

KODIAK RURAL REGIONAL

COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY



2021- 2026
PREPARED BY KODIAK AREA NATIVE ASSOCIATION

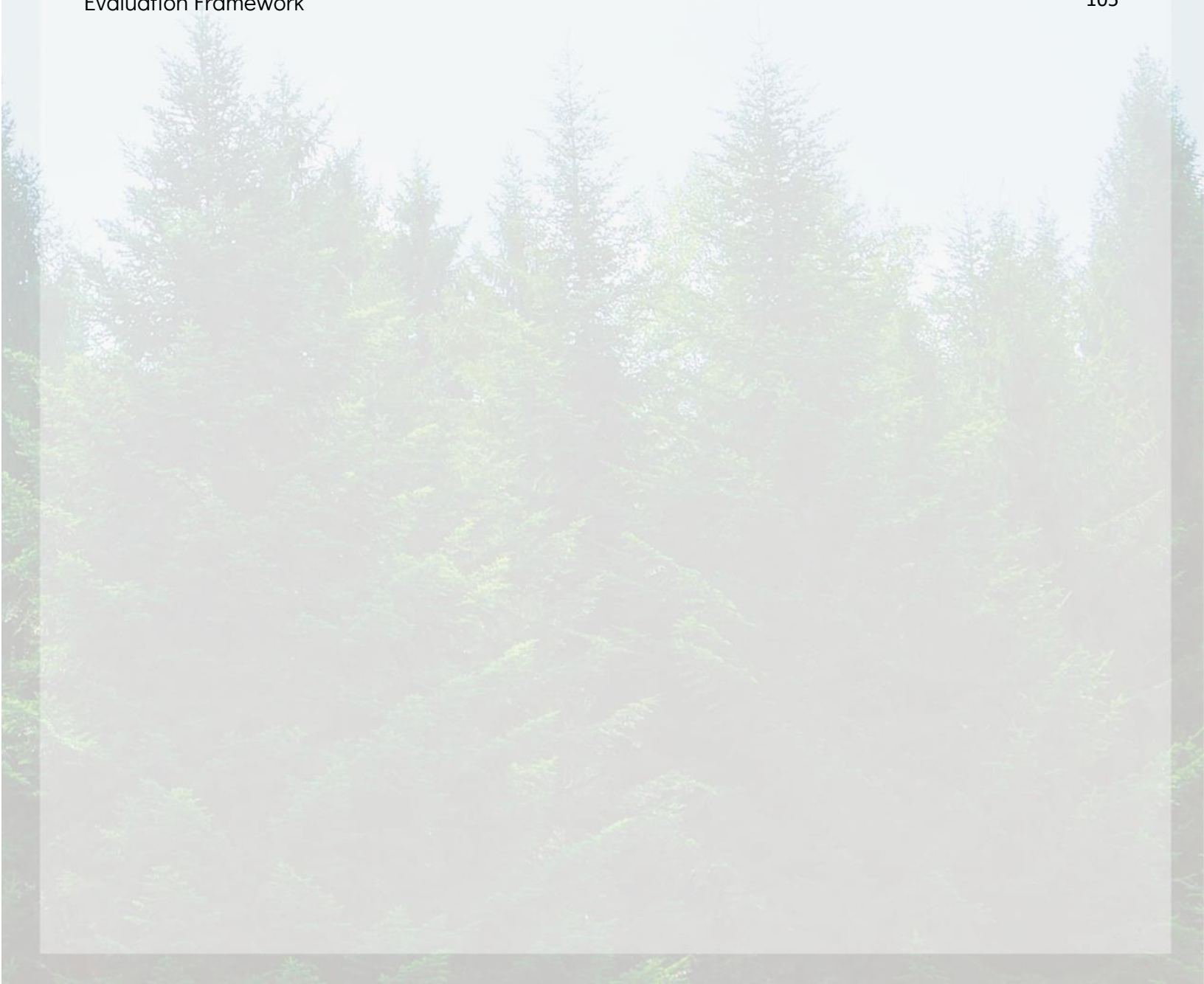
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Table of Contents

Executive Summary	7
Introduction	9
FY-21 Scope of Work	11
Kodiak Archipelago Rural Regional Strategy Committee	12
Background and Information for Planning	14
The People of Kodiak	
Physical Geography	
Population	
Pandemic Assessment	21
Military Impact	23
Climate Adaptation Planning	25
Kodiak Economic Development Organizations	26
Kodiak Waterfront Plan	29
Gibson Cove	31
Workforce Shortages and Gaps	32
Housing	32
Childcare Shortages	34
Declining Population in the Kodiak Region	35
Pacific Spaceport Complex	35
Alaska Marine Highway	35
Energy Infrastructure on the Kodiak Road System	36
The Kodiak Marketplace	37
Kodiak Media, Communications & Print Companies	39
Community Profiles	41
Kodiak Road System	41

Akhiok	45
Karluk	49
Larsen Bay	53
Old Harbor	57
Ouzinkie	61
Port Lions	65
Regional Strengths, Weaknesses, Opportunities, and Threats	69
Economic Cluster: Fisheries	70
SWOT	
Narrative	
Economic Cluster: Agriculture	75
SWOT	
Narrative	
Economic Cluster: Energy	79
SWOT	
Narrative	
Economic Cluster: Tourism	84
SWOT	
Narrative	
Economic Cluster: Mariculture	87
SWOT	
Narrative	
Economic Cluster: Connectivity	91
SWOT	
Narrative	

Strategic Projects, Programs, and Activities/CEDS	95
Plan of Action	
Fisheries	95
Agriculture	96
Energy	97
Mariculture	98
Connectivity	99
Tourism	100
Economic Resilience	101
Evaluation Framework	105



Kodiak Alutiiq Cultural Values

We are the descendants of Sugpiaq, the Real People. Understanding our environment and events that have shaped our lives and created the culture of our ancestors is vital for our children's cultural survival. The history of our People and our place in the world is a part of who we are today. Kodiak Alutiiq must learn and pass on to younger generations our understanding of our natural world: the sky, land, water and the animals. As we meet the challenge of living in the 21st century, we must continue to live in honor of those things we value:

cuqllipet - Our Elders

Sugt'stun niuwacipet - Our heritage language

ilaapet - Family and the kinship of our ancestors and living relatives

nunapet - Ties to our Homeland

unguwacirpet - A subsistence lifestyle, respectful of and sustained by the natural world

piciipet uswituu'uq - Traditional arts, skills and ingenuity

agayumaukut - Faith and a spiritual life, from ancestral beliefs to the diverse faiths of today

ilakuisngukut - Sharing: we welcome everyone

englarstaisngukut - Sense of humor

liicirpet - Learning by doing, observing and listening

Nunapet carlia'arluki - Stewardship of the animals, land, sky and waters

sugtanartukut - Trust

suupet - Our people: we are responsible for each other and ourselves

ling'aklluki - Respect for self, others and our environment is inherent in all of these values.

*Native Educators of the Alutiiq Region o Alutiiq Elder's Council the Alutiiq Academy of Elder
UAF Alaska Native Knowledge Network*

EXECUTIVE SUMMARY

KANA has updated the 2021 to 2026 Comprehensive Economic Development Strategy (CEDS) for the 2nd Annual update in 2023. Information gathered for this CEDS has occurred directly through stakeholder engagement and indirectly through research and observation. This performance period began on July 1, 2022, entering a recovery period following normalization of the global COVID-19 pandemic. Stakeholder engagement for this annual update focused on convening representatives with interests in the Kodiak Road System. This CEDS update provides a new opportunity to diversify our economy and shift economic development goals for the region.

Creating and maintaining a Comprehensive Economic Development Strategy is a continual process that requires observation, reflection, and participation in conferences, work groups, and boards. The compilation of large amounts of information, gathered from talking to people; reading reports, newspapers, journals, and books; and many more sources is only the start. Arranging all of the ideas, concepts, and information into a logical order and developing meaningful goals and objectives that provide a roadmap to improving the economic conditions of the region is the main focus of the CEDS document.

The DRAFT version of the CEDS is submitted to the EDA for review on May 1, 2023. While the DRAFT CEDS is not due to workgroup stakeholders until May 31, 2023, the plan is to post the DRAFT CEDS to the KANA website and circulate amongst workgroup stakeholders prior to this time. The public comment period of 30 days is established and the official new CEDS is planned to be released on June 30, 2023.

This CEDS contains sections that are new to the Kodiak Rural Regional Comprehensive Economic Development Strategy. Focus on the Kodiak Road System in this annual update includes:

- Kodiak's Economic Development Organizations
- Kodiak Marketplace
- Kodiak's waterfront development planning, including Gibson Cove
- Kodiak's housing needs assessment

KEY FINDINGS:

Three significant challenges related to workforce availability were revealed during stakeholder engagement in the update period. Housing shortages for mid-income professionals, lack of available and affordable childcare, and a declining population were all factors that stakeholders, and in particular employers, placed responsibility on for the workforce shortages in the Kodiak Region.

There were significant challenges identifying details for the Goals and Objectives, including lead organizations, projected timelines, and projected number of jobs remain unknown. Improving these sections will be a focus area of the 2024 update. Interested stakeholders are encouraged to provide feedback for consideration for future revisions.

INTRODUCTION: KODIAK AREA NATIVE ASSOCIATION (KANA)

This *Comprehensive Economic Development Strategy* was developed by the Kodiak Area Native Association (KANA) in collaboration with individuals and organizations at local and regional levels, using existing and newly assembled data that accurately reveals the complex economic issues facing the Alutiiq people of the Kodiak Region. This southern region of Alaska is comprised of two distinct areas: a small coastal strip of the Alaska Peninsula that includes parts of the Katmai National Park and Preserve, Becharof National Wildlife Refuge, and Aniakchak National Monument and Preserve—and, separated from the mainland by the roughly 30-mile wide Shelikof Strait, a band of islands known as the Kodiak Archipelago, the largest of which is Kodiak Island.

The island's main population center, the city of Kodiak, is one of seven communities on the island, in addition to six outlying Alaska Native villages: Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions. Coupled with the island's thriving commercial fishing industry and robust Alutiiq heritage are the state's highest living costs, economically disadvantaged communities, and a host of distinct needs that demand an in-depth comprehension of what precisely is required to conduct a prosperous life on an island with merely 40 miles of road—to which many of its residents have no access, and are confined to air or water for all travel.

Responsive to the diverse needs of the island's population, KANA was established as a 501(c)(3) nonprofit corporation in 1966 and operates through resolutions from nine regional Tribal Governments under Public Law (PL) 93-638, the Indian Self Determination and Education Assistance Act (ISDEAA). KANA provides primary medical, dental, behavioral health, and wrap-around services to families unable to secure necessary resources. This delivery reaches over 3,000 Alaska Native residents and takes place at 15 facilities throughout the region.

Historically, nonprofit corporations such as KANA were formed throughout Alaska prior to the Alaska Native Claims Settlement Act (ANCSA). ANCSA was signed into law by President Richard Nixon in December of 1971 and constitutes the largest land claims settlement in United States history at the time. ANCSA is essentially an agreement between the United States Government and Alaska Native Tribes, intended to resolve long-standing disputes regarding aboriginal settlements and stimulate economic development throughout the state of Alaska. The legislation distributed land to Native village and regional entities to establish for-profit corporations, each of which formed a separate non-profit entity to assist Alaska Native people with health and social services.

Today, KANA works to fulfill that need to ensure the collective well-being of both the Alaska Native and general populations of the Kodiak Region. Through helping to foster healthy thriving communities, KANA is committed to elevating quality of life for those we serve.

US ECONOMIC DEVELOPMENT ADMINISTRATION NATIVE PLANNING GRANT

KANA is a recipient of the US Economic Development Administration (EDA) Native Planning Grant, under which the organization dedicates resources to programs and activities that enhance the fiscal prosperity of our Native communities.

With the goal of improving the economic prowess of the Koniag Region, the Economic Development Project Manager works diligently under KANA's Community Services Department, collaborating with City and Borough officials, involved private entities, and tribal governments.

The *Regional Community Plan* delineates the framework by which KANA advocates for and provides technical assistance to Kodiak's Native communities, in hopes of ensuring a strong economic future for generations to come.

It was agreed upon from the participants of our regional CEDS planning meeting that this document will be named the Kodiak Archipelago Rural Regional Community Plan. This Economic Development Planning project will focus on serving the six village communities located in the Kodiak Archipelago (Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, and Port Lions) and the Kodiak road system as the hub for the village communities. The Kodiak road system includes the City of Kodiak, the United States Coast Guard base, Chiniak, and areas in between. The Kodiak road system contains services and businesses that support the rural areas of the region. Increasing economy prosperity in the hub community is necessary to increase the economic prosperity of the village communities.

Kodiak Area Native Association

FY 21 to FY 23 Scope of Work

1. Community and Regional Development Planning:

- a. Work in collaboration with local city and borough officials, public and private sector representatives, tribal governments, and corporations—all comprising the Economic Strategy Committee and Village work groups—to provide the annual update to the Kodiak Rural Regional CEDS 2021-2026. Many of the village communities in the Kodiak Archipelago are considered Distressed Communities.

2. Economic Development Partnerships:

- a. Increase scope of Economic Development Partnerships: extend networking efforts to targeted organizations such as the Alaska Fisheries Development Foundation; Alaska Sea Grant, the Kodiak Economic Development Corporation, the Southwest Alaska Municipal Conference, Kodiak College, Kodiak Archipelago Leadership Institute, University of Alaska Center for Economic Development (including the Alaska Cooperative Development Program & the Manufacturing Extension Partnership), and the Alaska Food Policy Council.

3. Workforce Development and Training:

- a. Gap analysis of available skills/education/experience of local workforce versus industry needs
- b. Create strategy to bridge workforce gap to fill Kodiak-based employment to local workforce

4. Economic Diversification:

- a. Projects/initiatives that diversify the Kodiak economy in order to bolster resilience to and long-term recovery

5. Economic Sector Enhancements/Support:

- a. Environmentally-sustainable energy projects and initiatives and broadband internet access in Kodiak Archipelago village communities;
- b. Mariculture industry development, including processing, manufacturing and product demand;
- c. Agriculture industry production, processing, and manufacturing;
- d. Community anchored fishery participation.

KODIAK ARCHIPELAGO RURAL REGIONAL STRATEGY COMMITTEE

KANA Board of Directors

NAME	ORGANIZATION	TITLE
Loretta Nelson	Native Village of Afognak	Chairperson
Phyllis Amodo	Kaguyak Village	Vice Chairperson
Cheryl Christofferson	Gwangkuta Suuget, At Large	Secretary
Jeannine "JJ" March	Sun'aq Tribe of Kodiak	Treasurer
Larry Chichenoff	Native Village of Ouzinkie	Director
Desiree Eluska	Native Village of Akhiok	Director
Chrislyn Hoen	Tangirnaq Native Village	Director
Stella Krumrey	Alutiiq Tribe of Old Harbor	Director
Nancy Nelson	Native Village of Port Lions	Director
Alex Panamaroff Jr.	Native Village of Larsen Bay	Director

Kodiak Work Group

NAME	ORGANIZATION	TITLE
Greg Zadina	KANA	Vice President of Strategy
Jena Lowmaster	Kodiak Chamber of Commerce	Executive Director
Jacelyn Keys	Kodiak College	Director
Aimee Williams	Discover Kodiak	Executive Director
Tom Panamaroff	Koniag	Regional & Legislative Affairs Executive
Duncan Fields	Shoreside Consulting	Owner
Melissa Good	Alaska Sea Grant	Mariculture Specialist
Chris Sannito	Alaska Sea Grant	Seafood Technology Specialist
Robbie Townsend Vennel	Kodiak Archipelago Leadership Institute	Project Director
Nick Mangini	Mariculture Industry	Farmer
Natasha Hayden	Afognak Native Corporation	VP of Lands and Natural Resources
Shauna Hegna	Koniag	President
John Whiddon	KEDC	President
Josie Bahnke	City of Kodiak	Deputy Manager
April Counciller	Alutiiq Museum	Executive Director
Rosa Skonberg	KANA	Workforce Development Manager
Nichole Pruitt	KANA	Vice President of Public Affairs
Shelly Peterson	Tribal Administrator	Tangirnaq Native Village
Kevin Bumgarner	Kodiak Daily Mirror	Publisher
Ed Hernaez	US Coast Guard	Commanding Officer
John Zbitnoff	Kodiak Launch Complex	General Manager

Ouzinkie Work Group

NAME	ORGANIZATION	TITLE
Elijah Jackson	City of Ouzinkie	Mayor
Darren Muller Sr.	Ouzinkie Native Corporation	Land and Special Projects Manager
Kerry Ivory	Native Village of Ouzinkie	Tribal Administrator
Herman Anderson	City of Ouzinkie	City Council Member
Linda Getz	City of Ouzinkie	City Council Member
Vickie Novak	City of Ouzinkie	City Council Member

Akhiok Work Group

NAME	ORGANIZATION	TITLE
Jeanetta Rastopsoff	Native Village of Akhiok	Secretary/Treasurer
Roger McCoy	City of Akhiok	Manager/Mayor
Speridon Simeonoff Jr.	KANA	VSPO/Council Member

Old Harbor Work Group

NAME	ORGANIZATION	TITLE
Rick Berns	City of Old Harbor	Mayor
Lepani Nadore	Alutiiq Tribe of Old Harbor	Tribal Administrator
Charlene Christiansen	Alutiiq Tribe of Old Harbor	Tribal Administration
Allison Pestrikoff	Old Harbor Native Corporation	Office Manager
Cynthia Berns	Old Harbor Native Corporation	VP – Community and External Affairs

Larsen Bay Work Group

NAME	ORGANIZATION	TITLE
Bill Nelson	City of Larsen Bay	Mayor
Marilyn Arneson	Native Village of Larsen Bay	Tribal Administrator
Richard Benson	Native Village of Larsen Bay	Tribal Council President
Teresa Carlson	Native Village of Larsen Bay	IGAP Department

Port Lions Work Group

NAME	ORGANIZATION	TITLE
Denise May	Native Village of Port Lions	Tribal Administrator
Dorinda Kewan	City of Port Lions	Mayor
Nancy Nelson	Native Village of Port Lions	Tribal Council President
Judith Clayton	City of Port Lions	City Council Member
Amanda Holden	Native Village of Port Lions	Tribal Council Member
Alisha Drabek	Nunaworks	Owner/Consultant
Kyle Crow	City of Port Lions	Resident

BACKGROUND AND INFORMATION FOR PLANNING

THE PEOPLE OF KODIAK ISLAND

The Alutiiq population is part of a continuum of Alaskan maritime peoples. The Alutiiq, or Sugpiaq people, have inhabited their ancestral homelands for approximately 10,000 years and include four main subsets: Prince William Sound, the lower Kenai Peninsula, the Alaska Peninsula, and the Kodiak Archipelago. Like hundreds of similar Alutiiq settlements along the Gulf of Alaska, the people of the Kodiak Archipelago were skilled mariners who depended on the sea for the necessities of life. The Alutiiq had a bartering economic system, trading goods and services as needed with their neighbors from the Aleutian chain to southeast Alaska. The Alutiiq believed that all things, living or not, possess a spirit, which they honored.

By AD 1200, Alutiiq society flourished in every corner of the Archipelago. The population is estimated by some to have reached 14,000, with as many as 50 winter communities, according to archeological records. Evidence also shows that these people transported a wealth of Kodiak resources like hard black slate, red salmon, bear hides, and spruce root to the mainland—having exchanged these goods for antler, ivory, horn, animal pelts, and exotic stone.

The first outsiders to settle on the island were Russian explorers under Grigory Shelikhov, who founded a Russian settlement on Kodiak Island at Three Saints Bay near the present-day village of Old Harbor.

