agriculture operations (i.e., testing and certification to allow products to be sold to the public).
- Develop cold storage and processing facilities in local communities for use by farmers.
- Increase threshold for cottage food laws from \$25,000 per year to \$50,000.
- Increase procurement of Alaska-sourced food to state agencies, nursing homes, hospitals, schools, prisons, etc.
- Invest in the University of Alaska's Cooperative Extension Service as a resource for agriculture and natural resources.
- Partner with travel industry to serve Alaska-grown agricultural products at tourism venues (e.g., cruise ships and lodges).
- Support the deployment of indoor agriculture for food production, such as hydroponic systems.

Industrial Maritime

Investment in workforce and infrastructure are two critical components to enabling economic activity in the maritime industrial sector. Assessing workforce and infrastructure gaps, attracting private investment, constructing infrastructure such as haul outs, and utilizing creative financing options may boost the sector. In addition, focus should be placed on maximizing use of existing assets, like the Ketchikan Shipyard.

Objective 2.4: Expand the maritime industrial sector to perform more boat and ship building and repair work in-state. Actions:

- Assess infrastructure and workforce gaps constraining the ability of in-state providers to service more vessels.
- Attract private investment to Alaska's shipyards and marine industrial sites.
- Construct waterfront infrastructure such as haul outs and sheltered work areas to enable year-round maintenance on marine vessels.
- Utilize AIDEA's AK SHIP financing program to increase in-state opportunities for marine industrial businesses.
- Evaluate Ketchikan Shipyard for highest and best use and return on investment.

Manufacturing

Just like with many spaces in the entrepreneurship ecosystem, training and technical assistance are important support services for growing the manufacturing capacity in the state. This includes assistance in product development, marketing, manufacturing techniques, and exporting.

Objective 2.5: Expand the capacity of Alaska's manufacturers to substitute imported products as well as expand to markets outside the state. Actions:

- Provide training and technical assistance to manufacturers through the Alaska Manufacturing Extension Partnership (MEP).

- Assist entrepreneurs, start-ups, and existing businesses in assessing and creating a broad range of products suitable in Alaska for manufacturing, marketing, and exporting.
- Develop new value-added food products such as shelf-stable barley flour.
- Identify barriers and opportunities in trade agreements.

Minerals

In addition to the presence of critical mineral ores, Alaska can develop processing and refining capacity, including for ores mined outside of the state. This would retain more economic impacts within the state than mining alone.

Objective 2.6: Position Alaska as a key processing location for critical minerals. Actions:

- Establish processing facilities for rare earth oxides and other critical mineral ores utilizing in-state and allied feedstock.
- Assess opportunities for the recycling and reuse of objects containing valuable minerals, such as discarded batteries, vehicles, and machinery.

Sustainable Energy

With extreme conditions and high cost of power juxtaposed against world-class energy resources, Alaska serves as a testbed for innovative clean, sustainable energy solutions. Alaska's participation in global-scale clean energy innovations (e.g. hydrogen hub and carbon capture, utilization, and storage hub) along with planning and policy revisions could enable rapid progress toward this goal. Deploying next generation energy solutions as legacy systems reach the end-of-life and utilizing partners to deploy pilot and demonstration projects also provides opportunities to build a reputation in the energy innovation space.

Objective 2.7: Develop Alaska as a global center of clean, sustainable energy innovation to attract and grow innovative firms. Actions:

- Adopt a clean energy portfolio standard that targets 80% clean energy while simultaneously reducing energy costs for users in the Railbelt by 2040.
- Deploy next generation renewable energy solutions throughout rural Alaska as legacy systems reach end of useful life, accounting for maintenance and training costs.
- Execute pilot and demonstration projects for energy technology through entities such as AEA, Launch Alaska, and the National Laboratories.
- Deploy clean energy sources such as geothermal, tidal, and microreactors.
- Conduct and implement a statewide strategic plan for energy development.
- Conduct a study on state level energy incentives programs across the U.S. with a goal of expanding energy incentive programs in Alaska.
- Support the establishment of an Alaska Hydrogen Hub and an Alaska Carbon Capture, Utilization and Storage (CCUS) Hub.

Goal 3: A Strong Business Climate & Entrepreneurial Ecosystem

A thriving business community rests on a supportive environment that makes Alaska a good place to start and run a business. This section addresses the needs of small “main street” businesses as well as tech-savvy startups with aspirations of scalable growth. Alaska’s economy needs both types to maintain the circulation of money in-state, and to spur the creation of new Economic Engines.



University

Universities are centers for knowledge transfer and can be utilized as a tool to stimulate entrepreneurial activity. Marketing and commercializing university intellectual property, developing instruction and internship opportunities around entrepreneurship, and aligning R&D with the state’s Economic Engines and Emerging Sectors are all ways in which the university could encourage entrepreneurial growth.