Shelikhov's mission was to establish a permanent settlement on Kodiak Island, so as to restrict the inroads of British fur traders and expand the sea otter hunting industry for his company. The Russian-American Company was established by Royal Russian Decree in 1799, and it was headed by Alexander Baranov. Baranov led the company for 19 years, building a lucrative fur trading enterprise trapping and selling sea otter pelts. But by the middle of the 19th century, the sea otter populations were driven almost to extinction.

He and his men, equipped with modern artillery, defeated the Alutiiq people in a series of battles and subdued the islanders. Russian colonization had a devastating effect on the local Native population as a result of forced labor (i.e., slavery). By the time Alaska became a US Territory in 1867, the Kodiak Region Alutiiq people had almost disappeared as a viable culture. Their history and heritage were retained by a handful of families in each community.

The culture is currently undergoing an historic revitalization that includes culture camps, language, and our own internationally recognized Alutiiq Museum.

PHYSICAL GEOGRAPHY

The island group known as the Kodiak Archipelago is situated on the western side of the Gulf of Alaska. The Kodiak Archipelago and a portion of the Alaska Peninsula are within the Kodiak Island Borough, or Koniag Region. The City of Kodiak, the main port of entry to the Borough and its environs, is 252 air miles south and west of Anchorage (a one-hour flight), accessible only by plane or boat.

The Borough encompasses a 29,000 square mile area, which includes approximately 6,500 square miles of land, including lakes and rivers, approximately 23,000 square miles of coastal waters, and 5,500 miles of shoreline. The Archipelago contains 162 named islands and nearly 1,500 unnamed islands, accounting for approximately 74% of the total Borough land area.

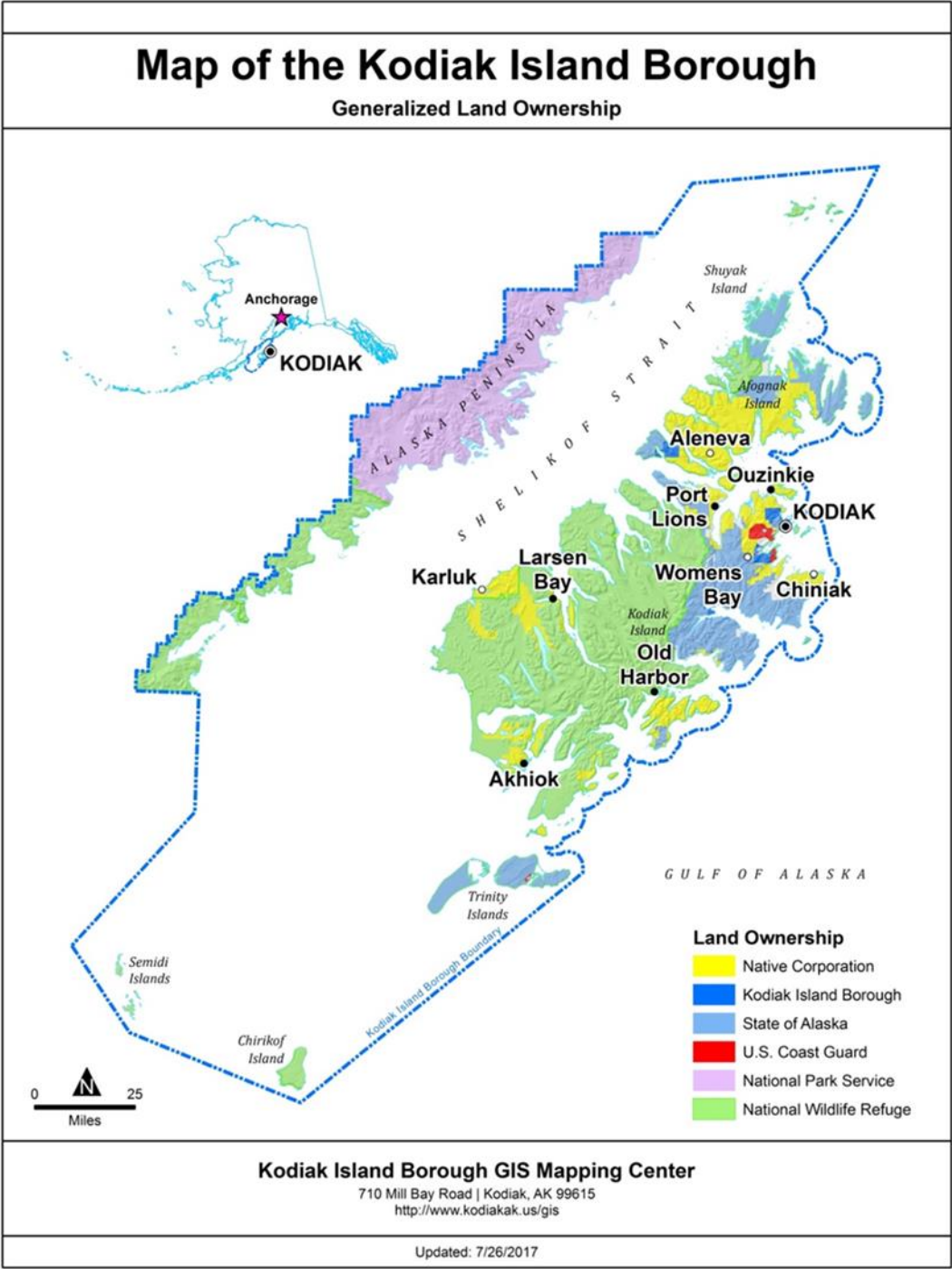
Kodiak Archipelago consists primarily of mountainous terrain, the tallest peak being Koniag at 4,500 feet on Kodiak Island. With the exception of the lowlands and broad valleys of the southwestern portion of Kodiak Island, the Archipelago coastline is rocky and rugged.

Kodiak Island is the largest island in the Archipelago and is the second largest island in the United States. The north and east sides of Kodiak Island are heavily forested. Wetlands, grasslands, and brush dominate the Island's south end. Commercial stands of timber, primarily Sitka Spruce, exist on the north end of Kodiak Island, as well as Afognak Island. Kodiak Island has numerous deep, ice-free bays that provide sheltered anchorage for boats. The southwestern two-thirds of the island, like much of the Kodiak Archipelago, is part of Kodiak National Wildlife Refuge.

Kodiak Island is home to eight communities: The City of Kodiak, and the remote communities of Akhiok, Karluk, Larsen Bay, Old Harbor, Ouzinkie, Port Lions, and Chiniak. Within these eight communities, Kodiak Island is home to ten federally recognized Tribes. There are no roads connecting the hub city of Kodiak with the outlying villages, with the exception of Chiniak. Village residents rely on transportation by boat or commercial airlines for travel in and out of their communities. The Alaska Marine Highway is a vital link between mainland Alaska, the Kodiak road system, and the three communities (Port Lions, Ouzinkie, and Old Harbor) that receive service.

The climate of Kodiak Island is characterized by moderately heavy precipitation and cool temperatures with frequent high clouds, fog, and high winds. These weather patterns often times result in restricted travel. High winds and icing are frequent during the winter, with storm winds produced by systems in the Gulf of Alaska that often sustain speeds from 50 to 75 knots.

However, Kodiak’s climate is favorable for over three hundred species of plants, many of which were used by inhabitants for food, medicine, and shelter. The deep fjords of Kodiak Island provide an abundant habitat for fish and marine mammals. Five species of salmon, herring, and halibut are all found in Kodiak Island waters, providing commercial, subsistence, and sports fishing resources.



BOROUGH LANDS

The Kodiak Island Borough was provided with roughly 56,500 acres of land within the Kodiak Archipelago from the State upon incorporation. Most of this land was originally obtained and selected under municipal entitlement act from the State of Alaska; the configuration of other parcels is the result of land trades with the State. Over 50 percent of Borough land is located on Shuyak Island and Raspberry Island; Ugak Bay and Hidden Basin also include numerous pockets that total a sizeable portion of Borough land acreage. Lease and disposal of Borough lands are subject to approval by the Borough Assembly. The Kodiak Island Borough zoning ordinance contains 18 zoning districts: Watershed (W); Wildlife Habitat (WH), Natural Use Lands (NU); Conservation (C); Rural Development (RD); Rural Residential (RR); Rural Residential One (RR1); Rural Residential Two (RR2); Single Family Residential (R1); Two Family Residential (R2); Multi-Family Residential (R3); Business (B); Rural Neighborhood Commercial (RNC); Urban Neighborhood Commercial (UNC); Retail Business (RB); Light Industrial (LI); Industrial (I); and Public Use Lands (PL). A new zoning scheme is in the works. Recreational land use includes 11 municipal parks totaling 60 acres in size.

STATE LANDS

The most significant state lands in the Borough are the region's vast tidelands. The state also owns a significant amount of inland area in the Borough. Most state lands are in the northeast part of the Borough near the City of Kodiak, and south around Ugak Bay to Dangerous Cape. State land selections are now complete in the Borough and new additions to state ownership are not likely.

The Alaska Department of Natural Resources (DNR) manages most of the state land in the Borough, though few areas have had management authority transferred to other State agencies. The Alaska Department of Transportation and Public Facilities manage roads and airport facilities, the Alaska Department of Fish and Game (ADF&G) manages the Tugidak Island Critical Habitat Area, and the Division of State Parks within DNR manages state park lands. State parks accessible by road include: Fort Abercrombie, Buskin River, and Pasagshak State Recreation Sites. A large portion of Shuyak Island is an undeveloped State park accessible only by water or air. The newest State park in the Borough is located on the northern coast of Afognak Island. In total, 5 state parks throughout Kodiak Island comprise 56,448 acres.

FEDERAL LANDS

Much of the Borough contains land managed by federal authorities. The major federal land owner on Kodiak Island is the U.S. Fish and Wildlife Service (USFWS). USFWS manages the Kodiak National Wildlife Refuge (KNWR), which comprises 1.8 million acres of the archipelago, a portion of the Becharof and Alaska Peninsula National Wildlife Refuge (APNWR), and the Alaska Maritime National Wildlife Refuge (AMNWR). KNWR is managed primarily as habitat for the Kodiak Brown Bear, the largest bear in the world. The USFWS is the largest single land manager in the Borough. The refuges are managed as multiple use areas and allow a wide variety of purposes that do not interfere with the primary objective of each refuge. The Borough boundary on the west, across Shelikof Strait, includes a portion of Katmai National Park managed by the Department of the Interior, National Park Service, the U.S. Coast Guard (USCG), and the Department of Transportation. The U.S. Coast Guard Support Center Kodiak, which is located near the Kodiak urban area, contains over 21,000 acres.

A portion of the scattered small rural parcels in the Borough are federal trust lands. Except for Native Allotments and Federal Town site lots, no other federal trust lands, such as Indian reservations, exist in the Borough. These parcels are held in trust by the federal government in the name of the owner. The activities on the parcel and any transfer of title must be approved by the Bureau of Indian Affairs (BIA). Since they are federal trust lands, the parcels are exempt from most local and state regulations, as well as taxation, until ownership is transferred. Federal environmental laws such as NEPA and the Clean Air and Water Acts do apply.

PRIVATE LANDS

The greatest growth among land ownership categories in the Borough has been among the sole proprietors of privately held land. Most of the lands selected by the Native regional corporation, Koniag, and the village corporations have been transferred for management or patented to the corporations. Over 750,000 acres of land have been transferred to these private corporations. This amounts to about 17 percent of the total land mass of the Borough. Much of this acreage, such as that on Afognak Island, was selected for timber resources or other development potential. However, some of this acreage was selected from within Wildlife Refuges and contains areas with high habitat values for fish and wildlife. Over the past several years, money from the Exxon Valdez Oil Spill settlement has allowed the federal government to repurchase much of this land. The surface estate to former Wildlife Refuge lands is subject to regulation to ensure its protection in a manner that will not materially impair the values for which the refuge was established and the subsurface estate (mineral rights) to such land was retained by the federal government. Except for lands previously part of a Wildlife Refuge, the subsurface estate of all Native lands is owned by Koniag, Inc.

ALASKA NATIVE CLAIMS SETTLEMENT ACT (ANCSA) LANDS

Collectively, as the largest private land owners' in the archipelago, the ANCSA corporations have the greatest potential for both resource development and other development opportunities. ANCSA lands in the region have been developed in a variety of ways including: logging; tourism facilities and activities; residential real estate development; federal and state land acquisition through the Exxon Valdez Oil Spill Council habitat restoration activities; mining; and gravel and rock sales.



Koniag, Inc., one of the thirteen Alaska Native Regional Corporations created under ANCSA, was incorporated in Alaska on June 23, 1972 by the Alutiiq People of the Kodiak Archipelago. At incorporation, Koniag, Inc. enrolled about 3,400 Alaska Native shareholders. ANCSA regional and village corporations selected land in and around existing Native villages in the State in proportion to their enrolled populations. The regional and village corporations are now owned by Alaska Native people through privately owned shares of corporation stock.

POPULATION

The population of the Kodiak Island Borough, according to the 2017 estimates from the Alaska Department of Commerce, Community and Economic Development, is 13,287, including the outlying villages. The total population of the Kodiak Archipelago villages is 782.

Accumulatively, the village populations were 74% Alaskan Native/American Indian, 18% Caucasian, 6% two or more races, 2% Hispanic and less than 1% of both Asian/Pacific Islander and African American. These numbers reflect the most current demographic information, based on the 2010 census. The Kodiak Island Borough appears to be experiencing a slow-but-long-term shift in racial and ethnic distribution. The 2000 Census Bureau shows no significant increase in both the 'Asian/Pacific Islander' and 'Hispanic Origin' categories. In 2000, 17% of the population belonged to the 'Asian/Pacific Islander' group. By 2010, this group remained at 17%. Conversely, the proportions for 'Whites' decreased from 59% in 2000 to 55% in 2010. The 'Native American' and 'African American' groups saw very small changes, on the order of 1-percent.¹

	2010 US Census	2020 Population
City of Kodiak	6,130	5,983
Akhiok	71	63
Chiniak	47	61
Larsen Bay	87	34
Old Harbor	218	216
Ouzinkie	161	109
Port Lions	194	170
Karluk	37	27
USCG Base	1,301	1,673
Other Areas	5,346	5,167
Total Borough	13,592	13,503

PANDEMIC ASSESSMENT – ECONOMIC IMPACT

Beginning in March 2020, the arrival of Coronavirus has had great effect on humanity, lifestyles, and economies all around the world. Kodiak Archipelago and its rural villages communities have remained resilient throughout the duration of the pandemic only really seeing significant increases in cases around the holiday seasons. Kodiak's remote location was able to restrict air traffic to non-essential travelers to the island and rural communities which decreased transmission greatly. Kodiak also was able to provide a free-same day COVID-19 testing center which benefited the community as they could quickly act with quick results. Alaska began administering vaccines to Alaskan residents on December 15, 2020 and just a few months' later vaccines were available to the general public.

As expected, many sectors of the local economy took a hit from the pandemic, specifically tourism, seafood, retail, food service and government. Kodiak Archipelago relies heavily on tourism to stimulate their economy during the spring and summer months. Due to pandemic travel restrictions and stay-at-home orders, there was a steep decline in visitors and tourism. For example, cruise ships were cancelled which resulted in the loss of 17,900 tourist spending time and money in Kodiak. Leisure and hospitality was down 35% and food service employment was down 33% due to the in-person dining restrictions and absence of tourism. The retail sector decreased 6% in 2020 compared to the previous year. The Coast Guard regulations in response to the pandemic also played a part in this drastic decrease in leisure, retail, hospitality and food service. The Coastguard disallowed their active duty personnel to circulate the community during the pandemic and just in April 2021 regulations were relaxed allowing coastguard to begin immersing themselves back into the community. Commercial fisheries were able to proceed as normal with minimal changes but saw the impacts in the prices paid for products. Whereas the seafood processors are who experienced significant shifts in operations. Seafood processing employment was down 16% in 2020 compared to 2019.

On March 27, 2020 the federal government signed into law a Coronavirus Aid, Relief, and Economic Security Act (CARES Act PL 116-136) to provide some financial relief to Americans, business owners, organizations, and governments. The CARES act provided 1.8 trillion dollars towards supporting low income families, businesses and workers, improved healthcare systems, and improve the roll out of prevention for future outbreaks, and lastly relief for educational institutions. Kodiak archipelago was a recipient of roughly 59.6 million dollars for relief funds to assist with economic hardships caused by the pandemic.

Table 66. Summary of Pre-COVID Status, COVID-19 Impacts, and Recovery Outlook by Key Economic Sector

Economic Sector	Pre-COVID Status	COVID-19 Impacts	Recovery Outlook
Tourism	Solid. Some year-to-year fluctuations in cruise volume dependent on sailing schedules, but driven by fishing, hunting and adventure tourism, as well as family visits.	Severe impacts. Total loss of spring season bear hunts; significant curtailment of summer fishing season and lodge operations.	Positive, contingent on vaccine success in controlling COVID-19. Impacts to cruise industry likely to carry into 2021. Overall, industry positioned to rebound.
Seafood	Consolidation trends in both fishing and processing. General downward trajectory across numerous species and fisheries, driven in part by resource abundance and in part by regulatory structures.	Moderate for fishery prosecution. Significant for seafood processing sector overhead and supply chains. Very disruptive to markets, with resulting impacts on processor profitability and prices paid to fishermen.	Complicated by numerous exogenous factors in combination with COVID-19. Impacts on harvesting likely to be minimal over time. Impacts on processing likely to play out over numerous years; potential to contribute to further consolidation.
Retail	Relatively stable overall, with opportunistic business openings. Significant pressure from Amazon Prime follows trend of closures sparked by Walmart's introduction in the 2000s.	Significant impacts, varying with sector/clientele. Relatively modest loss in overall employment.	Varied ability of individual businesses to maintain operations long enough to experience return of customers post-vaccine rollout. Availability of federal relief and stimulus likely to play important role.
Food service	Very steady employment numbers and relatively low churn in individual businesses.	Severe impacts. Employment losses of 35% over last year.	Moderate, provided businesses can endure into the post-vaccine period. Carry-out options help maintain some revenues during reduced in-person dining.
Government	Federal and state job losses offset by local government gains. Continued uncertainty in state budgets likely to drive impacts in state services and revenues to local government.	Government operations and employment provided an important stabilizing force in the economy as other sectors shed jobs.	Challenging, due to funding constraints at state level resulting from a combination of COVID-related factors (reduced oil revenues, increased costs) and overall state budgetary trends.

Table 67. Federal Disbursements to Kodiak Island Borough Residents and Organizations in Response to COVID-19

Program	Type of Recipient	Estimated Number of Recipients or Loans Made	Estimated Value (\$millions)
Economic Impact Payment (EIP)	Individuals and Families	9,123	\$11.0
Paycheck Protection Program (PPP)	Businesses, non-profits, including fisheries businesses	310	\$10.2
Economic Injury Disaster Loans (EIDL)	Businesses, non-profits	149	\$10.0
EIDL Grants	Businesses, non-profits	251	\$0.7
Coronavirus Relief Fund (CRF)	Tribes	10	\$5.5
Aid to Tribal Governments	Tribes	10	\$2.8
Welfare Assistance	Tribes	10	\$0.3
NOAA Fisheries Impacts	Commercial and sport fishermen, aquaculture businesses, subsistence harvesters	n/a	n/a
Housing Relief Program	Homeowners and renters	55	\$0.6
Municipal CARES Act Receipts	Municipalities	7	\$18.4
Total		n/a	\$59.5

Sources: U.S. Treasury, Small Business Administration, State of Alaska, Kodiak Economic Development Corporation, Alaska Housing Finance Corporation, Bureau of Indian Affairs, Federal Emergency Management Administration, Alaska Department of Fish and Game, and McDowell Group estimates.



Photo courtesy of Brad Pigage

MILITARY IMPACT

INTRO & HISTORY

The United States Coast Guard is not the only military branch present in the Kodiak region, but it is certainly the most prominent, contributing approximately 95% of the active duty military members in Kodiak. United States Coast Guard (USCG) Base Kodiak is the largest USCG base in the nation, comprised of nine different units. Base Kodiak was the first permanent Coast Guard aviation resource in Alaska and continues to serve nearly 4,000,000 sq. miles of Alaska and over 47,000 miles of its coastline. This is made possible by Base Kodiak being home to the largest Coast Guard Air Station and having the unique ability to house both cutters and aircraft (the only USCG command able to do so). Having such a large military base as part of such a small island community has a major impact on the area.

POPULATION / BASE SIZE

Base Kodiak plays a vital part to the upkeep of infrastructure in Kodiak, taking ownership of just under 28,000 acres of land, 41 miles of roads, two major piers, and perhaps most significantly: the airport, runways, and air traffic control on Kodiak. With close to 1,200 active duty military members, Coast Guard service men and women makeup approximately 20% of the total population of the city of Kodiak. Nearly half of those active duty members also bring with them their families. That means that Base Kodiak contributes closer to 30% of the total population of the city.

Historically, the base size has remained relatively steady and has not fluctuated much in the direction of growth or decay. However, within the next five years Base Kodiak is going to gain four new cutters, increasing active duty members by approximately 350 billets and adding an additional 80 family housing units to the already existing 391 units.

JOBS, INCOME, AND MILITARY SPENDING

The investment of Coast Guard funding in the region and the near guarantee of high levels of employment of active duty military, in addition to approximately 200 civilians employed by Base Kodiak, means that there is a sense of economic stability but also fragility that you would be hard pressed to find in other regions. This was apparent in 2018 when the partial government shutdown caused Coast Guard members to go on without pay, causing a ripple effect through the community that had never been seen before. Military members no longer had the income to drive into the local economy that so many businesses rely on – an estimated \$60,000,000 annually. The government shutdown in 2018 that caused so many to temporarily lose pay was eye-opening to the entire community as to exactly how important the military presence is on Kodiak. The USCG has spent approximately \$443 million over the last ten years within the Kodiak Island Borough alone. This does not factor in the additional spending from other military branches, including the Army, Navy, Air Force, and other department of defense sectors.

Rural Alaskan communities are known to have a higher cost of living, yet Kodiak ranks even higher due to the large Coast Guard presence on the island. This is due to the Basic Allowance for Housing (BAH); this rate is based off of the cost of living and changes depending on where members are stationed. Because the cost of living in Kodiak is higher than average, the BAH is also higher than average – with 20% of the population of Kodiak being active duty, landlords and homeowners price their spaces accordingly.

Members of the military, their families, and some retirees are eligible to access commissary and Post Exchange (PX) for groceries and many other consumer products. These purchases are not subject to local sales taxes and do not support small, locally owned business. Increasingly, Kodiak is an attractive place for military retirees to remain following their service. This segment of the population contributes to the local economy and the culture of the community. Some retirees leaving service with a service-related disability are eligible for a property tax exemption. This reduces property tax collections of the Kodiak Island Borough.

MILITARY FAMILIES

Approximately 500 active duty members are in Kodiak with their families. Military spouses play an important role in the local economy, filling many positions for local businesses and bringing in knowledge, expertise, and experience from many places outside of Kodiak. Despite the large pool of qualified workers, spouses are still often beat out of many positions because it is known that they will have to transfer out after three years. Regardless, Coast Guard spouses are still a noticeable demographic working in education, healthcare, and small business ownership. There is also a lot of community involvement from military spouses who use their connections to benefit the communities of Kodiak Island. The Military Spouses Association in particular has organized a toy drive during Christmas to use Coast Guard aircraft to bring presents to children in the remote villages. Others use their connections to encourage local produce to be sold on the commissary on base – helping both military members and the locals who grow and sell it.

Climate Adaptation Planning

Similar to many regions across the globe, the Kodiak Archipelago is seeing significant changes to its environment as a result of climate change. As stated from the Fourth National Climate Assessment webpage, Alaska is among the fastest warming regions on Earth. While there are a few options as to how communities can respond to the impacts of climate change, what is known as *climate adaptation planning* is one method that allows for stakeholders to voice and document the changes they are seeing in their community and outline ways in which they propose to mitigate the impacts of these changes – known as adaptation strategies.

The Kodiak Area Native Association (KANA) has been awarded funds through the Bureau of Indian Affairs to develop a climate adaptation plan in partnership with Kodiak Tribes to identify the changes of most concern, as well as, to develop adaptation strategies for the region. Though the climate adaptation plan is not set to be completed until August of 2023, it was early on that it was recognized that the issues that face Kodiak need to be resolved holistically. Climate change will have a significant impact to subsistence harvesting in Kodiak and as a result, a significant impact to the local economy. With this identification, KANA applied for and received funds from the Alaska Center for Climate Assessment and Policy (ACCAP) to include climate adaptation strategies in the CEDS to determine what economic approaches stakeholders can take that will also improve the environment and mitigate the impacts of climate change.

Kodiak Tribe's greatest concern in regards to climate change at this time is subsistence resource availability and food security. This is an evolving project that will produce more content in future CEDS additions including proposed actions and their impact to both climate change and economic development in the Kodiak Archipelago.

Economic Development Organizations:

Kodiak has three organizations that fit into the definition of an Economic Development Organization (EDO). An EDO is dedicated to the economic development of a geographic region, often engaging with businesses, government entities, and the public to enhance existing and develop new economic development opportunities.

Kodiak Chamber of Commerce:

The Chamber is a member-driven non-profit organization. The dedicated staff and Board of Directors work to offer educational and networking opportunities, business resources, and government advocacy to protect and advance members' interest.

Mission: To provide business development for an economically strong and diverse Kodiak region.

Core Purpose: Educate, Support, Grow

Core Values: Embrace diversity, member-driven anchored in the community, business champions, forward thinking.

The Chamber supports several annual events in Kodiak, including: Crab Festival, ComFish Alaska, Coast Guard Appreciation Dinner, Downtown Trick or Treat, Community Clean-Up Day, as well as hosting Political and Educational Forums as the opportunities arise.

The Chamber provides a variety of services to their members and the community:

- Relocation Guide for new comers to Kodiak, including newly arriving Coast Guard members
- Business After Hours events held at member locations
- Ribbon Cutting events: newly opened, relocated, or expanding – big scissors and ribbon included
- Chamber *News & Views*: a 2-minute radio interview segment with a Chamber member
- Educational Courses, Seminars, and Mentors: a partnership with the Small Business Development Center, Kodiak College, and the Small Business Association
- Loyal to Local Gift Card: gift card network that accepts eGift cards of participating members

Discover Kodiak:

Discover Kodiak is the convention and visitor's bureau for the Kodiak Archipelago, with members located all over Kodiak, Raspberry and Afognak Islands. Tasked with promoting the sustainable development of the tourism industry throughout the Archipelago, Discover Kodiak maintains a year-round visitor center in the heart of the downtown area to help visitors find local attractions and recommend member businesses.

Tourism in Kodiak is supported by Alaska Airlines and the Alaska Marine Highway. Discover Kodiak advocates for continued and consistent services by both organizations.

Discover Kodiak promotes the tourism industry in general in the Kodiak region by marketing and advertising to visitors, event & meeting planners, and the media to draw attention to all the opportunities Kodiak has to offer.

On top of benefiting hospitality-based businesses like hotels, tour companies, and hotels, the tourism industry supports ancillary industries like gas stations, grocery stores, bookkeepers, accountants, and more.

Kodiak Economic Development Corporation (KEDC):

The Kodiak Economic Development Corporation is entering its third year of existence and has developed a comprehensive strategic plan with prioritized initiatives based on board member feedback, community needs assessments, and other data points.

Core Purpose

Strengthening Kodiak's economic present and future – Advocating, Connecting, Innovating, and Driving

Core Values

Relationships – Diversity – Entrepreneurial – Sustainability – Hope

Core Outcomes

Advocating for a healthy business climate. Connecting all stakeholders committed to economic development. Innovating to bring in new businesses to strengthen Kodiak's economic future. Driving support for existing businesses to strengthen Kodiak's economic present.

Core Geography

Kodiak Island

Envisioned Future (2027):

By 2027, the Kodiak Economic Development Corporation is recognized as a resource for comprehensive economic development information and taking proactive action across Kodiak Island.

Envisioned Future (2030):

KEDC is recognized across the state as an effective business incubator, with the financial resources to support the development of the Kodiak economy.

Identified Initiatives

- Arctic Gateway
- Blue Zone
- Island Wide Marketing and Business Recruitment
- Business Retention and Expansion
- Mariculture Sector Support
 - Working with local independent kelp and shellfish farmers to form Kodiak Mariculture Alliance to provide better access to processing capabilities and expanded markets. In conjunction with the “Blue Economy Zone” hub proposed for Gibson Cove, will pursue funding opportunities for site development of future processing locations.
- Storefront Enhancement Program
- Workforce Housing
- Waterfront Development
- Workforce Development

Community Land Trust

KEDC has proposed a Three Phase project to establish a Community Land Trust (CLT), in which land is held by the trust and the developer or homeowner would own the building, in an effort to increase the

availability of affordable workforce housing in the community. The project would produce 18 duplexes totaling 36 single family units.

Phase I:

Feasibility Assessment and Business Planning – *Complete*

1. Assess the feasibility of operating a CLT and the development of a business plan to articulate the critical business planning assumptions for CLT Operations.
2. Identify city owned property ideally suited for CLT development.
3. Identify developmental costs for the CLT addition.
4. Identify a builder familiar with Kodiak Alaska's building requirements
5. Develop a Job Description for Phase II Project Manger

Phase II:

Creation of KICLT and Implementation of its Home Ownership Program

1. Hire KICLT Phase II Project Manager
2. Property lease between the City of Kodiak and KEDC
3. Development of KICLT property
4. Marketing and presale of KICLT homes
5. Construction and occupancy

Phase III:

Sustainable Management

1. Formation of Kodiak Island CLT 501c3
2. Transfer of management and operations to newly formed governing structure

Waterfront Master Plan¹

The importance of the waterfront to Kodiak's economy cannot be understated. From the seafood industry, the U.S. Coast Guard, transportation sector, visitor/tourism industry, subsistence participation, and the emerging mariculture industry, nearly every facet of industry, occupation, and activity rely on a functional waterfront. CEDS stakeholder engagement highlighted that Kodiak is located in a strategic location and could be considered the Gateway to the Arctic. Improvements to the waterfront would prepare Kodiak to increase shoreside services (eg. maintenance, construction) to accommodate Ice Breakers, increased Coast Guard vessels, research vessels, and maritime transportation.

To update the City of Kodiak's 2010 Waterfront Master Plan, the City of Kodiak contracted with RESPEC. The purpose of the Kodiak Waterfront Master Plan Update, dated February 2023, is stated in the document: "The development of the Kodiak Waterfront Master Plan involved reviewing the needs and current and future uses of Kodiak's downtown waterfront space. The plan incorporates an inventory of existing facilities, amenities, and recommendations for upgrades and enhancements for all city-owned waterfront properties based on need and use priority. Additionally, the plan identifies potential funding sources to fulfill the recommendations."

RESPEC states on the project website that: "A successful approach to waterfront planning aims to strike a balance between providing public access to the waterfront for both residents and visitors and supporting long-time industries that depend on the waterfront." (<https://www.kodiakwaterfrontplan.com/about>)

The City of Kodiak owns approximately nine miles of the 12 miles of waterfront within city limits, so undoubtedly, will have a significant role in planning and financing improvements. According to the updated plan, "the waterfront faces numerous challenges, including facilities in need of electrical and structural upgrades, docks lacking space for the ever-growing number of large fishing and cargo vessels, and the need for new and improved facilities to accommodate the many people who visit the waterfront.

Despite these challenges, there are many opportunities for the Kodiak Waterfront, including creating space to support the growing mariculture industry, providing drydock and haul-out locations, and development facilities for marine debris recycling."

¹ <https://www.kodiakwaterfrontplan.com/>



KEY OBSTACLES

- / Lack of suitable dry-dock facilities at St Herman Harbor
- / Facility deficiencies, such as structural failures of piers with unsafe electrical components, degraded utilities, insufficient spill and fire response capabilities and navigational aids, unsuitable berthing depths, and unavailable upland space to support industrial activity due to the unfinished quarry
- / Unsuitability of the terminal design space at Pier I
- / Lack of proper passenger facilities at Pier II
- / Unsuitability of the floatplane dock for a larger capacity at Trident Seaplane Basin
- / Lack of a critical deep-water dock to facilitate industrial and transportation user activity

MOST CRITICAL

- / Harbor electrical system (St Herman and St Paul Harbor)
- / Dock piling replacement (St Paul Harbor: Dock I and Oscar's Dock)
- / Installation of more piers (St Herman Harbor)
- / Extending/widening/developing of the breakwater (St Herman and St Paul Harbor)

Figure above taken from the Kodiak Waterfront Plan (www.kodiakwaterfrontplan.com)

Gibson Cove

Gibson Cove is about 29 acres of waterfront property that is just two miles south of downtown Kodiak. Gibson Cove area has historically been used as a tannery, cannery, served as boat gear storage, and other miscellaneous fishery/ maritime industry. It also serves as a highly trafficked recreational beach site for residents.

The City of Kodiak owns the majority of the Gibson Cove property, which was purchased due to the potential development opportunities as commercial waterfront property, something that is very limited in Kodiak. The property comes with a dilapidated cannery building and industrial dock that is currently unsafe for use and will need to be assessed to see if any of the foundations of building or dock is salvageable. In addition to being an unsafe structure, Gibson Cove cannery building experienced a fire in January of 2023 that devalued and damaged the buildings infrastructure even more.

The City Council and subcommittees of the council have been in discussions of potential uses for this property for several years with letters of interest from potential stakeholders archiving back to 2016. In 2019, the City Manager asked the Port and Harbor Advisory Board (PHAB) for suggestions for the uses of Gibson Cove property. PHAB researched and made suggestions to the board based on conversation they had with interested parties including representation from the United States Coast Guard, NOAA, and local charter companies.

In the *Kodiak Waterfront Master Plan* (kodiakwaterfrontplan.com), Gibson Cove is listed as a priority for renovation and development. Included in the Gibson Cove section (pg. 40) is an aerial map of future plans- short, mid-term and long -term goals (see below).

Short-term Goals:

- Demolish old fish cannery

Midterm Goals:

- Develop vehicle parking area
- Develop pedestrian signage, sitting and walkways within bay area on southside of Gibson Cove

Long- term Goals:

- Develop pedestrian signage, sitting and walkways from Gibson Cove along Rezanof Drive to the Pier 2-Multi-Dock

The city's goals remain broad and have kept momentum in independent conversations and meetings amongst community members, fisherman, kelp farmers, marine debris and net recyclers, non-profits and other businesses and entrepreneurs that want to see this property used to its full potential as well as maintain and respect the local recreational uses.

Workforce Shortages & Gaps

Stakeholders identified gaps in Kodiak's workforce as a significant challenge to fill current open positions and accommodate for potential growth of businesses in the Kodiak region. Skilled trades are of particular concern, including HVAC, mechanical, electrical, and construction; many projects in Kodiak require hiring workforce from off-island with added travel and accommodation costs. Automotive maintenance, equipment operators, and medical providers are also short in supply.

In September 2022, the Kodiak Economic Development Corporation hosted a Workforce Development luncheon with approximately 30 people representing 13 different sectors. Common themes from attendees included difficulty of employers in filling open positions and attracting talent and a desire to have young people remain in Kodiak and grow the local workforce, with an overwhelming number of attendees expressing need to understand and support local resources to grow and develop local talent. Developing local talent is a long-term workforce development solution that can strengthen the economy in coming years.

More immediate need is to address the current gap in the available and ready workforce. This is not just a Kodiak issue, but a state-wide challenge. According to the March 2023 Alaska Economic Trends "The size of Alaska's working-age population has been declining for nine years in a row." Two reasons cited include net migration losses and an aging population. Kodiak in particular has experienced an aging workforce in the fisheries sector, both in the fishing and processing components.

Additional factors also play a role in the availability of local workforce, including housing shortages and the availability of affordable, quality childcare.

Housing

Pulled from the Kodiak Island Borough Housing Needs Assessment

The Kodiak region, both on the Road System and within the village communities, experiences a significant shortage of available, affordable housing. This is particularly true, according to Kodiak Economic Development Corporation (KEDC), for "median-level income earners." In response, KEDC has formed a Workforce Housing Taskforce, to pursue increased housing options through a Community Land Trust (CLT), where, the buildable land is owned by the CLT and the homeowner purchases the structure and all

improvements. KEDC hopes to work with the Kodiak Island Housing Authority and the City of Kodiak to produce as many as 18 duplexes.

Housing shortages have caused challenges for attracting a needed workforce to the Kodiak Region. Employers (ranging from the hospital, the school district, construction companies, Native Corporations, and more) report housing as a significant deterrence to recruiting staff to move to Kodiak. Providence Hospital is addressing this challenge through the Providence Kodiak Workforce Housing Project, building a 16-unit facility to house new staff while they search for permanent housing.

A report titled “Kodiak Island Borough Housing Needs Assessment,” produce by McKinley Research Group for Kodiak Island Housing Authority in May 2022 analyzed the current and future housing conditions in the Kodiak Region. The report found:

- Housing costs in Kodiak are rising and are more expensive than Alaska-wide median housing costs both for renting and purchasing. There is limited availability of multi-family housing.
- 28% of Kodiak households are “cost burdened,” meaning that they spend 30% or more of monthly household income on rent or ownership costs.
- Most interest is in single-family, less than 2,000 square foot homes between \$300,000 and \$400,000; survey respondents state that housing affordability and availability is poor to very poor.
- The assessment indicates that demand exists for between 65 to 75 new single-family households with income above \$100,000 (approximate income to support a \$340,000 home).
- Strong demand for residents and employers for “professional” high-quality rental units; whereas demand for low-income housing is weaker.

Specifically, for the Village Communities, the report found:

- Many vacant housing units exist in village communities, some due to seasonal usage with others needing significant maintenance and are uninhabitable.
- Housing in the village communities are overwhelmingly single-family homes (96%)
- Populations in the village communities are declining, from 768 in 2010 to 619 in 2020; Low household income persists with high numbers of households below the federal poverty level.
- The assessment indicates that demand exists for between five to ten new or refurbished housing units in each village community, whereas average home value is

quite low in comparison to the costs of land and materials needed to build new housing.

- Survey respondents express there is a demand for housing for Tribal members who would like to move back to the village and younger residents living in multi-generational housing exists
- Availability of housing for rent and purchase are poor to very poor and nearly ½ of survey respondents were dissatisfied with the state of repair and energy efficiency in their homes

Childcare Shortages

As employment rebounds post-pandemic, the shortage of available childcare options and childcare workers is keeping many people from returning to the workforce. There were childcare shortages before the pandemic and post-pandemic the shortages are even more profound.

According to “Alaska Economic Trends” from April 2022, “An unmet need for childcare hampers economic recovery” and that “The shortage of child care has affected women most.”

The lack of available affordable, quality childcare did not start with the pandemic. In 2013, the Kodiak Area Native Association commissioned a feasibility study by the McDowell Group that indicated “that there is relatively strong unmet demand in Kodiak for high quality child care.”

However, as “Alaska Economic Trends” explains “Like restaurants and stores, child care providers grappled with small profit margins, high turnover, and changing regulations” and states that “Almost a fifth of Alaska’s licensed child care facilities have closed since March 2020, mainly because of financial losses and the lack of workers.”

Addressing the gap in available quality child care services could provide relief to workforce shortages and improve the economic conditions of the region.

Declining Population in the Kodiak Region:

According to “Alaska Economic Trends” from September 2022, the “Predicted growth would be the slowest in Alaska’s history” through 2050. State population is projected to “increase by a projected 24,800 people from 2021 to 2050.”