Objective 3.1. Utilize the assets of the University of Alaska System to grow knowledge-economy firms in Alaska. **Actions:**

- Market and commercialize intellectual property generated from university research.
- Provide credit and non-credit instruction and internship opportunities allowing students to explore entrepreneurship.
- Align university research with the R&D needs of Economic Engines and Emerging Sectors, especially in energy, Arctic technologies, resource development, ocean sciences, health care technologies, biosciences, and aerospace.

Training

A suite of organizations across Alaska support small businesses and startups. Ensuring continued funding and support for organizations secures continued provision of the services those organizations offer. Building awareness of workforce programs, like the DOLWD small business programs, is one example of ways to ensure alignment, mutual referrals, and coordination between business assistance providers.

Objective 3.2. Ensure the availability of advising, training, and technical assistance services to small businesses. **Actions:**

- Maintain state, federal, and private sector investment in the Alaska Small Business Development Center (SBDC), Procurement Technical Assistance Center (PTAC), Manufacturing Extension Partnership (MEP), and other programs of the UAA BEI.
- Support Community Development Financial Institutions (CDFIs) and similar entities providing credit and training to small businesses.
- Spread awareness of the Department of Labor and Workforce Development’s (DOLWD) workforce programs for small businesses.
- Ensure alignment, mutual referrals, and coordination between business assistance providers.
- Provide training, education, and awareness about alternative enterprise models such as employee-owned cooperatives.

Start-ups

A healthy startup ecosystem has a dynamic mix of companies. High growth, investable startups are an important part of generating new economic value and diversification. Encouraging the development of these startups in Alaska is important.

Objective 3.3: Increase the number of investible startup companies based in Alaska. **Actions:**

- Grow the capacity of new and existing startup accelerator programs to serve more entrepreneurs.
- Expand the technical assistance offerings available to high potential, high-growth startups.

- Create more opportunities for catalytic events such as sprints or Startup Weekends which encourage shared entrepreneurial learning and networking.
- Develop a research and development tax credit (credit against income) to incentivize the formation of new companies and valuable intellectual property.
- Support and promote Alaska-based venture capital funds.
- Encourage development of corporate innovation arms, such as corporate venture funds and R&D operations.
- Train Alaska startup founders how to raise angel and venture capital in order to increase cash inflow and money circulation in Alaska.

Access to Capital

To meet the financial needs of the diverse mix of businesses and business owners across Alaska a variety of tools are necessary. Implementing new loan and grant programs, increasing utilizations of the State's loan programs, growing access to microloans, expanding Alaska's angel investor community, and developing crowdfunding participation may improve access to capital.

Objective 3.4: Ensure adequate access to capital for Alaska's small businesses and entrepreneurs.

Actions:

- Implement the Alaska SBDC's tribal and small business financing programs funded by the U.S. Treasury's State Small Business Credit Initiative (SSBCI).
- Increase utilization of DCCED business loan programs and the Alaska Industrial Development and Export Authority (AIDEA) Loan Participation program.
- Increase the availability of microloans, especially in underserved areas.
- Increase the use of Alaska's Intrastate Crowdfunding for innovative businesses.
- Create Entrepreneurial Capital Catalyst Grants to invest in starting and restarting high growth-potential businesses underserved by the capital marketplace.
- Increase participation in Alaska's angel investor community to meet the capital needs of high growth-potential startups.
- Centralize navigation of financing programs for entrepreneurs and businesses.

Technical Expertise

In an increasingly digital world, the importance of digital competency is only growing. Developing competencies in E-commerce, artificial intelligence, machine learning, and cybersecurity technical assistance are two strategies which could improve business competency.

Objective 3.5: Enhance the digital competencies of Alaska's businesses and entrepreneurs. **Actions:**

- Provide e-commerce trainings and resources for all communities, especially those newly connected to broadband utilizing Digital Equity Act funding.
- Provide cybersecurity technical assistance to businesses, especially those contracting with the federal government.

Inclusivity

Programs already exist to serve diverse populations across the state. Rural business plan competitions and cohort-based business trainings throughout the state should be expanded and continued.

Objective 3.6: Continue to support programs for rural business enterprises, minority, women-owned, and disadvantaged businesses. **Actions:**

- Continue and expand rural business plan competitions and cohort-based business trainings throughout the state.

Regulatory

State and local governments should formally evaluate various regulations to locate areas for simplification or streamlining to allow for easier compliance for small and entrepreneurial firms.

Objective 3.7: Reduce the regulatory burden on small businesses and entrepreneurs. **Actions:**

- Formally evaluate state regulations to locate areas for simplification or streamlining.

Entrepreneurs

Pursuing federal funding for entrepreneurial support organizations to provide local and online resources to entrepreneurs helps grow a network of resources. In addition, state and local governments can evaluate the use of procurement preferences for startup businesses.