The same analysis indicates a significant decrease in population for the Kodiak Island Borough, from an estimated 12,900 people in 2021 to 11,871 in 2030 and just 9,871 in 2050 representing a 23.5% decrease.

Net out migration, decreases in birth rates, and increases in death rates are all contributing factors.

Such a significant decline in population is concerning and could impact the economic outlook of the Kodiak Region in the coming decades.

Pacific Spaceport Complex:

Owned and operated by the Alaska Aerospace Corporation, the Pacific Spaceport Complex is located approximately 45 miles from the City of Kodiak on Kodiak Island. Most activity at the Pacific Spaceport Complex have been conducted by the U.S. government, although private industry is increasing activity. According to an interview with former CEO Milton Keeter by Alaska Public Media “Alaska Aerospace is headquartered in Anchorage, and the Kodiak facility employs about 40 full and part-time staff, plus contractors.” ([Alaska Public Media, Oct 11, 2022; by Kirsten Dobroth, KMXT](#))

Alaska Marine Highway:

The Alaska Marine Highway System (AMHS) is a vital transportation system for Coastal Alaska, including connections to Bellingham, Washington and Prince Rupert, British Columbia. For the Kodiak region, the AMHS connects the Port of Kodiak, Old Harbor, Port Lions, and Ouzinkie with the mainland, providing residents and visitors with safe, reliable, and efficient transportation of people, goods, and vehicles. Of particular concern for the Kodiak region is the aging MV Tustumena, which started service in 1964. The MV Kennicott is the only additional vessel with capabilities of serving the Kodiak region. The State of Alaska continues efforts to replace the MV Tustumena, which has been challenging given the precarious condition of the State budget. The State budget has also had dampening

effects on the frequency and seasonal service of the AMHS to the Kodiak region, which is a concern of the many people who rely on the AMHS.

Energy Infrastructure on the Kodiak Road System

The Kodiak Electric Association (KEA) produced electricity from 99.8% from hydroelectric and wind generation sources in 2022. KEA provides electricity service to the Kodiak Road System and to Port Lions. Current generation infrastructure is in place and financed through long-term debt, creating what is essentially a fixed-cost utility. Electricity rates do not fluctuate with the cost of diesel fuel or natural gas like most of Alaska. Further, electricity rates are similar or less than the cost of the greater Anchorage area, the average cost of the United States, and less than most other areas of Alaska. Industry on the Kodiak road system can depend on stable, affordable rates, which provides an ideal location for seafood processors to operate and the opportunity for future development of year-round agriculture, manufacturing, and kelp/mariculture product processing.

The Kodiak Marketplace

Currently under construction in the heart of the City of Kodiak is the Kodiak Marketplace – A project that “seeks to support local economic development opportunities through the support of small business and microenterprise entrepreneurs and workforce training” as described on the Kodiak Area Native Association’s website.

The project started in 2018 with market research and abatement. More than 60,000 SF of hazardous materials including asbestos and lead based materials were abated. In late 2020 the building design was initiated and finalized in early 2021. Demolition and construction got underway in late 2021, with a target completion date of May 2023.

The Marketplace will be a two story 63,000 square foot mixed use building, operating as a workforce and economic development hub to improve the viability of existing economies and a meeting place for the community to gather. Mixed-use occupancy includes small business and retail space on the



ground floor and meeting space and workforce and economic development services offices on the second floor. The first-floor retail space includes a mix of local and Alaskan owned small business retailers including: 3 new businesses; 2 new brick and mortar; 2 business expansion; and 2 relocations. The project is estimated to directly create more than 20 new jobs in the community including building maintenance and support services as well as speculative staffing packages for new businesses.

Initial market research indicated that any development of the facility was high risk with no clear direction. Local surveys seemed to indicate that there was retail space available, which suggested to interviewees that no businesses desired new space. Contrary to those reports, business owners have been eager to secure space for their emerging and expanding ventures even given the higher lease premiums over typical market rates. Approximately 15-20 additional entrepreneurs have inquired about space and been referred to the SBDC for further business development support. This suggests there is a local need for both small business development activities and updated/renovated leasable

space. This anecdotal data was used to recommend that KEDC consider adopting a storefront improvement program to support further revitalization of Kodiak's downtown through building façade refurbishment.

Kodiak Media, Communications & Print Companies

Local media (radio, television and newspapers) provide the largest communication and outreach platform or megaphone for businesses, non-profits and government agencies to reach local listeners, viewers and readers. They play a critical role in driving success in their communities. In addition, state and national media companies can and do play a critical role in contributing to a community's economic health and development.

Mass communication is key to maintaining a robust and healthy local business economy and environment. In Kodiak our local commercial radio stations, public radio stations and local newspaper have been helping to keep Kodiak's economy growing and thriving for well over 50 years, providing a way to reach the most people possible to inform them of what's happening in Kodiak specifically.

Local & State Media available to Kodiak Residents:

Kodiak Island Broadcasting Co. Inc

- Commercial Radio Stations 98.7 FM KVOK & HOT 101.1 FM (HD signals)

Kodiak Public Broadcasting Co.

- KMXT 100.1 FM (HD signals)
- KODK 90.7 FM

Turquoise Broadcasting – *Homer stations on translators in the Kodiak community*

- KPEN 102.7 FM
- KBAY 107.9 FM
- KWVV 104.9 FM
- KGTL 620AM

Homer Public Radio - *Available to fisherman on the north side of Afognak island and in surrounding waters.*

- KBBI 890AM

Kodiak Daily Mirror

- Local Kodiak Newspaper, Non-profit

Printmasters

- Local print company for posters, newsletters, business cards, calendars, banners, and other print media

Anchorage and other State Newspapers

Television Stations:

- Anchorage stations KTUU, KTTY, KTYR, KAKM available through GCI, DISH, DIRECT TV, HULU, YOUTUBE, FUBO and other streaming platforms.
- ARCS is free statewide over the air television

Social Media & Digital Advertising Platforms – *all available*

Communications Companies in Kodiak

- ACS—Internet & Home Phone
- GCI—Internet, Cell Phone & Home Phone, & Television
- AT&T—Cell Service, Internet, Tablets and Television (Direct TV)

Kodiak Road System

Population

12,764

Coordinates

57.8675° N, 152.8822° W

Location

252 Air Miles SW of Anchorage

Land Area: 6.3 square miles (*City of Kodiak*)

Water Area: 3.7 square miles

The City of Kodiak is nestled on the northeastern side of the second largest island in the United States (Kodiak). The Kodiak Road System is comprised of approximately 87 miles of state-owned roads, with end points at White Sands Beach, Fossil Beach in Pasagshak, and Anton Larsen Bay. The City of Kodiak is the most densely populated community on the Road System though populations also exist out of city limits in Bells Flats, and in Chiniak.

History & Culture

The first people (Alutiiq/Sugpiaq) arrived on Kodiak Island more than 7,500 years ago via “skin boats” along the Aleutian Chain. The Alutiiq/Sugpiaq people thrived on Kodiak Island for thousands of years before making contact with Russians in the late 1700s, when Russian fur hunters, traders, and explorers established the first permanent Russian settlement in Alaska on Kodiak. This settlement acted as a commercial port and the first capital of Russian America.

Kodiak has a long history of natural disasters as well, with Mount Novarupta erupting in 1912, covering the City of Kodiak in Ash, as well as the “Great Alaska” earthquake in 1964 that triggered devastating Tsunamis to the island, leveling out downtown infrastructure.

The City of Kodiak saw a boom in population during World War II as the island acted as a perfect strategic location for the North Pacific. The United States Navy built a large base which still stands today, now as the largest United States Coast Guard Base.¹ Before WW II, Kodiak was a fishing community of approximately 400 people.

¹ <https://koc.alaska.edu/about/community/>

Governance & Contact

City of Kodiak

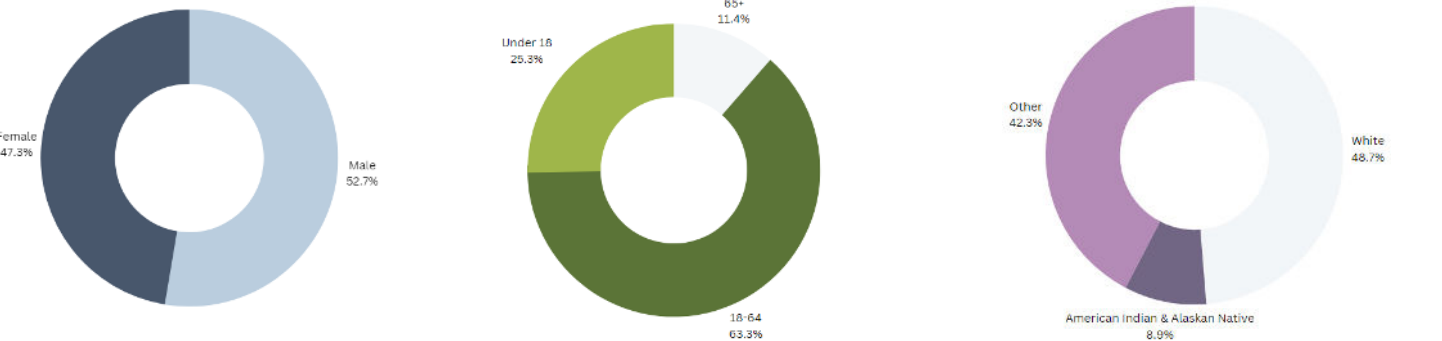
2nd class city, incorporated in 1940
6 member City Council
907-486-8636

Kodiak Island Borough

2nd class borough, incorporated in 1963
7 member Assembly
907-486-9300

The City of Kodiak was incorporated in 1940, 77 years after the United States purchased Alaska from Russia and nearly 20 years before Alaska became the 49th state. In 1965 a City Charter was adopted and signed so that Kodiak could operate as a “Council-Manager” form of government.

Demographics - *Population by Sex, Age, and Ethnicity (from left to right)*



Education

Preschools	Elementary Schools	Middle Schools	High Schools	Higher Education
East Elementary	Akteach	Akteach	Kodiak High School	Kodiak Community College
Central Office Preschool	Chiniak School	Chiniak School		
Sun’aq Preschool	East Elementary	Kodiak Middle School		
Child Development Center - CG Base	Main Elementary			

Transportation – Only accessible by boat or plane

Air

Benny Benson State Airport is a public and military use airport comprised of 3 asphalt-paved runways, all measuring between 5,000 – 7,500 feet long. Alaska Airlines is the only commercially owned airline that flies into Kodiak offering flights to and from Anchorage (approximately a one-hour flight). Small planes also operate from the state airport, offering flights from the City of Kodiak to all communities off of the Road System. Kodiak also features a municipal airport with a 2,883 foot paved runway. There are floatplane facilities at Lily Lake and Trident Basin on Near Island.

Water

The Alaska Marine Highway, operating the M/V Tustumena and M/V Kennicott connect Kodiak with Port Lions, Old Harbor, Ouzinkie and with the Alaska mainland and provides passenger and car transport service year-round. Two-all cargo carriers and one scheduled intra-island carrier ships also serve Kodiak to provide food, provisions, and supplies.

Employment & Businesses

600 Active Business Licenses

7.5% Living below poverty

\$79,173 Median household income

7% Sales tax (city limits)

4.4% Unemployed

*10.75 Property tax mills

5% Bed tax

Kodiak is home to the largest fishing fleet in the state of Alaska with 650 slips at the Kodiak Municipal Harbor, owned by the City of Kodiak, and one of the top ports in the world, meaning that commercial fishing is a dominant part of the economy. Additionally, you can also find the largest U.S. Coast Guard Air Station in Kodiak, making government jobs as a large part of the workforce. Other sectors like retail, manufacturing, and tourism are important parts of the Kodiak economy as well.

**Service Districts and property taxes based on service needs.*

Community Energy Sources & Use

Utility Provider: Kodiak Electric Association

Sources of Energy: Hydropower, Wind, Diesel

Gas Vendor: Petro Marine / Petro 49

Capital Improvement Projects (CIP) List FY23²

Project	Estimated Cost	Funds Needed
Hospital Facility Sterilizer and Boiler Replacement	\$1,000,000	\$1,000,000
Kodiak Community Health Center Expansion Design	\$25,850,000	\$1,200,000
Ouzinkie Electrical Distribution System	\$2,500,000	\$2,500,000
City of Larsen Bay Water Distribution Lines	\$1,700,000	\$1,700,000
Old Harbor Septic Tank Replacement	\$100,000	\$100,000
Service Area Road Improvements and Paving	\$10,000,000	\$9,000,000
Drainage Improvements for Chiniak Highway and Sargent Creek Intersection	\$2,500,000	\$2,500,000
Port Lions State Route Improvement Project	\$1,200,000	\$1,200,000
School Roof Evaluation and Design	\$100,000	\$100,000
Safe Pathways to North Star Elementary School	\$2,000,000	\$2,000,000
Akhiok School HVAC Controls Replacement	\$300,000	\$300,000
Sargent Creek Community Playground & Basketball Court	\$300,000	\$148,000
Mill Bay Beach Access and Recreation Upgrade	\$500,000	\$500,000
Anton Larsen Bay Road Extension to Ice Free Water	\$10,450,000	\$10,000,000

² <https://www.kodiakak.us/DocumentCenter/View/10718/KIB-State-Legislative-Capital-Improvement-Projects-Priority-List?bidId>

Akhiok (*Kasukuak*)

Population

63

Coordinates

56.9456° N, 154.1703° W

Location

90 Miles SW of Kodiak, 340 Miles SW of Anchorage

Land Area: 7.8 square miles

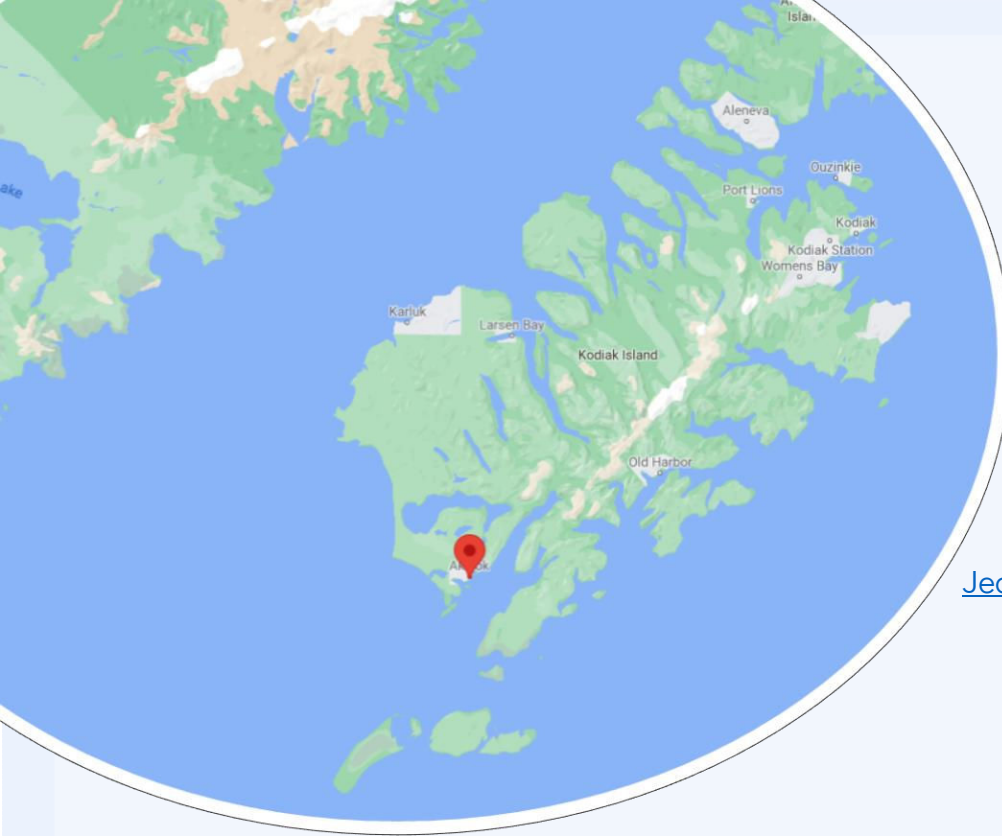
Water Area: 2.4 square miles

Akhiok is located on the southwest end of Alitak Bay, between Kempf Bay and Moser Bay. The terrain surrounding Akhiok is made up of low hills and moist tundra like valley. There are few tall brush areas and trees, and some stands of alder are present. Akhiok is surrounded by land owned by the Akhiok-Kaguyak Native Corporation, and/or is within the Kodiak National Wildlife Refuge. The area is rich in wildlife and marine life, while the original village site on the Aliulik Peninsula has a high brown bear density and ancient Alutiiq petroglyphs are preserved near the present village.

History & Culture

The original village of Akhiok was located near Humpy Cove, on the eastern side of Alitak Bay, and was originally a sea otter hunting settlement. The village, called Kashukugniut, was occupied by the Russians in the early 19th century. The name Akhiok was reported in the 1880 census. In 1881, residents from the old village relocated to the present site at the south end of Kodiak Island at Alitak Bay. A post office was established in 1933 and remained open until 1945. The village was renamed Alitak during World War I by the post office to avoid confusion with a village near Bethel named Akiak. The name was later changed back to Akhiok. With the decline of the sea otter industry, however, the village become oriented primarily toward fishing. Following the 1964 earthquake and tsunami, families from the village of Kaguyak were relocated in Akhiok. The majority of the community are descendants from Kodiak Archipelago's Sugpiaq/Alutiiq peoples. Residents are proud of their heritage and traditions of respect for the land and marine resources. Subsistence is an important part of the community's culture and well-being. Children are taught from an early age how to hunt, fish, dig for clams, pick berries, and gather medicinal plants. Akhiok residents consider halibut, flounder and cod as primary subsistence fish resources as well as salmon and trout. In addition, all varieties of clams are utilized, as are crab and shrimp. Marine mammals of subsistence importance include seals, sea otters, and sea lions. The Kodiak brown bear and the Sitka black-tail deer are both popular for sport hunting and are essential sources of subsistence food for local residents.





Governance & Contact

City of Akhiok

2nd class city, incorporated in 1974

7 member City Council

City_of_akhiok10@yahoo.com

Native Village of Akhiok

7 members of Tribal Council

Jeanetta.rastopsoff@kodiakhealthcare.org

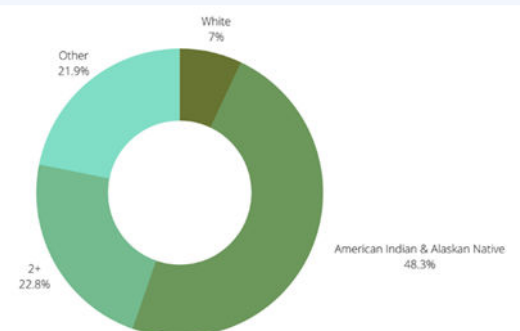
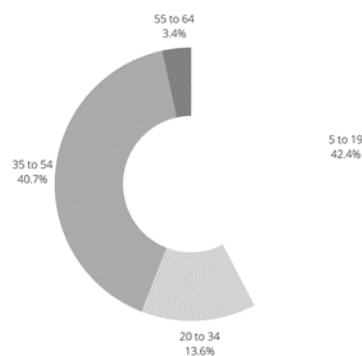
Kaguyak Tribal Council

___ enrolled Tribal members

PO Box 5078, Akhiok, AK 99615

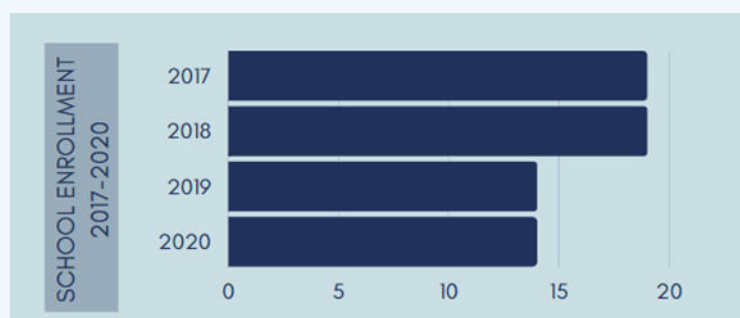
Two federally recognized tribal councils, Akhiok Tribal Council and Kaguyak Tribal Council, are jointly eligible to administer a variety of federal programs, including local health care, employment assistance and other social services. They assign their federal contracting authority to Kodiak Area Native Association (KANA), who then administers many of these programs and provides essential services. The City levies no property or sales taxes, and most municipal funds come from service charges and state-shared revenue. The City and Tribal Councils provide services including street maintenance, electricity and fuel distribution, water and sewer, police and emergency response services, a Culture Center, airstrip maintenance, and solid waste disposal.

Demographics - Population by Sex, Age, and Ethnicity (from left to right)



Education

Akhiok School
Kodiak Island Borough
School District



Transportation – Only accessible by boat or plane

Air

Small gravel airstrip, in need of an expansion to accommodate larger aircrafts
Island Air Service provides flights 3 times per week

Water

No boat harbor; no dock.

Employment & Businesses

3 Business License Holders	10.5% Living below poverty
\$27,500 Median household income	0% Sales tax
20% Unemployed	10.75 Property tax mills

Akhiok’s economy is based on a mixture of commercial fishing and subsistence harvest activities, with some commercial tourism focused on sport fishing and hunting. Some of the community’s cash flow also comes from public sector employment. In recent years, commercial fishing activities have been adversely affected by a number of factors, including limited entry and individual fishing quotas, the Exxon Valdez oil spill of 1989, and a decline in fish prices. The community has one lodge that provides some employment opportunities for local residents who provide fishing and hunting guiding services. Nearby Alitak fish processing plant does not employ Akhiok residents, instead the plant chooses to employ primarily foreign and non-local residents.

Community Energy Sources & Use

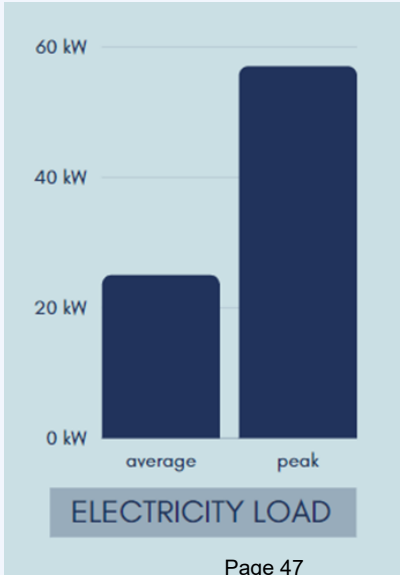
Utility Provider: Akhiok/Kaguyak Electric

Sources of Energy: Diesel

Electrical Generation Capacity: 3654 kWh Diesel / 3 Diesel generators

PCE Status: Active (\$0.13/kWh)

ELECTRIC CUSTOMERS	ANNUAL FUEL USE (GALLONS)
22 RESIDENTIAL	35,340 Electric
4 COMMUNITY FACILITIES	27,357 Space Heating
1 GOVERNMENT	7,317 Transportation
5 COMMERCIAL	



Community Energy Priorities

1. Maintenance and Efficiency of Community Transportation Infrastructure:

- a. Construction of a fuel pier with dolphins and marine header
- b. Feasibility of road to Alitak Cannery
- c. Acquire fuel truck to move fuel from tank farm to power house

2. Maintenance and Efficiency of Electrical Utilities:

- a. Fix frequency issues and maintain for long term reliability: Upgrade generators and engines, upgrade power distribution system (FUNDED)
- b. Upgrade tank farm
- c. Workforce development: training for the next generation utility operator

3. Increase Community Education and Outreach:

- a. Increase local education about energy efficiency

4. Develop Local Energy Generation:

- a. Wind: Install MET Towers
- b. Hydro: Investigate feasibility of hydro-wind-diesel hybrid system
- c. Solar: test feasibility of cost/benefit of solar integration

5. Maintenance and Efficiency of Public Buildings:

- a. Feasibility of energy efficiency upgrades to public buildings

6. Maintenance and Efficiency of Residential Buildings:

- a. Expressed need for new, energy efficient homes. Some homes are so old that they shouldn't be retrofitted; they just need to be retired.
- b. Install AMPY meters in homes – (COMPLETE)

Capital Improvement Projects (CIP) List FY21

Estimated Cost

\$125,000

Unknown

Unknown

\$1 Million

Project Name

School Heat Recovery

Fuel Dolphin

Landfill Relocation

Renewable Energy Generation Integration

Karluk (*Kal'ut* or *Kal'uq*)

Population

27

Coordinates

57.5719° N, 154.4556° W

Location

88 Miles SW of Kodiak, 301 Miles SW of Anchorage

Land Area: 55.4 square miles

Water Area: 2.4 square miles

The community of Karluk is nestled beside the Karluk River at the Karluk River mouth, facing the Shelikof Strait on the western end of Kodiak Island. The village is surrounded by low-lying mountains, moist tundra, and rivers and streams. The village is surrounded by Kodiak National Wildlife Refuge. The Karluk River drainage has one of the highest densest populations of bears in the world; 180 to 200 Kodiak bears are known to use the drainage.

History & Culture

The area spanning from Karluk lake to the Karluk River mouth is thought to have been inhabited by Sugpiaq/Alutiiq peoples for more than 7,000 years. There are over 46 archaeological sites that show evidence of Alutiiq peoples inhabiting the area. Russian hunters, drawn to the abundant salmon run in the Karluk River, established a trading post as the first permanent community at Karluk in 1786. In 1878, the Karluk Packing Company cannery was built in Karluk, the first cannery on Kodiak. By the late 1800s, there were at least 5 canneries operating out of Karluk in addition to salteries and tanneries. The population had risen to over 1,000 residents, making it the third largest community in Alaska at the time. The Karluk canneries were producing most of the sockeye salmon that came out of Alaska, and the town was home to the world's largest cannery. Over-fishing eventually decreased the salmon population and the canneries closed down in the 1930s. The Karluk Russian Orthodox church was built in 1888 and continues to be a key part of the community. Historically, the community was split across two sites, one on either side of the spit at the entrance to the lagoon. "Old" Karluk lies on the northern side with "new" Karluk on the southern side. New Karluk is the residential core of the community, and is home to all but three or four families. The village council relocated the community to its present site after a severe storm in January 1978.





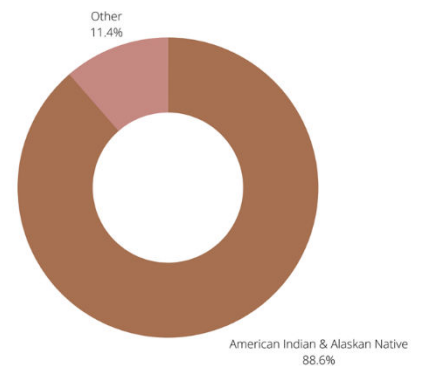
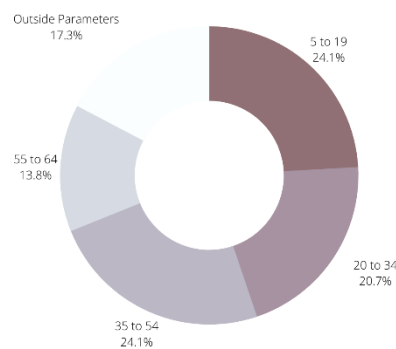
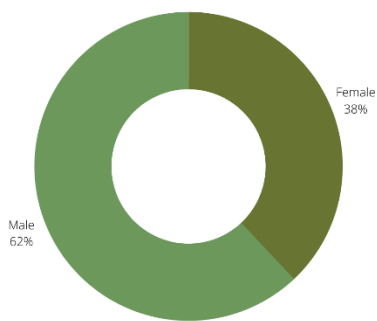
Governance & Contact

Karluk, Census-Designated Place
Unincorporated City
No municipal government structure

**Karluk Indian Reorganization
Act (IRA) Tribal Council**
7 members of Tribal Council
PO Box 22 Karluk, AK 99608
907-241-2218

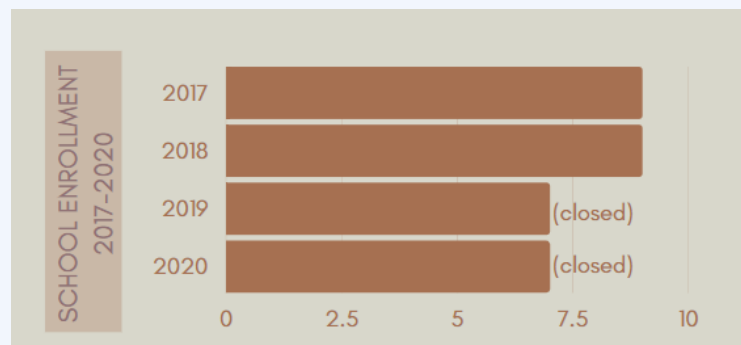
Karluk is an unincorporated community, with no municipal government structure. Most community activities are governed by the Kodiak Tribal Council, the federally recognized tribe and official tribal governing body. The Tribe is eligible to administer a variety of federal programs. It currently contracts with Kodiak Area Native Association for elder meal services. Because Karluk is not a second-class city, it is not eligible for the same Borough or state assistance as other outlying communities in the Borough.

Demographics - *Population by Sex, Age, and Ethnicity (from left to right)*



Education

Akhiok School
Kodiak Island Borough
School District



Transportation – Only accessible by boat or plane

Air

State of Alaska-owned 2,400 foot gravel airstrip
One flight a day (year round, weather permitting) between Karluk and Kodiak through Island Air Services

Water

Seaplane base at Karluk Lake

Employment & Businesses

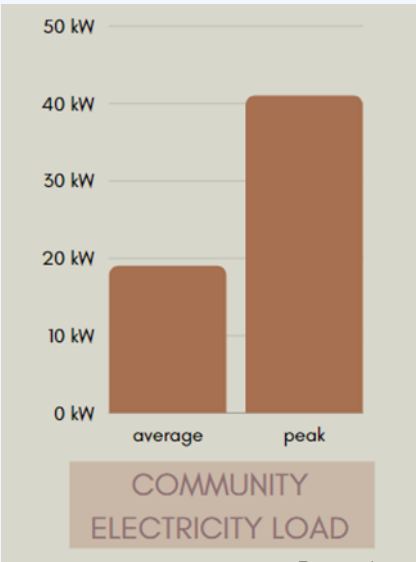
3 Business License Holders	25% Living below poverty
\$19,500 Median household income	0% Sales tax
28% Unemployed	10.75 Property tax mills

Hunting and guide services provide some seasonal employment. Most residents rely heavily on the subsistence economy to supplement their diets. Most available fish and wildlife species are harvested, including shellfish, finfish, waterfowl, small and big game, and marine mammals.

Community Energy Sources & Use

Utility Provider: Alutiiq power and Fuel Company
Sources of Energy: Diesel
Electrical Generation Capacity: 264 kWh Diesel / 2 Diesel generators

ELECTRIC CUSTOMERS	ANNUAL FUEL USE (GALLONS)
14 RESIDENTIAL	23,759 Electric
2 COMMUNITY FACILITIES	14,226 Space Heating
14 OTHER	3,805 Transportation



Community Energy Priorities

1. Maintenance and efficiency of electrical utilities

- a. Upgrade streetlights
- b. Heat recovery on powerhouse

2. Maintenance and efficiency of water utilities

- a. Replace and upgrade mainlines and pump-house

3. Maintenance and efficiency of public buildings

- a. Feasibility of energy efficiency upgrades to public buildings

4. Maintenance and efficiency of residential buildings

- a. Feasibility of energy efficiency upgrades to residential buildings
- b. Find ways to help homeowners up-keep homes and lower home heating and electrical bills

Capital Improvement Projects (CIP) List FY21

Estimated Cost

Unknown

Unknown

Project Name

Landfill Relocation

Wastewater Treatment Plan Upgrade

Larsen Bay (*Uyaqsaq*)

Population

34

Coordinates

57.5400° N, 153.9786° W

Location

60 Miles SW of Kodiak, 283 Miles SW of Anchorage

Land Area: 5.4 square miles

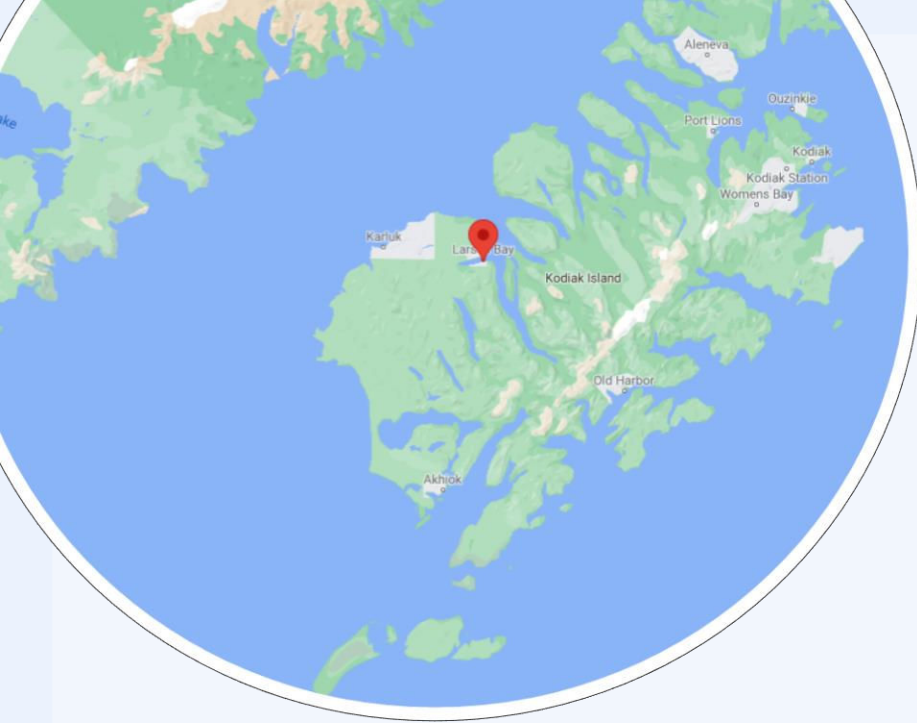
Water Area: 2.2 square miles



Larsen Bay is located inside Uyak Bay, a narrow fjord on the southwest end of Kodiak Island. Larsen Bay is surrounded by Kodiak National Wildlife Refuge. The surrounding landscape is dominated by scattered birch, cottonwood and alder trees, with some locally heavy stands. High brush of alder and willow predominates with the tree growth. There is no Sitka spruce as in the eastern part of Kodiak Island. There are small areas of wetlands, especially at the head of the bay.

History & Culture

The area of Larsen Bay has been inhabited for over 2,000 years by Sugpiaq/Alutiiq peoples. Russian fur traders frequented the area in the mid-1700s, and the Bay was named by Russians for Peter Larsen, an Unga Island furrier, hunter, and guide. A tannery operated in Uyak Bay in the 1800s. The influence of Russian fur traders is apparent in the Russian Orthodox churches and cemeteries, and Russian heritage is an important aspect of the identity of the predominately Alutiiq community. The area has a rich archaeological history. In the 1930s, Ales Hrdlicka removed 756 human remains from Larsen Bay's cemetery, despite the objections from the community, and took them to the Smithsonian Institution in Washington, D.C. Hrdlicka was the curator of the U.S. Museum of Natural History at the time, and has since been recognized as disrespectful and dismissive of Native peoples. The Larsen Bay Tribal Council formally requested the return of the remains in 1987, and after negotiations and some resistance from the Smithsonian, the remains were returned to Larsen Bay in 1991 and reburied. A cannery was built by the Alaska Packers Association in 1911 and is still in operation. It is now owned and operated by Icicle Seafoods. During the summer months, the population of Larsen Bay more than doubles as the commercial salmon fishery gets underway. The vast majority of cannery employees are non-village residents. Larsen Bay is a hub of commercial and sport fishing activity on Kodiak's west coast. Six lodges host visitors and provide a tourist guide service, although most are not owned by village residents. Subsistence is a central way of life to many residents, both for food security and for cultural well-being.



Governance & Contact

City of Larsen Bay

2nd class city, incorporated in 1974

7 member City Council

cityoflarsenbay@gmail.com

mayor.larsen.bay@gmail.com

Native Village of Larsen Bay

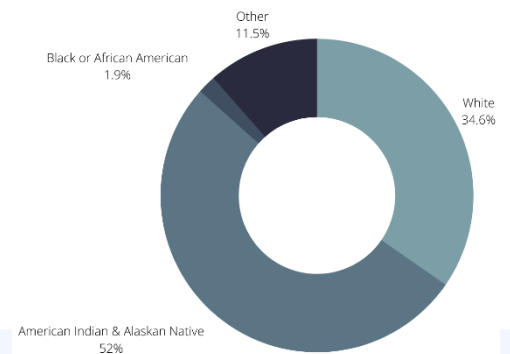
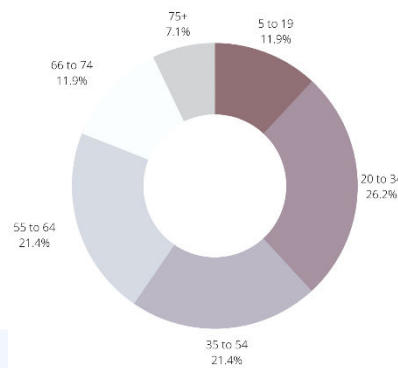
7 members of Tribal Council

larsenbaytribe@gmail.com

PO Box 50, Larsen Bay, AK 99624

The City of Larsen Bay provides electricity, water, sewer, road maintenance for the 3.5 miles of gravel roadway, and solid waste disposal. A small hydroelectric plant located about a mile from the community generates electricity. The Larsen Bay Tribal Council serves as the tribal government for Alaska Native residents of Larsen Bay. The Council administers numerous grants, and owns the Tribal farm, Marlene's Garden, which has 2 hoop houses and a hydroponics operation. Kodiak Area Native Association provides health services and Village Public Safety Officer through a contract with the Tribal Council.

Demographics - *Population by Sex, Age, and Ethnicity (from left to right)*



Education

Larsen Bay School
Kodiak Island Borough
School District



Transportation – Only accessible by boat or plane

Air

State of Alaska-owned gravel airstrip
Daily flights between Larsen Bay and Kodiak Mon-Sat via Island Air Service

Water

Small boat harbor; cargo barge arrives every six weeks (weather dependent)
Float plane dock operated by State of Alaska

Employment & Businesses

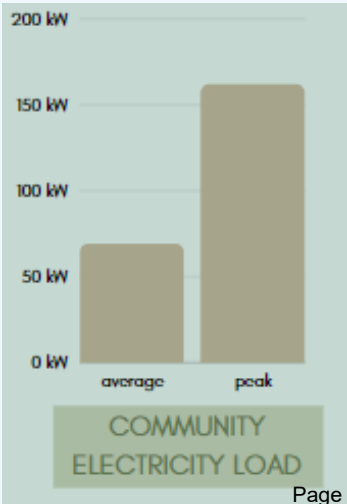
18 Business License Holders	36.5% Living below poverty
\$36,250 Median household income	3% Sales tax
30% Unemployed	10.75 Property tax mills
\$5 Per person per night bed tax	

Employment in Larsen Bay comes from local government, fishing, and sport fishing and hunting guide services. Many jobs are seasonal. There are a number of lodges that operate from May to October, although most are not owned by local Larsen Bay residents. The cannery employs foreign workers who live in Larsen Bay at the cannery only during the summer. The subsistence economy is very important; there is no store in town.