Objective 3.8: Ensure a supportive business environment for startup companies. **Actions:**

- Pursue federal funding for entrepreneurial support organizations that provide local and online resources to entrepreneurs.
- Evaluate the use of procurement preferences for startup businesses in state and local government procurement.

Promote Alaska

The State of Alaska has a suite of brands and platforms at its disposal to market Alaska and Alaskan businesses. Programs like Made in Alaska, Alaska Grown, Silver Hand, and Travel Alaska build the Alaskan business brand. In addition, the state government can highlight the successes of Alaska startup companies on its communication channels.

Objective 3.9: Promote Alaska's advantages as a place to do business. **Actions:**

- Support programs like Made in Alaska, Alaska Grown, Silver Hand, and Travel Alaska.
- Highlight Alaska startup companies on state government communication channels.
- Create an online marketplace for Made in Alaska.

Goal 4: Build & Update Economic Foundations

Valdez

Photo by Jeremy Talbott



All economies require basic foundational assets in order to function and grow. These foundations include infrastructure, housing, recreational amenities, energy and other factors influencing living costs and quality of life. When these foundations are strong, they help to attract and retain human capital, and support the wellbeing of communities.

Broadband

High costs and difficult geography have left Alaska lagging in terms of broadband access, quality, and costs, especially in rural areas. However, multiple federal funding programs promise to all but eliminate Alaska's digital gap in the next five years, bringing numerous ancillary economic benefits.

Objective 4.1. Ensure access to broadband in all Alaska communities that meets an acceptable standard for speed, reliability, and affordability.

Actions:

- Develop a plan to maximize the value of broadband funds coming to Alaska under Broadband Equity, Access, and Deployment (BEAD) Program, Digital Equity Act (DEA) and other federal sources.
- Establish and fully staff the State of Alaska Office of Broadband.
- Build middle and last mile broadband infrastructure to increase access and reduce costs in unserved and underserved areas.
- Utilize funding under the Digital Equity Act to close the digital divide and promote equity and digital inclusion.
- Connect tribal communities to affordable broadband through the Tribal Broadband Connectivity Program as well as other state and federal programs.
- Invest in redundancy to maintain internet connectivity when feasible to continue service during interruptions.

Ferries

The Marine Highway sustains coastal communities in the Southeast, Gulf Coast, and Southwest parts of the

state. Maintaining and upgrading the system are important investments.

Objective 4.2. Ensure the continuation of the Alaska Marine Highway System as a commercial artery for the communities of coastal Alaska. **Actions:**

- Maintain passenger service to coastal communities.
- Utilize the system to transport freight to reduce logistics costs.
- Reduce system costs by building docks meeting AMHS vessel requirements.

Air

Federal programs reduce the cost to transport residents as well as food and basic necessities to Rural Alaska and must be maintained.

Objective 4.3: Preserve the Bypass Mail and Essential Air Service Programs, which have a significant beneficial impact for Rural Alaska families and businesses. **Actions:**

- Preserve the Bypass Mail Program, which has a significant beneficial impact for Rural Alaska families and businesses.

Housing

High housing costs and low inventory likely contribute to labor shortages and outmigration rates that stunt economic growth. Leaders around the state must work together to reduce barriers to construction, incentivize home building, and assess new housing technologies.

Objective 4.4: Increase the supply of affordable housing for urban and rural communities throughout Alaska. Actions:

- Assess the potential for local government tax exemptions to incentivize developers to build more housing.
- Examine and, when needed, adjust existing zoning laws and permitting processes with the goal of reducing barriers to constructing economical housing.
- Assess reforms to Title 29 statutes limiting local governments' ability to offer voluntary tax exemptions.
- Evaluate and apply lessons from Alaska Industrial Development and Export Authority (AIDEA)'s current master plan development for military housing in the Fairbanks North Star Borough (FNSB).
- Proactively plan for housing expansion in communities where large industrial expansion is planned (for example, the Nome deep-water port).
- Evaluate potential powers for local governments to develop abandoned property.

Marine Infrastructure

Both coastal and inland communities in Alaska depend on efficient and well-functioning waterfront infrastructure to receive goods. Ports, harbors, and waterfronts must be updated, modernized, and, if appropriate, expanded to meet economic needs.

Objective 4.5: Upgrade and, where needed, expand port, harbor, and waterfront infrastructure. Actions:

- Assist coastal communities in expanding harbor capacity where demand is sufficient.
- Upgrade aging coastal infrastructure.
- Utilize IJJA funds to improve all aspects of port and harbor infrastructure.
- Expand electrification of docks for cruise industry and other large commercial vessel operators.

Affordable Energy

Alaska has some of the highest power costs and energy consumption in the U.S. Reducing these costs through efficiency improvements, transmission line upgrades, and low-cost power production would produce dividends for livability and industrial expansion alike.