Community Energy Sources & Use

- Utility Provider: Larsen Bay Utility Company
- Sources of Energy: Diesel & Hydroelectric
- Electrical Generation Capacity: 23 MWh Diesel / 807 MWh Renewable
- PCE Status: Active (\$0.06/kWh)

ELECTRIC CUSTOMERS	ANNUAL FUEL USE (GALLONS)
52 RESIDENTIAL	2,245 Electric
8 COMMUNITY FACILITIES	43,771 Space Heating
41 OTHER	30,000 Transportation



Community Energy Priorities

1. Develop local energy generation

- a. Hydro: updating/replacing/refurbishing spillway

2. Maintenance and efficiency of community transportation infrastructure

- a. Dock construction and moorage for fuel barge

3. Maintenance and efficiency of public buildings

- a. Work with AEA to balance PCE price increase
- b. Feasibility of energy efficiency upgrades to public buildings

4. Maintenance and efficiency of residential buildings

- a. Feasibility of energy efficiency upgrades to residential buildings

5. Reduce cost of local food supply

- a. Explore feasibility of solar integration at village farm

6. Maintenance and efficiency of electrical utilities

- a. Replace electrical lines (complete)

7. Maintenance and efficiency of water utilities

- a. Replace and upgrade current infrastructure in schools

Capital Improvement Projects (CIP) List FY21

Estimated Cost

\$1,700,000

\$1,200,000

\$157,000

\$700,000

Project Name

Water Distribution Lines

Reservoir Spill Way

Equipment Repairs and Maintenance

Upgrade City Hall

Old Harbor (*Nuniaq*)

Population

216

Coordinates

57.2028° N, 153.3039° W

Location

70 Miles SW of Kodiak, 300 Miles SW of Anchorage

Land Area: 20.5 square miles

Water Area: 6 square miles

Old Harbor is located on the southeast side of Kodiak Island in Sitkalidak Strait off of the Gulf of Alaska. Placed at the base of steep mountains, the physical topography around Old Harbor is very rugged. Old Harbor has three distinctive small neighborhood sites necessitated by the terrain and lack of buildable land around the old town site. The village is located in a transition zone between high brush vegetation and alpine tundra. The vegetation is dominated by willow, alder, devil's club, bluejoint and fescue grasses, lupine, Jacob's ladder, ferns, sedges, and horsetail.

History & Culture

The lands and waters of Old Harbor have been inhabited by the Sugpiaq/Alutiiq peoples for nearly 10,000 years. About 73% of the current village population of 216 are of Alutiiq descent. In the 1780s, Russian colonizers landed on Kodiak Island and established their first colony in Three Saints Bay, just south of Old Harbor. The colony was destroyed by a tsunami and two earthquakes, and relocated to the present site of Kodiak City. The Russians carried out one of the largest known massacres of several hundred Qik'tarmiut Sugpiaq in the late 1780's at Refuge Rock near Sitkalidak Island. This sacred place is known as *Awa'uq* (to become numb) in Alutiiq. In the late 1800s, a new settlement was established at the current site of Old Harbor. The 1964 Good Friday Earthquake and resulting tsunami destroyed almost the entire town and the nearby village of Kaguyak. Old Harbor was rebuilt in the same location and many Kaguyak residents relocated to Old Harbor. The community is rich in culture with spiritual ties to the land, bonds of kinship and belief, respect for Elders and community and the shared practices of a subsistence lifestyle. Families continue a tradition of subsistence hunting and fishing in the village. Many residents smoke, dry and pickle fish, harvest berries, gather sea gull eggs, kelp, shellfish, sea urchins and octopus, and hunt for ducks, ptarmigan, goat, deer, seal, and sea lion. Relatives and friends return to their home community in the fall to partake in subsistence hunting and fishing. Old Harbor is unique in its blending of older Sugpiaq traditions, the Orthodox Christian religion, and a strong subsistence-based lifestyle with newer influences from modern American society.





Governance & Contact

City of Old Harbor

2nd class city, incorporated in 1966

7 member City Council

oldharborcitycouncil@gmail.com

Alutiiq Tribe of Old Harbor

7 members of Tribal Council

lnadore@alutiiqtribe.org

Old Harbor Native Corporation

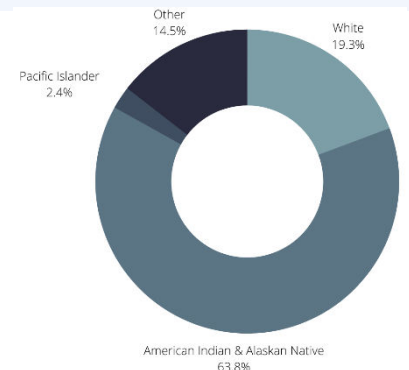
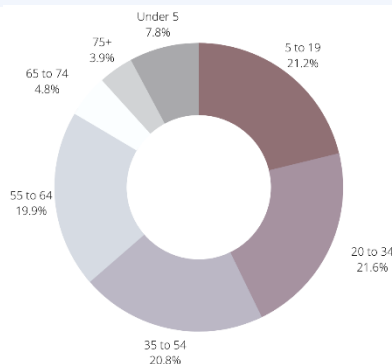
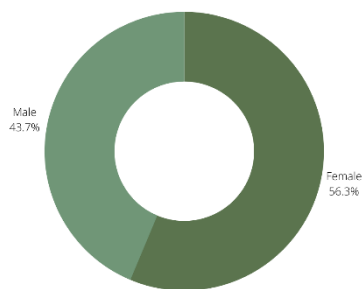
450 shareholders

9 member board

info@oldharbor.org

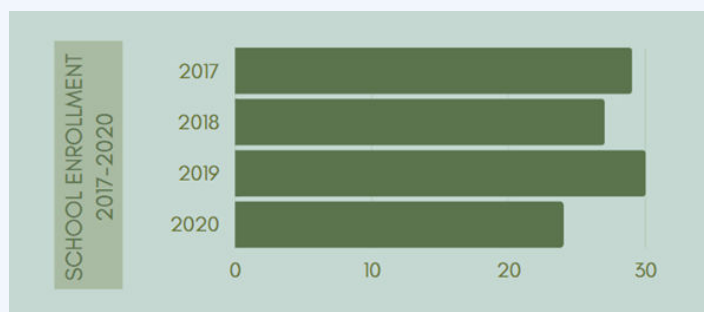
The Alutiiq Tribe of Old Harbor, the Old Harbor Native Corporation, and the City of Old Harbor work together to ensure a healthy future for the community. The City is responsible for community facilities such as water and sewer, street maintenance, public buildings, and the small boat harbor and dock. The Tribal government administers social and cultural programs and provides funds to help maintain roads in the community. The Tribal government contracts with Kodiak Area Native Association to provide health care, senior citizens meal program, and public safety. Old Harbor Alliance runs Nuniaq farm, which has 3 hoop houses and a hydroponics operation, as well as manages the Tribally-owned bison herd on Sitkalidak Island.

Demographics - Population by Sex, Age, and Ethnicity (from left to right)



Education

Old Harbor School
Kodiak Island Borough
School District



Transportation – Only accessible by boat or plane

Air

State-owned 2,750 foot gravel runway; small passenger & freight services from Kodiak: two air charter operations; 2x daily flights from Kodiak via Island Air Service

No cross runway, no navigations equipment available

Water

Old Harbor dock and small boat harbor: 35 boat slips; new, larger dock completed in 2011

No current Alaska Marine Highway Ferry service.

Employment & Businesses

10 Business License Holders

24.1% Living below poverty

\$31,563 Median household income

3% Sales tax

15.8% Unemployed

10.75 Property tax mills

Employment in Old Harbor is in tourism, guiding sport fishing and hunting, and some commercial fishing. Government entities including the City of Old Harbor, Alutiiq Tribe of Old Harbor, Kodiak Island Borough School District, and Kodiak Area Native Association also provide employment.

Community Energy Sources & Use

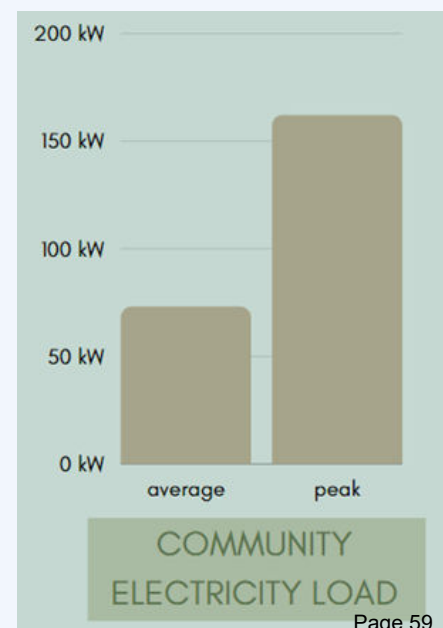
Utility Provider: Alaska Village Electric Cooperative

Sources of Energy: Diesel

Electrical Generation Capacity: 845 kWh Diesel / 3 Diesel generators

PCE Status: Active (\$0.42/kWh)

ELECTRIC CUSTOMERS	ANNUAL FUEL USE (GALLONS)
95 RESIDENTIAL	58,192 Electric
120 COMMUNITY FACILITIES	108,334 Space Heating
19 OTHER	28,976 Transportation



Community Energy Priorities

1. Develop local energy generation

- a. Hydro: permitting and final design and construction funding for hydro.
- b. Build road to hydro project site (planned – Marine IRT)
- c. Wind: complete installation of MET tower and integrate analysis into their education system
- d. Biomass: community-wide integration of biomass

2. Maintenance and efficiency of water utilities

- a. Replace and upgrade current infrastructure

3. Maintenance and efficiency of public buildings

- a. Feasibility of energy efficiency upgrades to public buildings

4. Maintenance and efficiency of residential buildings

- a. Feasibility of energy efficiency upgrades to residential buildings

5. Maintenance and efficiency of commercial buildings

- a. Feasibility of energy efficiency upgrades to commercial buildings

6. Maintenance and efficiency of community transportation infrastructure

- a. Runway expansion project (complete)
- b. Resurface local roads

7. Maintenance and efficiency of electrical utilities

- a. Workforce development: training for the next generation utility operator
- b. Provide lighting service to airport

8. Increase community education and outreach

- a. Increase local education about science and energy in schools

Capital Improvement Projects (CIP) List FY21

Estimated Cost	Project Name
\$10,000,000	Hydroelectric Power Project
\$100,000	Downtown Septic Tanks
\$200,000	State of AK Airport – Updated Layout Plan
\$1,435,000	Water Distribution System Upgrade
\$20,000	Bear Proof Dumpster & Dumpster Repair
\$200,000	City Shop/Garage
\$130,000	Landfill Building

Ouzinkie (*Uusenkaa*)

Population

109

Coordinates

57.9236° N, 152.5022° W

Location

12 Miles NW of Kodiak, 270 Miles SW of Anchorage

Land Area: 6 square miles

Water Area: 1.7 square miles

Ouzinkie is located on the southwest shore of Spruce Island and is separated from Kodiak City by the Ouzinkie Narrows. Ouzinkie's landscape is characterized by tall Sitka spruce forests, swampy areas, and volcanic and sedimentary rock. Ouzinkie and its surroundings are home to a wide variety of fish and wildlife species.

History & Culture

The village of Ouzinkie is located on the ancient homelands of the Sugpiaq/Alutiiq peoples, who have continuously inhabited the lands and waters of Spruce Island and the Kodiak Archipelago since time immemorial. The village itself was founded in 1849 as a retirement community by Russian settlers from the Russian American Company, making it one of the oldest settlements of the archipelago. The Russian Orthodox Church of the Nativity was built in 1898. The Church remains an important part of the community and is a national historical landmark. St. Herman, the first canonized Russian Orthodox saint in North America, called Ouzinkie home. St. Herman's chapel is located at Monk's Lagoon, located on the East end of Spruce Island, and is an annual pilgrimage site every year in early August. Ouzinkie was once a thriving commercial fishing community, supported by the rich salmon and other fisheries around the archipelago. Two canneries were built in Ouzinkie in the late 1800s. The 1964 Good Friday tsunami destroyed one of the canneries, which was never rebuilt. The Ouzinkie Seafood cannery was built in the late 1960s and burned down in 1976; no canneries have operated in Ouzinkie since. Fishing remains an important part of the culture and economy. The dual Alaska Native and Russian Orthodox heritage remain valued in the community. Today, roughly 75% of the population of Ouzinkie identify as Alaska Native. The Native Village of Ouzinkie is a federally recognized Tribe and around 75% of the village population are enrolled tribal members. Village inhabitants continue to rely on the lands and waters for their way of life.





Governance & Contact

City of Ouzinkie

2nd class city, incorporated in 1967

7 member City Council

Mayor.jackson@ouzinkie.city , clerk@ouzinkie.city

Native Village of Ouzinkie

7 members of Tribal Council

Nvo.clerk@gmail.com

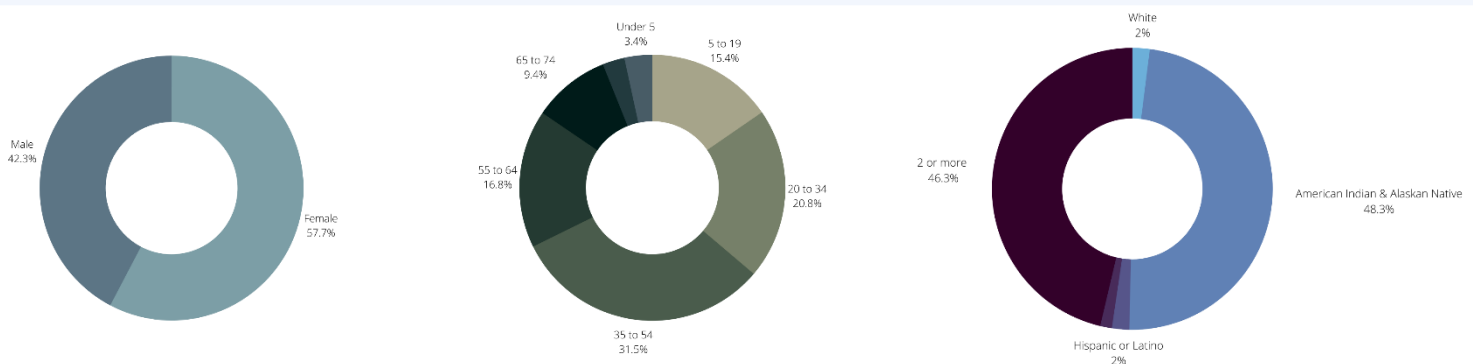
Ouzinkie Native Corporation

PO Box 89, Ouzinkie, AK 99644

info@ouzinkie.com

The Tribal Council administers several federal grants and addresses issues concerning Alaska Native members of the community. The Tribal Council contracts Kodiak Area Native Association to provide medical, dental, behavioral health, Village Public Safety Officer and other community care services. Ouzinkie Native Corporation owns and manages much of the land around Ouzinkie. Civic centers in Ouzinkie include the Community Hall, the Nativity of Our Lord Church, and a community farm with hoop houses and a hydroponics operation called Spruce Island Farm. With the help of Kodiak Archipelago Leadership Institute (KALI), Spruce Island Farm aims to increase food security in Ouzinkie.

Demographics - *Population by Sex, Age, and Ethnicity (from left to right)*



Education

Ouzinkie School
Kodiak Island Borough
School District



Transportation – Only accessible by boat or plane

Air

2x daily flights to Ouzinkie from Kodiak via Island Air Service
Gravel runway – upgraded in 2010

Water

Dock was enlarged in 2015, can now accommodate the Alaska Marine Highway ferries
The Ferry service is weather-dependent; generally is 3x per week from March to October

Employment & Businesses

- 10 Business License Holders

20.5% Living below poverty
- \$43,125 Median household income

3% Sales tax
- 39% / 66% Year round / Seasonal unemployed

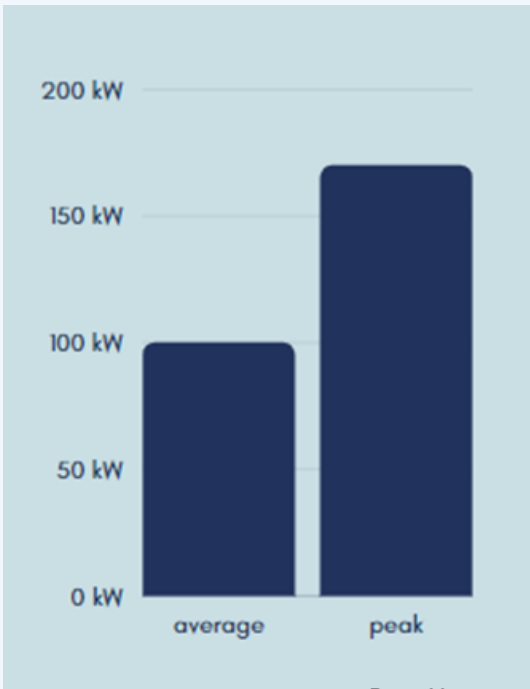
10.75 Property tax mills

Employment in Ouzinkie comes from government entities including the City of Ouzinkie, Ouzinkie Tribal Council, Kodiak Island Borough School District, Kodiak Area Native Association, and the Ouzinkie Native Corporation. Tourism, commercial fishing, and logging also provide some employment.

Community Energy Sources & Use

- Utility Provider: City of Ouzinkie
- Sources of Energy: Diesel & Hydroelectric
- Electrical Generation Capacity: 515 kWh Diesel / 239 kWh Renewable
- PCE Status: Active (\$0.22/kWh)

ELECTRIC CUSTOMERS	ANNUAL FUEL USE (GALLONS)
77 RESIDENTIAL	40,800 Electric
10 COMMUNITY FACILITIES	78,788 Space Heating
22 OTHER	21,073 Transportation



Community Energy Priorities

1. Develop local energy generation:

- a. Hydro: find funding to upgrade powerhouse (new hydro turbine) – (funding application pending) and penstock (WIP 2020)
- b. Biomass: find funding for feasibility study of biomass system
- c. Wind/solar: analyze feasibility of small-scale wind and solar power

2. Maintenance and efficiency of electrical utilities:

- a. Install AMPY meters or other pre-paid system
- b. Replace street lights

3. Maintenance and efficiency of public buildings:

- a. Feasibility of energy efficiency upgrades to public buildings

4. Reduce cost of local food supply:

- a. Install stand-alone solar generation at farm for hoop house heat/cooling

Capital Improvement Projects (CIP) List FY21

Estimated Cost	Project Name
\$4,807,500	Municipal All-Purpose Complex
\$1,500,000	Electrical Distribution System
	Renewable Energy Projects
\$1,200,000	Wind Generation
\$750,000	Solar Panels
\$283,407	Spruce Island Farm Improvements
\$750,000	Heavy Equipment Storage & Firehall Building
	Equipment Upgrades
\$125,000	Forklift Replacement
\$100,000	Landfill Maintenance Equipment
	Municipal Port Facility Upgrades
\$30,000	Zink replacement for Harbor and Dock
\$20,000	Electrical upgrade and water to Harbor
\$150,000	Harbor to Dock Access Road
\$175,000	Access Ramp at Harbor
\$3,275,000	Community Roads Resurfacing
Unknown	Alaska Marine Highway, Tustumena Replacement
\$8,000,000	Anton Larsen Bay Road Extension
	Public Facilities Development
\$170,000	Public Restroom
\$100,000	Boardwalk Repair/Replacement
\$200,000	Community Development
\$350,000	Upgrade to Fish Processing Facility
\$100,000	Cellular Communication System for State Airport

Port Lions (*Masiqsirraq*)

Population

170

Coordinates

57.8675° N, 152.8822° W

Location

19 Miles SW of Kodiak, 247 Miles SW of Anchorage

Land Area: 6.3 square miles

Water Area: 3.7 square miles

Port Lions is located in Settlers Cove off of Kuzhuyak Bay on the north end of Kodiak Island. The town is surrounded by Sitka spruce, birch, alder, and willow trees that cover the mountainous terrain. Within town, a causeway provides foot and bike access across Settler's Cove to Peregrebni Point. The waters around Port Lions are an excellent place to spot wildlife, and are home to some of the richest fisheries in Alaska. In the summer, whales, sea otters, sea lions, seals, and hundreds of birds can be spotted.