Objective 4.6: Reduce the cost of energy for industrial and residential use through any realistic means throughout the state. Actions:

- Build natural gas infrastructure to increase the supply of natural gas to the Interior, leveraging public and private investment.
- Where feasible, install renewable energy systems such as wind, tidal, geothermal, and solar to reduce power costs in rural areas.
- Use industrial access roads and bulk purchasing power to supply low-cost fuel to rural communities located near natural resource development sites.
- Expand transmission lines to connect outlying communities to the Railbelt (or other regional) grids

wherever a cost-benefit analysis indicates a positive value.

- Utilize federal infrastructure funds to retrofit commercial and industrial buildings for greater efficiency.
- Build new, and upgrade existing hydroelectric facilities to provide low cost, low emissions power.
- Fully implement Commercial Property Assessed Clean Energy (CPACE) financing to help commercial building owners increase energy efficiency and reduce costs at the local government level.
- Establish a green bank to finance energy efficiency projects in partnership with the private sector.
- Increase the reimbursement for Power Cost Equalization (PCE) from 500 kWh to 750 kWh.
- Upgrade Railbelt transmission lines to increase transmission capacity, per announced \$200 million capital plan.

Affordable Health Care

By several measures, Alaska has the highest health care costs in the U.S. This places a heavy burden on households and employers, discouraging in-migration and economic expansion.

Objective 4.7: Reduce the cost of health care for residents and employers in Alaska. Actions:

- Evaluate and assess policy options to reduce the cost of health care services and insurance premiums.
- Utilize innovative technologies such as telemedicine and mobile apps to improve delivery and reduce costs.

Transportation Infrastructure

Airports, roads, rail, and marine linkages allow for the movement of people and goods.

Objective 4.8: Improve transportation infrastructure between communities throughout Alaska to enable lower cost of living, provide better access to health care, support inter-community commerce, and allow greater opportunities for educational interaction.

Actions:

- Secure IJJA and other federal funds to build and upgrade air, road, rail, and marine infrastructure.

Recreation

Economically healthy communities are places where people want to live, work, and raise families. Recreational assets like trails and community spaces offer economic returns by attracting resident workers and visitors.

Objective 4.9: Strategically invest in recreational and quality of life amenities in Alaska communities.

Actions:

- Promote downtown revitalization in urban communities.
- Build hiking, bicycle, and motorized trails within and between communities around the state.
- Improve or construct new community and youth facilities such as libraries.

Goal 5: Develop Alaska's Workforce & Human Capital

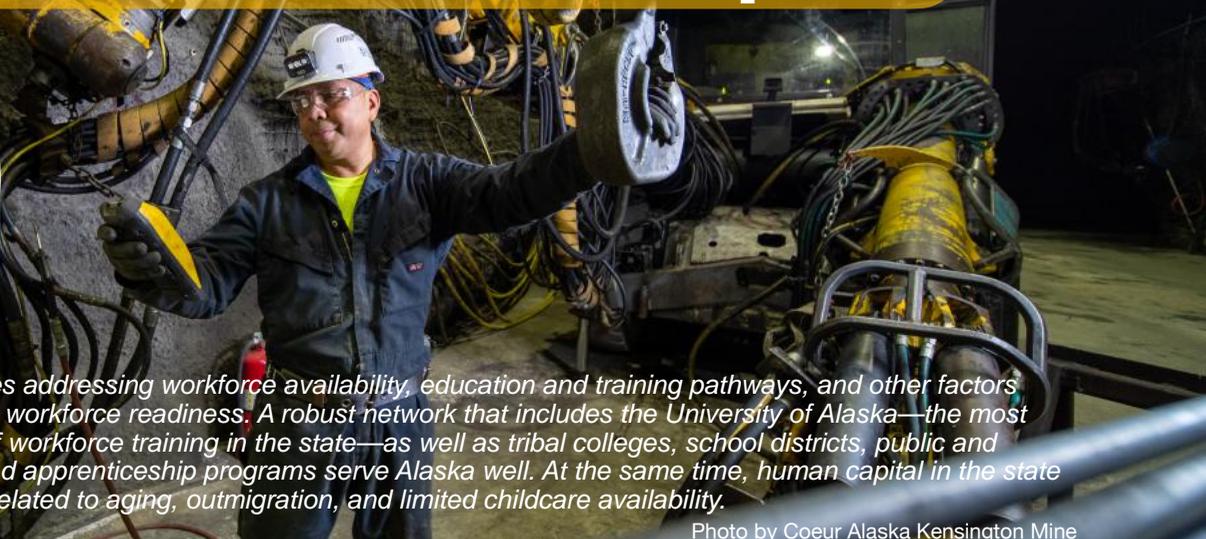


Photo by Coeur Alaska Kensington Mine

A healthy economy requires addressing workforce availability, education and training pathways, and other factors related to career skills and workforce readiness. A robust network that includes the University of Alaska—the most comprehensive provider of workforce training in the state—as well as tribal colleges, school districts, public and private training centers, and apprenticeship programs serve Alaska well. At the same time, human capital in the state faces serious constraints related to aging, outmigration, and limited childcare availability.

Workforce Coordination

With such a wide variety of public, private, tribal, labor, and nonprofit entities involved in workforce development, alignment of efforts is a constant challenge. Building up a “hub” entity will allow for greater efficiency in meeting the needs of workers and employers alike.

Objective 5.1. Align and coordinate statewide workforce development efforts and strengthen collaboration. Actions:

- Strengthen the Alaska Workforce Investment Board (AWIB) under the Department of Labor and Workforce Development (DOLWD) to serve as a “hub” to coordinate and align workforce development efforts in close collaboration with other public, private, and nonprofits.
- Develop and maintain an accessible inventory of all public and private training programs in the state and ensure connectivity and mutual referrals.
- Identify and fill gaps in the workforce ecosystem by creating new programming to serve high-need occupations.
- Provide online tools and resources to help individuals assess occupations and locate specific training requirements and providers.

Education

Like elsewhere, Alaska's economy is hungry for skilled workers. This means not only attainment of bachelor's or advanced degrees, but associate degrees, occupational certificates, apprenticeships, and foundational education (e.g. STEM) in K-12 programs. Supporting and growing educational opportunities in partnership with school districts, universities, state and local government, unions, and the private sector will promote the further development of an Alaskan skilled workforce.

Objective 5.2. Maximize the educational opportunities of Alaskans to prepare them for successful careers. Actions:

- Sustain and grow investment in the University of Alaska System and its offerings in pre-college programs,

occupational endorsements, certificates and degrees, and professional development.

- Sustain and grow investment in regional post-secondary training centers such as Alaska Vocational Technical Center.
- Sustain and fully fund K-12 education for all Alaskans, including career guides to expand awareness and strengthen secondary students' ability to transition into postsecondary pathways that lead to employment.
- Utilize the collective voice of the statewide and regional partners to advocate for policies that will increase access to upskilling and reskilling Alaskans for employment and career advancement, and to retain a productive workforce.
- Expand apprenticeships, pre-apprenticeships, and work-based learning pathways to expedite skill development for entry level employment.
- Support STEM education activities at the K-12 level, such as coding academies, robotics, artificial intelligence.

Workforce Attraction

Years of outmigration have squeezed Alaska's already-small labor pool. Strategic efforts to attract, as well as retain, workers could help to reverse this negative trend. This includes dedicated marketing programs and investments in quality of life in communities.

Objective 5.3: Attract working-age individuals and families to Alaska to fill jobs we cannot fill from our existing workforce and retain our existing workforce in-state. Actions:

- Strategically invest in quality-of-life elements and economic foundations to improve the attractiveness of the state as a place to live and work.
- Initiate targeted marketing efforts to encourage people to move to Alaska to fill industry and occupational gaps.
- Advocate for the easing of federal visa restrictions limiting the availability of guest workers in seafood processing, tourism, seasonal construction, and other industries.
- Strengthen the military-to-civilian transitions to retain skilled talent in Alaska.

Remote Workers

The rise of remote work presents an opportunity to attract telecommuters to choose Alaska as a place to live and contribute to the economic vitality of the state. Teleworking also offers opportunities for current residents to remain in place while pursuing career growth and high-paying employment.

Objective 5.4: Develop and expand opportunities for remote work in Alaska. Actions:

- Develop an informational website for people interested in relocating to Alaska.
- Assist residents in accessing remote work opportunities that allow them to remain in their community.
- Offer trainings and resources to help residents access remote work opportunities, especially in communities newly connected to broadband.

Childcare

Limited childcare capacity and the presence of childcare “deserts” in Alaska prevent many parents from working full-time. Strategies to increase the number of licensed providers would help ease the labor shortage.

Objective 5.5: Expand the availability of affordable, quality, licensed childcare to enable greater workforce participation by parents of young children. Actions:

- Provide business planning assistance to establish childcare centers.
- Support individual community strategies and share best practices across the state.
- Assist potential childcare operators in meeting regulatory and licensing requirements, as well as accessing variances when appropriate.
- Evaluate the potential for patient capital to assist in the startup of childcare centers.

Workforce Act

The WIOA Combined Plan guides the use of WIOA federal funds by the DOLWD. This CEDS supports its goals to: 1.) Build clear routes to careers and/or employment for all Alaskans, 2.) Support job opportunities, training opportunities, and career progression opportunities for all Alaskans, and 3.) Develop multiple pathways for statewide economic stability and job growth.

Objective 5.6: Implement the Alaska Workforce Innovation and Opportunity Act (WIOA) Combined Plan. Actions:

- Build clear routes to careers and/or employment for Alaskans.
- Support job opportunities, training opportunities, and career progression opportunities for all Alaskans.
- Develop multiple pathways for statewide economic stability and job growth.