History & Culture

The village of Port Lions was founded in 1964 by the displaced communities of Aq'waneq on Afognak Island and Port Wakefield on Raspberry Island, after the villages were destroyed by a tsunami triggered by the Good Friday Earthquake. Port Lions was built with the help of the Bureau of Indian Affairs, Lions Club International, Mennonites, the Public Health Service, and other organizations, and was named in honor of the Lions Club. The community's culture and history dates back at least 6,000 years. Many community members can trace their ancestry to the Old Village of Afognak and have a diverse mix of Sugpiaq/Alutiiq, Russian, and Scandinavian bloodlines. Several sites around Port Lions were inhabited prior to colonization. Three sites are on the Peregrebni Peninsula, one is at the head of Settlers Cove, and a possible site is at the north bank of the mouth of the Port Lions River. Three homesteads and a sawmill were established in the area in the early 1900s. The large Wakefield Cannery was located on Peregrebni Point until it burned down in 1975. A 149-foot floating crab processor called "The Smokwa" operated in Port Lions from 1975-1980. The majority of the population of Port Lions are Alutiiq, and most residents practice a fishing and subsistence way of life.





Governance & Contact

City of Port Lions

2nd class city, incorporated in 1966

7 member City Council

cityofportlions@gmail.com

Native Village of Port Lions

7 members of Tribal Council

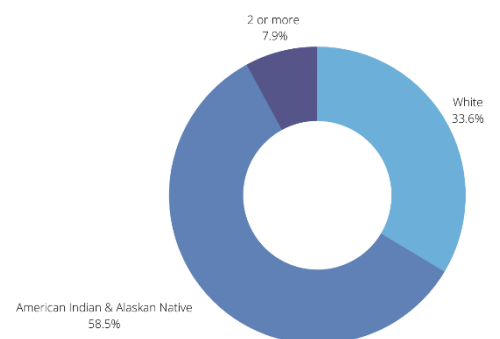
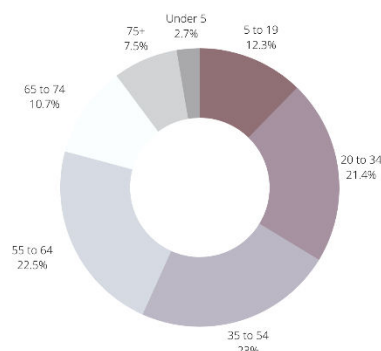
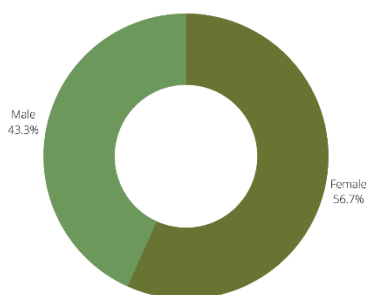
nativevillageofportlions.org

Afognak Native Corporation

www.afognak.org

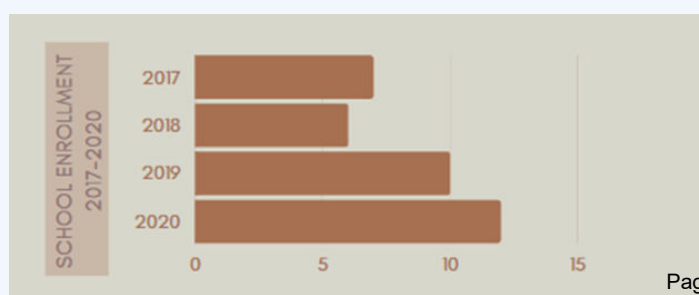
The City of Port Lions provides for and manages water and sewer, a library, public dock facilities, solid waste management, and public safety. The City and Tribe work together to provide street maintenance, and solid waste management. The Native Village of Port Lions is a federally-recognized tribe that administers programs including youth and elder services, cultural programs such as Alutiiq Dancing, and Tribal Environmental Programs. Through resolution from the Native Village of Port Lions, Kodiak Area Native Association (KANA) provides medical, dental and behavioral services. In addition, KANA provides a Village Public Safety Officer for the community through an agreement with the City of Port Lions. The Tribe also owns the Port Lions Farm, which has hoop houses and a hydroponics operation.

Demographics - *Population by Sex, Age, and Ethnicity (from left to right)*



Education

Port Lions School
Kodiak Island Borough
School District



Transportation – Only accessible by boat or plane

Air

State of Alaska-owned 2,600 foot gravel airstrip; Daily flights between Port Lions and Kodiak via Island Air Service

Water

Small boat harbor, may be used by seaplanes; 68 boat slips; Boat harbor partially rebuilt in 2011. Recently built deep water city dock to accommodate large ships; Alaska Marine Highway ferries serve Port Lions twice/week from May to October, and twice a month November to April. Access to Kodiak Road System at Anton Larsen Bay during non-winter months.

Employment & Businesses

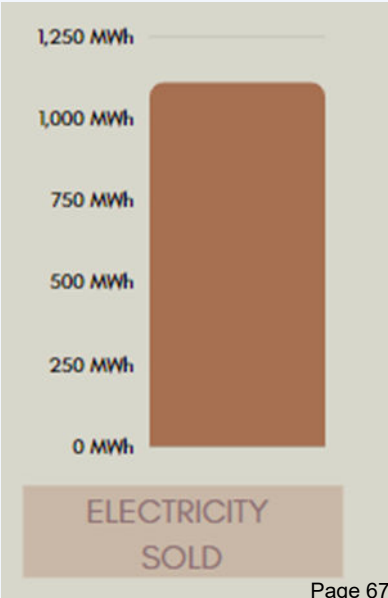
17 Business License Holders	12.9% Living below poverty
\$42,917 Median household income	0% Sales tax
13.9% Unemployed	10.75 Property tax mills
5% Bed tax	

Local government and utilities are the main employers in Port Lions. There is some employment from sport fishing and hunting guide services and commercial fishing. In the 1970s and 1980s, commercial fishing and lumber industries fueled a thriving community in Port Lions. However, in recent decades the community has increasingly struggled to provide year-round employment for its residents due to a decline in fish prices.

Community Energy Sources & Use

- Utility Provider: Kodiak Electric Association
- Sources of Energy: Hydropower, Wind, Diesel
- Gas Vendor: Kizhuyak Oil Sales
- Bank Fuel Capacity: NVPL 90,600 gallons; KEA 1100 gallons

ELECTRIC CUSTOMERS	ANNUAL FUEL USE (GALLONS)
135 RESIDENTIAL	N/A Electric
15 COMMUNITY FACILITIES	97,391 Space Heating
	26,049 Transportation



Community Energy Priorities

1. Maintenance and efficiency of public buildings

- a. Funding for energy audits and retrofits on community buildings
- b. Pursue RACEE Round 2 funding (in progress as of May 2020)

2. Maintenance and efficiency of residential buildings

- a. Feasibility of energy efficiency upgrades to residential buildings
- b. Pursue RACEE Round 2 funding (in progress as of May 2020)

3. Maintenance and efficiency of commercial buildings

- a. Feasibility of energy efficiency upgrades to commercial buildings
- b. Pursue RACEE Round 2 funding (in progress as of May 2020)

4. Maintenance and efficiency of water utilities

- a. Conduct system-wide energy audit

5. Maintenance and efficiency of community transportation infrastructure

- a. Improve reliability of cost-effective transportation option – improve transportation options for elders

6. Develop local energy generation

- a. Reactivate Tribal Energy Dept. – Hire energy coordinator

7. Broadband Internet Infrastructure

- a. Aleutian/Kodiak fiber optic cable installation

Capital Improvement Projects (CIP) List FY21

Estimated Cost	Project Name
\$120,000	Loader
\$700,000	Broadband Internet Tech.
\$1,200,000	Road Upgrade
\$2,500,000	Water Distribution Replacement & Expansion
\$35,000	Insulated Fire Truck Garage
\$50,000	Disaster Emergency Preparedness
\$50,000	Landfill Bulldozer

REGIONAL OVERVIEW

STRENGTHS

1. Our People: with cultural revitalization of the Alaska Native Community paired with diverse population.
2. The beauty of the Kodiak Region and natural environment are ideal for residents and attractive for tourist activity.
3. Strategic ice-free port location: The Gateway to the Arctic for ideal placement of military and Coast Guard population, marine services, transportation/shipping.
4. Low cost electricity on the Kodiak Road System and Port Lions.
5. Quality education opportunities and healthcare services.

WEAKNESSES

1. Cost & quality of housing; expensive & limited in inventory; limited rental options, especially in the village communities.
2. Aging infrastructure in the City of Kodiak and throughout the villages.
3. Workforce shortage, declining population, aging workforce
4. Telecommunications/cellular service is poor or nonexistent in many village communities

OPPORTUNITIES

1. Community and Economic Development with long term sustainability and resilience in mind.
2. Enhancement of regional disaster implementation and response plans.
3. Community Plan Updates to support greater economic development.
4. Growing and stable military and Coast Guard population and increased retention of military incomes and investments. Potential location for ice-breaker placements.
5. Infrastructure investments from Federal economic development program through the

THREATS

1. Reduced State of Alaska budget:
 - a. Cuts to the Alaska Marine Highway System, increasing freight and travel costs.
 - b. Risk of increased property taxes in the Kodiak Island Borough
2. Loss of population in village communities and outmigration in the Kodiak Island Borough.
3. School sizes in the village communities are in decline.
4. Kodiak was not eligible or selected as an Opportunity Zone – this could be a disadvantage when pursuing competitive funding.
5. Natural or Human disaster, such as pandemic or earthquake/tsunami

FISHERIES

STRENGTHS

1. Strong commercial fishery industry provides significant employment opportunities, creating a good tax base for local community governments.
2. Wide diversity of fishery species in the Kodiak Archipelago, providing nearly year-round fishery industry activity.
3. Increasing maritime repair capabilities, industrial supplies and infrastructure in the Kodiak region with public-private partnership between City of Kodiak and Highmark Marine for management and operation of the Kodiak Shipyard.
4. Investment in and wide-acceptance of science-based management of fish industry.
5. Community Quota Entities (CQE) Program participation:
 - a. Five village communities participate in the CQE Program and all six villages are CQE eligible.
6. Sun'aq Tribe's "Kodiak Island WildSource" – custom fisheries and Kelp processing capabilities and infrastructure.

WEAKNESSES

1. The Greying of the Fleet: aging population of fishery participants in harvesting and processing sectors with limited new generation participants entering the industry.
 - a. Cost of entry is high, reducing the participation of the younger generation in the industry.
2. Resource fluctuation and seasonality including changes in ocean chemistry, weather patterns, and marine production.
3. Fishery value-added processing is limited in the Kodiak region with minimally processed catch shipped overseas for manufacturing into consumer products.
4. Large trawl vessels have significant volumes of by-catch that are discarded, thus unavailable for small fleets to harvest.
5. High cost of energy reduces attractiveness of canneries in some locations.
6. Privatizing fisheries access has led to a decline in the local ability for fishery participation.
7. Some cannery jobs are perceived as not attractive for many village participants.
8. Large processors in the Kodiak market have been consolidating in recent years, which could translate into few worker jobs, reduced economic activity, and lower prices paid to fishery participants.

OPPORTUNITIES

1. CQE program expansion to rural village communities: Increase fishery quota that is owned locally and anchored in the village communities.
2. Trade education and policy education for natural resource management – help educate younger generation to increase ability to participate in resource management and policy making processes.
3. Custom processing infrastructure facilities for smaller fishing businesses seeking to increase value of their catch.
4. Create fisheries policies that view fisheries as holistic ecosystems which include participation by the indigenous people and communities.
5. The potential increase in biomass of sablefish due to climate change.
6. Kodiak Wildsource: build a restaurant and create a cultural center at waterfront property.
7. Selling locally caught seafood from smaller boat fisheries at local grocery stores like the Kodiak Harvest Food Cooperative.
8. City of Kodiak allows for the direct sales of fresh seafood to a consumer from a fishing vessel.
9. Fisheries enhancement in Old Harbor: working towards king crab and salmon enhancement in Three Saints Bay.
10. Employment to village residents via a new and the existing canneries in Old Harbor and Akhiok.

THREATS

1. Loss of access to and ability to participate in fisheries by local communities from third party controlling interests.
2. Fisheries Management is not currently supporting the long-term sustainability of marine resources for small coastal communities.
3. Kodiak commercial salmon fisheries lost access to some areas and fishing time through a Board of Fish decision meant to re-allocate stock to Chignik and the northern Cook Inlet.
4. Foreign trade war impacts to fisheries and seafood sales from Alaska decreases demand for fresh Alaskan seafood.
5. Pacific cod decline and pink salmon disasters and impacts due to climate change.
6. The consolidation of processing companies; increased automation, decreasing workforce needs; aging local workforce requiring importation from outside of Kodiak/Alaska/United States.

FISHERIES - *NARRATIVE*

Our rural communities, including Kodiak, are surrounded by endless coastline and a wealth of marine resources. Inhabitants of this region have depended on the resources from the sea for many centuries of their existence. From living a subsistence lifestyle, hunting and fishing from skin-covered kayaks, through forced labor hunting for fur during the Russian settlement, to the commercial fishing era in the early 1900s, the marine ecosystem has provided food, an economy, and a way of life.

As a result of a number of factors, there has been a decline in the fishing and maritime industry. These include, but are not limited to: the decline in the value of wild salmon, implementation of State and Federal regulations (Limited Entry fisheries/IFQ's), the devastating effects of the 1964 earthquake; which ruined many of the fish processing plants around Kodiak Island that employed residents of the rural villages, and the Exxon Valdez Oil Spill. All have contributed to this drastic decline, impacting the economic and socio-economic state of the rural villages of the Alutiiq community in the Kodiak region.

The majority of the population around Kodiak Island, and all of our village communities, are settled alongside the sea and rely on the resources that come from it. Utilizing these resources is essential to the economic stability of the region. Managing the sustainability of these resources is vital to ensure that future generations continue to benefit from the potential economic stability. The data available is limited in terms of how many fishing vessels are active and how many residents are employed in the fishing industry in the village communities, what the value of their catch may be, where their catches are being delivered, and what their future plans in the fisheries industry are. While some data may be available through Dr. Courtney Carothers' research in developing the "Greying of the Fleet" study, additional survey work may be needed.

Community Quota Entities (CQEs) pose an opportunity for economic development in our village communities. The purpose of the CQEs is to create jobs and revenue for economically distressed communities. The challenge is in purchasing the quotas at a price that allows the CQEs sufficient income to pay the debt service. However, the prices for quota share have gone up to a point that this is not possible. At current quota pricing, a down payment (either existing capital or a grant) of about 33% would be needed to cover the debt service. CQEs generally don't have an initial asset base and have had limited success in securing down payments through other means.

There are active Community Quota Entities (CQEs) in Ouzinkie (about 17,000 pounds of halibut quota in Area 3A), Old Harbor (about 7,000 pounds in 3B and about 1,200 pounds in 3A) and Port Lions (quota data unavailable at writing). Local fishermen requests substantially exceed available quota each year and each community can purchase up to 50,000 pounds of quota, which likely could be easily fished.

The fishery dependent village of Old Harbor is in the midst of a long-range, multi-pronged economic development strategy that has the ultimate goal of returning the economic benefit of fisheries to the community; through creative funding, strategic partnerships, long-range planning and a lot of hard work. Old Harbor has completed their airport runway expansion project, is seeking methods to fund and build hydroelectric power capabilities, and is developing a salmon enhancement project in Three Saints Bay. All of these inter-related projects and efforts ultimately lead up to the development of a frozen fish processing facility in Old Harbor. It is reported that there are cannery operators that are highly interested in developing a frozen fish processing facility in Old Harbor.

The infrastructure improvements provide the necessary access to transport the product to market, renewable electricity to produce the product, and the fish necessary to harvest for the product. The improvements are also in response to what potential private investors need in order to operate the plant efficiently.

The Sun'aq Tribe of Kodiak purchased the Ursin property in 2016, which is a long-ago abandoned cannery near downtown Kodiak. The Tribe has expanded their Kodiak Wild Source processing capacity at this location and would like to build a restaurant, cultural center and/or another complimentary business space.

During the March 2021 Kodiak Archipelago Rural Regional Leadership Forum, the following Issues, Goals, and Strategies related to the Fisheries economic cluster were developed (see next page).

Review Draft- Forum Fisheries Issues, Goals and Strategies- March 2021

ISSUES What is the Problem?	GOALS What are the solutions?	STRATEGIES How do we achieve the solutions?
<p>Loss of Human Right to fish leads to a significant decline in access to fisheries by local communities and an increase in third party controlling interests. This impacts our communities in the following four ways:</p> <ul style="list-style-type: none"> • Degradation of Sugpiaq and community traditions that have been based on marine resources for at least 7,000 years. • Loss of Community Food Security. • Decline in Available Capital • Limiting Opportunities for Community Members and our young people. <p>Fisheries Management is currently not supporting the long term sustainability of our marine resources for our small coastal communities.</p> <ul style="list-style-type: none"> • Regulations currently allow for fishing practices that support habitat destruction and large by-catch of valuable non-targeted species of both commercial and subsistence resources. <p>Fisheries policy making bodies currently exclude the full participation of our long-term, multi-generational, fishery stakeholders.</p> <p>Fisheries are currently not being managed for long-term sustained yield as environmental changes in the marine environment accelerate due to climate change that impacts ocean chemistry, weather patterns, and marine production.</p>	<p>Establish Effective Fisheries Policies that view fisheries as holistic systems, that consider the impacts on local economies, culture and heritage, and teaching and learning between generations.</p> <ul style="list-style-type: none"> • Establish rural coastal community and Alaska Native representative presence on federal and state policy making bodies. <p>Restore coastal communities home-ported small boat fishing fleets.</p> <ul style="list-style-type: none"> • Anchor federal quota shares to communities to re-establish and support long-term sustainability. • Develop a Community Development Quota entity for the Gulf of Alaska. • Re-envision State CFEC regulations so that limited entry permits are retained by fishery dependent communities. • Reduce the cost of entry. <p>Work together to tell the story of climate change. This includes:</p> <ul style="list-style-type: none"> • Establish tribal and community environmental monitoring programs. • Document the use of Local and Traditional Ecological Knowledge. <p>Maintain the subsistence priority use of marine resources.</p> <p>Maintain rural marine infrastructure.</p>	<p>Develop an effective advocacy program to influence federal and state policy makers.</p> <ul style="list-style-type: none"> • Fully support and collaborate with the Kodiak Fisheries Advocacy Committee. • Provide regional staffing to support fisheries advocacy efforts. <p>Make what we currently have work. Don't lose any more ground.</p> <ul style="list-style-type: none"> • Identify and successfully fund opportunities that support regional goals, develop proposals and implement projects.

AGRICULTURE

STRENGTHS

1. Increase in participations of traditional agriculture.
2. An emerging hydroponics industry providing fresh and local produce year-round.
3. The Kodiak Archipelago Leadership Institute (KALI) farm infrastructure support in four village communities:
 - a. Development of farm infrastructure and agriculture technical capacity.
 - b. Administration for Native Americans (ANA) funding to develop a food hub to distribute to elders in the Kodiak region.
 - c. Technical assistance and training through USDA 2501 program (Socially disadvantaged farmers and ranchers), expanding to include mariculture farm development.
 - d. Actively grown food at all four village communities, with Ouzinkie and Larsen Bay producing enough to sell overstock to Kodiak.
 - e. The development of a network of technical resource advisors.
4. High export costs for Alaskan grown foods, making the market more competitive.
5. The Kodiak Harvest Food Cooperative, a Kodiak based initiative, developing a food hub model to connect local farmers and producers to local consumers throughout the Kodiak region.