Infrastructure Bill Preparedness

The Infrastructure Investment and Jobs Act will create thousands of jobs in Alaska, providing work opportunities but also straining the state’s small labor pool. Quickly meeting the training needs of

infrastructure workers will be essential to maximizing the economic benefit of the federal monies.

Objective 5.7: Prepare Alaskans for job opportunities to be created by federally funded infrastructure projects. Actions:

- Produce report on jobs likely to be created by IJJA projects, and associated training needs (DOLWD effort).
- Assess the capacity of existing workforce providers to train workers for infrastructure job opportunities.
- Engage firms which operate in the highest demand industries to understand their basic requirements for incoming workers.
- Strengthen and expand existing workforce programs to help meet demand.
- Develop a rapid training plan tailored to the job opportunities expected to be in highest demand in construction, transportation, engineering, administration, and other areas.

Planning

Many current and proposed economic development efforts in Alaska center around key industry sectors that form Alaska’s economic base. These efforts cannot succeed fully without addressing the workforce needs of these sectors.

Objective 5.8: Develop or update and implement workforce development plans centered around the needs of Alaska’s Economic Engines, Emerging Sectors, and supporting industries. Actions:

- Maintain or update existing plans: Health Care, Construction, Oil and Gas, Transportation, Maritime, Mining, Agriculture.

Alternative Energy Workforce

As the energy transition toward renewables and electrification progresses, workforce development needs will also evolve. Dedicated efforts must be made to build training capacity in these areas, including funds available through the Infrastructure Investment and Jobs Act.

Objective 5.9: Prepare the Alaska workforce for job opportunities in low and no emissions energy technologies, such as electric vehicles, renewable energy systems, and other technologies. Actions:

- Obtain federal grants under the IJJA to train mechanics and maintenance workers on electric and hydrogen vehicles.

Regulatory

In addition to continuing to improve and automate necessary regulatory processes, Alaska must continue to coordinate with other states on uniform qualification criteria to better enable the transition of high value workforce participants into the state.

Objective 5.10: Streamline and simplify regulatory processes to attract high value workforce. Actions:

- Continue improve and automate regulatory processes.
- Continue to coordinate with other states on uniform qualification criteria to better enable the transition of high value workforce participants into the state.

Goal 6: Build a Resilient Economy

Resiliency refers to the ability of an economy to avoid, withstand, or mitigate the effects of negative external events such as natural disasters, commodity price instability, or downturns. Recent years in Alaska have witnessed oil price swings, fisheries disasters, floods, earthquakes, severe storms, wildfires, food supply chain interruptions, power outages, coastal and riverine erosion, cyber-attacks, and the COVID-19 pandemic. Some of these are associated with climate change. The CEDS includes both proactive and responsive measures to plan for and reduce negative impacts.



Sean Neilson Photography

Resiliency Planning

The COVID-19 pandemic generated many opportunities for lessons learned around responding to economic shocks. Cooperation, pre-established organizational structures and systems, and program deployment promote business continuity and preparedness. In addition, ensuring that resiliency is part of the decision-making process for siting new commercial and industrial development implements a preventative measure in the planning process.

Objective 6.1. Develop a resiliency framework specifying roles, responsibilities, and resources to be utilized for economic recovery in the event of an external shock and to address persistent economic deficiencies. Actions:

- Organize a resiliency task force made up of federal agencies and economic development organizations that can be activated when needed.
- Leverage lessons learned/recorded during the COVID pandemic regarding cooperation, organizational structures, systems, and program deployment to promote business continuity and preparedness.



- Work with communities to site new commercial and industrial developments in locations that are out of harm's way.
- Support efforts to secure ongoing funding for the operations of Alaska Regional Development Organizations (ARDORs).

Resilience Capacity

Developing Alaska's in-state capacity to supply and deliver its own goods and services is one step toward addressing this. Examples include increasing local agriculture production for food security, developing in-state timber resources for construction lumber and biomass energy, growing the manufacturing sector to provide self-sufficiency from imported products, and maturing in-state applications for mariculture products.

Objective 6.2. Leverage Economic Engines and Emerging Sectors to promote the resiliency to supply chain disruptions, natural disasters, and external shocks. Actions:

- Develop in-state timber resources for construction lumber and biomass energy.
- Utilize natural gas resources for power and heating needs.

- Increase in-state agricultural output for food security.
- Grow the manufacturing sector to provide self-sufficiency from key imported products.
- Develop in-state applications for mariculture products.
- Incorporate decarbonization, climate change, and the energy transition into economic development efforts.

Resilient Infrastructure

This focuses on upgrading key transportation infrastructure and energy infrastructure. Energy reliability and transmission and broadband fiber redundancy projects, where feasible, ensure continued service. Diversifying energy sources and infrastructure with new sources such as renewable energy and micronuclear technology will help with continuity during power and communication interruptions.

Objective 6.3: Build new, and upgrade existing, infrastructure capable of withstanding resiliency shocks such as natural disasters. Actions:

- Upgrade ports, airports, highways, and rail connections as needed to ensure uninterrupted access to essential supplies.
- Ensure power reliability for certain forms of infrastructure, such as ports and airports, which require an uninterrupted supply.
- Invest in redundancy for transmission lines and broadband fiber when feasible to continue service during interruption (see Goal 4).
- Upgrade rural energy infrastructure such as power houses and bulk fuel farms.

- Deploy clean energy systems to reduce dependence on diesel fuel, including renewable and micronuclear sources.
- Advocate for timely and efficient reimbursement from FEMA for damaged infrastructure.

Rural Resilience

Economic diversity builds resilience. In Rural Alaska, depending on the community, promoting cultural tourism, assisting artists in marketing and selling crafts, providing e-commerce trainings, and supporting industrial and natural resource development may help residents diversify local economies.

Objective 6.4: Increase economic opportunity and self-sufficiency in Rural Alaska while preserving balance with subsistence lifestyle. Actions:

- Promote cultural tourism opportunities for interested communities.
- Assist artists in marketing and selling crafted products.
- Provide e-commerce trainings and resources for all communities, especially those newly connected to broadband (see Goal 3).
- Support industrial and natural resource development that provides job opportunities and community reinvestment.



CEDS Evaluation Framework

Making progress on goals and objectives requires the ability to measure that progress. This CEDS offers a roadmap to grow, strengthen, and diversify Alaska’s economy, and an evaluation framework is needed in order to gauge the success of those efforts—as well as to assess the overall health of the state economy. The evaluation framework presented here attempts to set indicators tied to five of the six goals. (The sixth goal, resilience, is supported by the metrics of the other goals). The metrics shown below are based on careful consideration of the goals and objectives, as well as the consistent availability of data sources. However, economies are complex, and achieving the ambitious goals contained in this CEDS requires the coordinated efforts of many thousands of Alaskans. It should be recognized that caveats always apply, and failure to meet some numerical targets could be due to factors outside of Alaskans’ control.

Baseline measures for CEDS evaluation framework

GOAL AREAS

Overarching Goals

Strengthen Economic Engines



Cultivate and Grow Emerging Sectors



Support a Strong Business Climate



Build Economic Foundations



Workforce Development



GOALS	BASELINE	YEAR
Annual Average Employment (excludes self employment)	310,293	2021
Gross State Product (GSP)	\$54,970,100,000	2021
Net Migration (Annual)	(3,327)	2020-2021
Oil Production Average Barrels/Day	437,000	2021
Permit Approval Time	TBD	
Mining Employment	3,500	2021
Oil and Gas Employment	6,711	2021
DOD and DHS Contract Value	\$1,771,213,425	FY 2021
DOD and USCG Personnel	30,697	2022 (Mar)
Board Feet of Timber Harvested (MMBF all lands)	151.5	2019
Air Cargo Volume TSAIA (Tons)	3,157,682	2020
Alaska Resident Commercial Fishing Permit Ownership	76.6%	2022
Total Ex-Vessel Value of Seafood	\$1,896,517,435	2021
Cruise Ship Visitors	1,331,600	2019
Independent Visitors	881,400	2019
Aquatic Plant Production (lb)	563,390	2021
Aquatic Farms with Production	32	2021
Aerospace Product Manufacturing Employment	138	2021
Farm Revenues (agriculture, non-aquatic)	\$35,302,000	2017
Boat and Ship Building and Repair Employment	383	2021
Manufacturing Employment (non-seafood)	3,894	2021
Critical Mineral Processing Employment	0	2022
Number of Remote Workers	21,083	2020
Renewable Share of Electricity Production	39.40%	2022
New Businesses Started	8,034	2021
New Rural Businesses Started	1,024	2021
SBDC SSBCI Loan Dollars	0	
SBIR/STTR Awards	4	2021
SBIR/STTR Award Dollars	\$506,000	2021
University of Alaska Patents	TBD	
Households with 100 MBPS Broadband Service	TBD	
Number of Licensed Childcare Centers	523	2021
New Housing Starts	1,669	2020
Average Home Price	\$388,648	2021
Median Adjusted Rent Cost	\$1,179	2021
Average Residential Power Cost per kWh	\$0.23	2022
Average Industrial Power Cost per kWh	\$0.19	2022
Percent of Working-Age Alaskans with Postsecondary	55%	2022
Total University of Alaska Enrollment	24,483	Fall 2021
Total University of Alaska Degrees/Certificates Awarded	3,997	
Vo-Tech Enrollment (TVEP)	7,723	2021
Labor Force Participation Rate	66.2%	2022 (May)



Fairbanks

Photo by Jacob Boomsma

VI. APPENDICES

This CEDS plan is the result of extensive research and stakeholder input spanning nearly a year. Much of this material had to be compressed to keep the document concise. The following appendices are available for anyone interested in taking a deeper look.

Appendix A: Goals and Objectives Matrix

Appendix B: Economic Summary Background

Appendix C: Economic Engines

Appendix D: Emerging Sectors

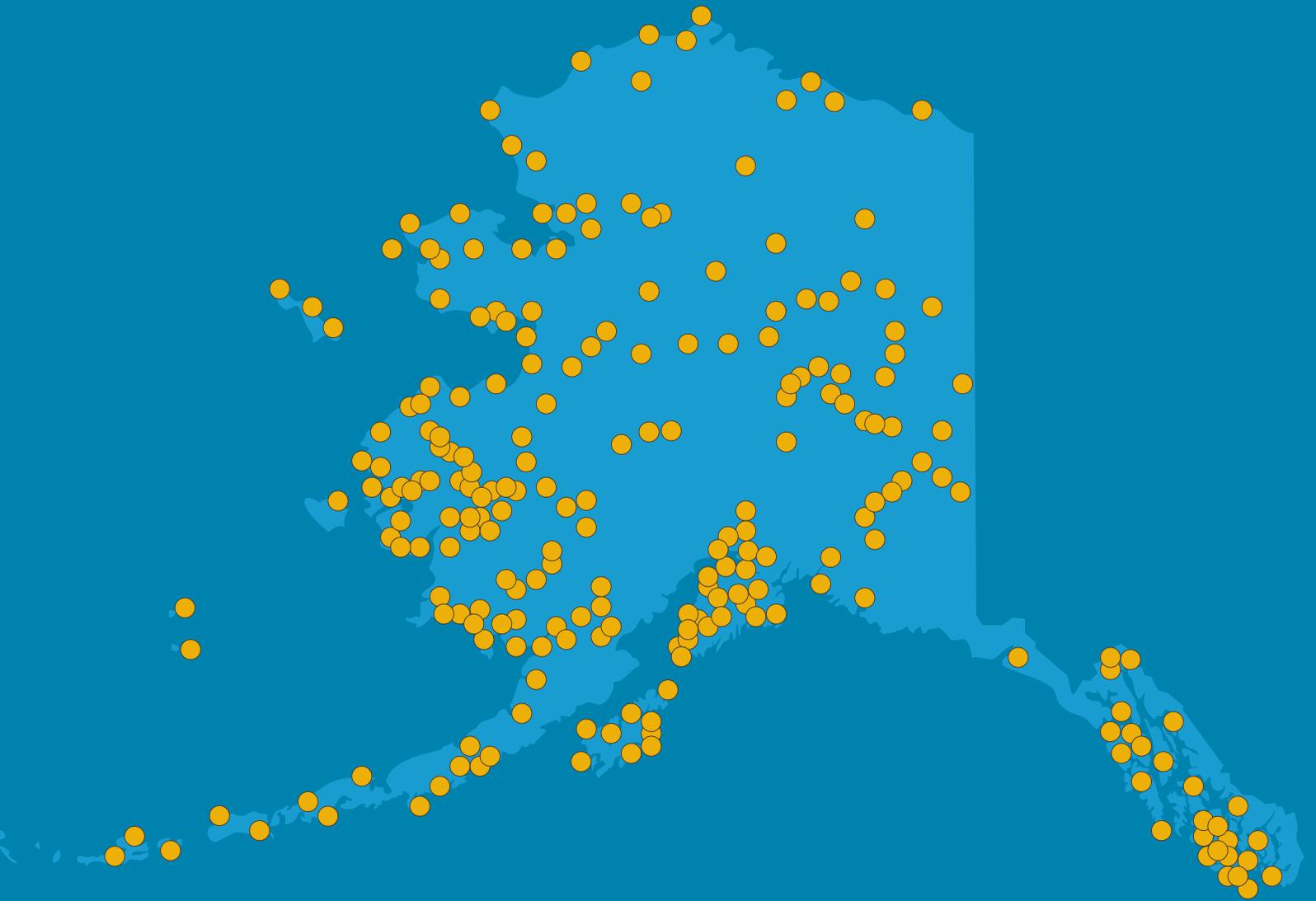
Appendix E: SWOT Analysis

Appendix F: Business and Stakeholder Survey Results

Appendix G: Review of CEDS Plans Across Alaska

Appendix H: Evaluation Framework Data Sources

Available at [www.commerce.alaska.gov/web/
StatewideComprehensiveEconomicDevelopmentStrategy.aspx](http://www.commerce.alaska.gov/web/StatewideComprehensiveEconomicDevelopmentStrategy.aspx)



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