WEAKNESSES

1. Traditional farming in Alaska is subject to a shorter growing season.
2. Farming and agriculture is an occupation that is not traditionally high-paying.
3. Limited amount of personnel in some communities makes recruiting and retention of farm laborers very challenging.
4. Soil conditions in the Kodiak region generally require amendments to create fertility levels needed for adequate productivity; this requires additional knowledge, time, and outside resources for soil testing and education.

OPPORTUNITIES

1. Emerging hydroponics could provide year-round production of local greens in the Kodiak region.
2. The USDA subsidizes some shipping costs for supplies and produce to and from farms outside of the contiguous United States. If implemented properly, this could reduce shipping costs that are paid for by customers.
3. Village farms have the potential to grow enough produce to both feed their local community and export produce to the Kodiak road system.
4. Potential for wholesale purchasing access for grocery stores in the village communities.
5. Institutional markets for local agriculture such as hospitals, schools, and senior centers presents a sizable opportunity if production quantities can be increased by Kodiak farmers and producers.
6. KALI continues to adapt subsequent funding applications to the growing capacity of the farmers and ranchers in the Kodiak region.
7. Port Lions is connected to the Kodiak Electric Association grid. The low-cost electricity could allow financial feasibility for hydroponic farming operations.

THREATS

1. Internet and online retailers:
 - a. Dominant companies like Amazon are stiff competition for locally owned grocery stores. This includes subsidized shipping through the US Mail system, providing cheaper alternatives that the public can purchase instead of the locally grown produce.
2. Climate change can alter the growing seasons and other available food resources grown, gathered, fished, and hunted locally.

AGRICULTURE - *NARRATIVE*

Historically, up until the 1940's Kodiak's rural communities were for the most part self-sufficient. Village residents hunted and fished, grew gardens and received grocery orders for canned goods and fuel. As one Larsen Bay elder shared, "We worked all summer and used our commercial fishing money to buy our winters supplies. We had everything we needed." This changed beginning after WWII as more consumer goods arrived and now tradition of supplying the majority of your food locally has declined, increasing the cost of living and leading to the loss of Traditional Ecological Knowledge (TEK).

Limited amounts of locally grown food is produced and marketed on Kodiak Island on a commercial level. Nearly all produce is either shipped or flown in for the entire Kodiak populace including the village residents. Because of this, the price of fresh produce in the Kodiak region is expensive and often of low quality. The weather and severe seasonal differences in the Kodiak region pose a major obstacle in development of local food production.

However, agricultural production is rapidly changing in Kodiak. In just six short years, four village-based farms have begun to fulfill local fresh produce demand in the respective village communities. Supporting both food security and local economic development the Kodiak Archipelago Leadership Institute (KALI) has been working to develop farm infrastructure and agricultural technical capacity in Larsen Bay, Old Harbor, Ouzinkie, and Port Lions. In 2015, a three-year project funded by the Administration for Native Americans (ANA) started pilot farms in these communities. On top of the infrastructure installed (hoop houses, poultry coops, etc.), locally hired farm technicians received training to build the local workforce to start on the path to self-sustainability. KALI continues to provide technical assistance and training through the USDA 2501 program (Socially disadvantaged farmers and ranchers). All four farms are actively growing food and two sites (Ouzinkie and Larsen Bay) are working to grow enough for local demand and to 'export' out of the village and into Kodiak.

KALI continues to lead the agriculture industry development, starting a project named “Suupet Neregkwarluki” in Alutiiq or “We Are Feeding Our People” through another ANA Social and Economic Development Strategies (SEDS) grant awarded in September 2020 to further hydroponic farming. The funding will pay for 11 growing cabinets and a shipping container hydroponic operation in Port Lions, Larsen Bay, Ouzinkie, Old Harbor, and Kodiak. Hydroponic farming allows for year-round fresh produce to be grown. Additionally, private-investment hydroponic agriculture operations are appearing throughout the Kodiak region as others recognize the potential in this emerging industry.

Local food production has an opportunity for either organizations or entrepreneurs to further local economic development. Currently, Kodiak has limited marketplace platforms for local farms to engage with the public and generate revenue. These platforms include seasonal farmer’s markets and a Community Supported Agriculture Producer’s Cooperative that delivers weekly farm share boxes to subscribers. Recently, developments in the community have identified a substantial interest in developing and opening a full-service Food Cooperative Grocery store with a focus on carrying locally grown produce and locally caught seafood. A food cooperative would be a local, community owned business that would not have the same corporate barriers that a nationwide grocery store has. The local ownership would make it easier for the grocery store to decide to carry the products they wish before competing with industrial scale farms from the Lower 48.

A food cooperative ownership grocery store model could also support smaller village-based grocery stores and institutional customers (elder meals, lodges, preschool programs, etc.) by creating a channel to wholesale pricing and shipping.

Further increases in commercial agricultural production have opportunities beyond residential and retail sales channels. Local produce and agricultural products demand by institutional customers, including schools, the hospital, senior center, and more.

ENERGY

STRENGTHS

1. Kodiak Area Native Association was previously funded through the USDA Community Facility Technical Assistance and Training (USDA CF TAT) program.
 - a. Energy Efficiency audits on Community Facilities in the village communities were completed, including on medical clinics.
 - b. Plans of action to address identified deficiencies and recommendations from the energy efficiency audit were evaluated.
 - c. Technical assistance to village communities to apply for Community Facility eligible projects including energy, water, and sewer infrastructure was provided.
2. Increased capacity of microgrid energy systems for the Kodiak region upon completion of the Arctic Remote Energy Networks Academy (ARENA) by KANA's Economic Development Project Manager.
3. Kodiak Road System and the community of Port Lions are powered by 99.5% renewable energy sources.
4. Economic assistance is provided to rural Alaskan customers to cut costs for power through the Alaska Energy Authority's Power Cost Equalization program.
5. Pre-paid electricity meters.
6. Completion of Akhiok's electrical distribution system and electric powerhouse replacement project in summer 2021.
7. Replacement of the hydroelectric penstock in Ouzinkie and the planned replacement of the current aging hydroelectric turbine.
8. Expert technical assistance with future integration of renewable electricity generation infrastructure via the Department of Energy's Energy Transitions Initiative Partnership Project (ETIPP).

WEAKNESSES

1. The real, unsubsidized cost of electricity in rural village communities is very high.
2. Three of the six village communities are 100% reliant on fossil fuels for energy generation.
3. The aging utility infrastructure which varies from village to village.
4. Aging skilled workforce which may decrease self-sustainability and require reliance on expensive, outside technicians.
5. Grant funding (USDA CF TAT) that provided approximately 40% FTE employee to work with village communities to develop energy projects will concluded in September 2021, reducing this much needed Technical Assistance.

OPPORTUNITIES

1. Technical Assistance provided by The United States Department of Energy – Office of Indian Energy.
2. Wind, hydroelectric, and solar with the addition of grid energy storage are all potential opportunities to decrease dependence on fossil fuel electricity generation.
3. Senator Lisa Murkowski’s Energy Act of 2020 will allow for the broad modernization of national energy policies.
4. Beneficial electrification specifically for the Kodiak Electric Association grid provides opportunities for heat pumps to heat homes and electric vehicles for transportation.
5. Strategic workforce development plans should be identified and created to bridge the gap of the aging workforce.

THREATS

1. The complexity and automation of powerhouses in rural Alaska is challenging for maintenance staff in village communities and creating an increased reliance on outside technicians.
2. State budget challenges:
 - a. Reduced funding for energy projects.
 - b. The potential elimination of the Community Assistance Program.
 - c. The Power Cost Equalization endowment could be at a significant risk from being transferred into general funds, removing inherent protections an endowment provides.
3. Environmental regulations could change the way diesel fuel can be delivered to some of the village communities.
4. The outmigration of population in rural village communities.

ENERGY - *NARRATIVE*

In 2019, the Kodiak Area Native Association (KANA) was awarded a 2 year grant through the USDA Community Facility Technical Assistance and Training (USDA CF TAT) program. The program began on October 1, 2019 and concluded in September 2021. This funding builds off of the work the KANA was able to complete as part of the Energy Planning contract from the Southwest Alaska Municipal Conference (SWAMC) through September 2019. The focus of the work through the USDA CF TAT program is to begin developing the priority projects identified throughout the region during the many years of energy planning.

Through the CF TAT program, KANA worked with the village communities to update energy priority projects, to work towards accomplishing energy priority projects, and endeavor to reduce or stabilize the costs of energy. There were 13 energy efficiency audits conducted on community facility buildings; two major electricity infrastructure projects funded and started (Akhiok – whole village re-power project & Ouzinkie hydroelectric turbine replacement project); and continued development of renewable energy integration projects. While this project has concluded, additional energy planning and project development resources are being sought to continue moving the energy sector in the Kodiak Archipelago forward.

The Kodiak Electric Association (KEA) is a leading example of an isolated microgrid operation throughout the world, producing 99.5% renewable electricity (wind/hydro) with electricity rates that are less than mainland Alaska and have not risen in many years. KEA's success shows that renewable energy production is possible on Kodiak Island. And, the village of Port Lions is connected to the KEA grid.

An important element to point out is that there are five village communities that are not connected to the KEA grid. These communities experience very high electricity costs just the same as isolated village communities throughout Alaska and the residents of these communities are very dependent on the Power Cost Equalization program for some level of electricity affordability.

The Alaska Energy Authority (AEA) has traditionally been heavily involved with energy planning and project support throughout Alaska and has a mission to “reduce the cost of energy in Alaska.” AEA has seen sizable budget cuts from State of Alaska funding and has a reduced capacity for future planning and project support. It may be more important than ever for private organizations, such as KANA, develop the technical capacity and obtain funding resources to support those services lost from government agencies.

Major partners in the energy sector in the Kodiak region include the AEA, the Alaska Native Tribal Health Consortium (ANTHC), the Department of Energy – Office of Indian Energy, the University of Alaska’s Alaska Center for Energy and Power (ACEP), and the National Renewable Energy Laboratory (NREL). Working with these partners provides much needed technical expertise to move projects forward in the Kodiak region.

The following table is a listing of Community Energy Priorities that were derived through a series of community meetings held by the Southwest Alaska Municipal Conference (SWAMC) staff and “community and regional leaders, residents, utilities, industry representatives, and other key stakeholders” during Phase II of the Kodiak Regional Energy Plan process. These energy project priorities will be updated as projects are completed or conditions change.

Akhiok	Old Harbor
<p>1. <u>Maintenance and Efficiency of Community Transportation Infrastructure:</u></p> <ul style="list-style-type: none"> Construction of a fuel pier with dolphins and marine header Feasibility of road to Alitak Cannery Acquire fuel truck to move fuel from tank farm to power house <p>2. <u>Maintenance and Efficiency of Electrical Utilities:</u></p> <ul style="list-style-type: none"> Workforce development: training for the next generation utility operator <p>3. <u>Increase Community Education and Outreach:</u></p> <ul style="list-style-type: none"> Increase local education about energy efficiency <p>4. <u>Develop Local Energy Generation:</u></p> <ul style="list-style-type: none"> Wind: Install meteorological Tower for wind analysis Hydro: Investigate feasibility of hydro-wind-diesel hybrid system Solar: test feasibility of cost/benefit of solar integration <p>5. <u>Maintenance and Efficiency of Public Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to public buildings <p>6. <u>Maintenance and Efficiency of Residential Buildings:</u></p> <ul style="list-style-type: none"> Newer more energy efficient homes are desired for the community to start replacing the older and less efficient homes. 	<p>1. <u>Develop Local Energy Generation:</u></p> <ul style="list-style-type: none"> Hydro: Permitting and final design and construction funding for hydro. Build road to hydro project site (Planned – Marine Innovative Readiness Training) Work in progress, started the summer of 2021. Wind: Complete installation of MET tower and integrate analysis into their education system Biomass: Community-wide integration of biomass <p>2. <u>Maintenance and Efficiency of Water Utilities:</u></p> <ul style="list-style-type: none"> Replace and upgrade current infrastructure. Work currently in progress. <p>3. <u>Maintenance and Efficiency of Public Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to public buildings <p>4. <u>Maintenance and Efficiency of Residential Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to residential buildings <p>5. <u>Maintenance and Efficiency of Commercial Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrade to commercial buildings <p>6. <u>Maintenance and Efficiency of Community Transportation Infrastructure:</u></p> <ul style="list-style-type: none"> Resurface local roads <p>7. <u>Maintenance and Efficiency of Electrical Utilities:</u></p> <ul style="list-style-type: none"> Workforce Development: Training for the next generation utility operator Provide lighting service to airport <p>8. <u>Increase Community Education and Outreach:</u></p> <ul style="list-style-type: none"> Increase local education about science and energy in schools
Karluk	Ouzinkie
<p>1. <u>Maintenance and Efficiency of Electrical Utilities:</u></p> <ul style="list-style-type: none"> Upgrade streetlights Heat recovery on powerhouse <p>2. <u>Maintenance and Efficiency of Water Utilities:</u></p> <ul style="list-style-type: none"> Replace and upgrade mainlines and pump-house <p>3. <u>Maintenance and Efficiency of Public Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to public buildings <p>4. <u>Maintenance and Efficiency of Residential Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to residential buildings Find ways to help homeowners up-keep homes and lower home heating and electrical bills 	<p>1. <u>Develop Local Energy Generation:</u></p> <ul style="list-style-type: none"> Hydro: Find funding to upgrade powerhouse (new hydro turbine) – (funding application pending) and penstock (Work in progress). Funding has been received for the powerhouse upgrade, and the penstock has been replaced. Biomass: Find funding for feasibility study of biomass system Wind/Solar: Analyze feasibility of small-scale wind and solar power <p>2. <u>Maintenance and Efficiency of Electrical Utilities:</u></p> <ul style="list-style-type: none"> Install Ampy prepaid electric meters or other pre-paid system Replace street lights <p>3. <u>Maintenance and Efficiency of Public Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to public buildings <p>4. <u>Reduce Cost of Local Food Supply:</u></p> <ul style="list-style-type: none"> Install stand-alone solar generation at farm for hoop house heat/cooling
Larsen Bay	Port Lions
<p>1. <u>Develop Local Energy Generation:</u></p> <ul style="list-style-type: none"> Hydro: Updating/Replacing/Refurbishing spillway <ul style="list-style-type: none"> Currently being addressed by ANTHC <p>2. <u>Maintenance and Efficiency of Community Transportation Infrastructure:</u></p> <ul style="list-style-type: none"> Dock construction and moorage for fuel barge <p>3. <u>Maintenance and Efficiency of Public Buildings:</u></p> <ul style="list-style-type: none"> Work with Alaska Energy Authority to balance Power Cost Equalization price increase Feasibility of energy efficiency upgrades to public buildings <p>4. <u>Maintenance and Efficiency of Residential Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to residential building <p>5. <u>Reduce cost of Local Food Supply:</u></p> <ul style="list-style-type: none"> Explore feasibility of solar integration at village farm <p>6. <u>Maintenance and Efficiency of Water Utilities:</u></p> <ul style="list-style-type: none"> Replace and upgrade current infrastructure 	<p>1. <u>Maintenance and Efficiency of Public Buildings:</u></p> <ul style="list-style-type: none"> Funding for energy audits and retrofits on community buildings <p>2. <u>Maintenance and Efficiency of Residential Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to residential buildings <p>3. <u>Maintenance and Efficiency of Commercial Buildings:</u></p> <ul style="list-style-type: none"> Feasibility of energy efficiency upgrades to commercial buildings <p>4. <u>Maintenance and Efficiency of Water Utilities:</u></p> <ul style="list-style-type: none"> Conduct system-wide energy audit <p>5. <u>Maintenance and Efficiency of Community Transportation Infrastructure:</u></p> <ul style="list-style-type: none"> Improve reliability of cost-effective transportation option – improve transportation options for elders Explore electric vehicles for transportation, as well as other all electric options like heating and smart buildings <p>6. <u>Develop Local Energy Generation:</u></p> <ul style="list-style-type: none"> Reactivate Tribal Energy Department – Hire Energy Coordinator <p>7. <u>Broadband Internet Infrastructure:</u></p> <ul style="list-style-type: none"> Aleutian /Kodiak fiber installation

TOURISM

STRENGTHS

1. Kodiak is an amazing place for tourists to visit with world class outdoor activities: fishing, hunting, hiking, and wildlife viewing.
2. Existing tourism related business in our village communities, including hunting and fishing lodges in Larsen Bay, Old Harbor, Akhiok, and Port Lions, provide employment for residents.
3. “Discover Kodiak”, Kodiak’s Destination Marketing Organization, has promoted Kodiak worldwide as a travel destination since 1986, with their main purpose to promote sustainable development of the tourism and convention industry throughout the Kodiak Island Borough and City, thereby increasing economic opportunities, jobs and local tax revenues.
4. Pre-pandemic, the number of cruise ships stopping in Kodiak had increased and participation in the Bear Town Market by local arts and crafts also increased supporting small entrepreneurs. Cruise ship traffic is forecast to increase again in the 2023 season.
5. The Alaska Marine Highway Service serves Kodiak, Ouzinkie, Port Lions, and Old Harbor with Mainland Alaska and the Aleutian Chain.

WEAKNESSES

1. Limited tourism support infrastructure in the village communities, including transportation and available services may make access for potential mainstream tourists challenging.
2. Air Transportation from the Mainland and the Lower 48 to Kodiak is expensive and may limit the number of travelers.
3. Cruise ship tourists tend not to eat out in local restaurants while on shore.
4. The downtown area of the City of Kodiak is dated and several storefronts sit empty. Historical asbestos use in buildings is a barrier to redevelopment investment due to abatement expense.

OPPORTUNITIES

1. Eco-tourism is gaining substantially worldwide and provides a good opportunity for the Kodiak Region. Low impact, outdoor based, nature exploration like hiking, surfing, camping, birding, kayaking, whale watching, bear viewing, and more are all accessible on Kodiak Island.
2. Cultural Tourism is rising in interest and focus. The Alaska Native Cultural Tourism Plan has a state-wide view, while the Alutiiq Heritage Foundation has a more Kodiak Regional view through development work at the Alutiiq Museum and ideas behind developing artist & culture-bearer workforce development opportunities and resource availability.
3. Growth of existing village-based tourism businesses and support infrastructure, including transportation, accommodation, and internet/cellular connectivity.
4. Foods (seafood) and beverages (brewery/cidery) with Kodiak or Alaska specific focus could be designed and marketed specifically to cruise ship tourists.
5. Increased promotion opportunities for off-road system tourism business operators through Discover Kodiak.
6. Tourism can be thought of as an export: exporting the Kodiak experience. With other limited export options beside seafood, tourism provides a unique opportunity for economic diversification.
7. Kodiak regional Alaska Native Corporations may find opportunity in investing in Tourism infrastructure to build up local capacity and earn a return on their investment.

THREATS

1. State of Alaska budget cuts to the Alaska Marine Highway have forced reduction of the operating schedule and length of service season.
2. Unintended consequences that are associated with tourism activities, including increased traffic, impact to infrastructure, and utilization of resources.
3. Environmental/Natural catastrophe: oil spill, earthquake, bear mauling, global pandemic – could bring tourism activity to a halt.
4. The Tustumena is the main ferry that services the Koniag and Aleutian region for the Alaska Marine Highway; due to the age of the vessel it is often in dry dock for extended periods of time for repairs. This results in travel delays, shipping delays, and uncertainty for travelers.

TOURISM - *NARRATIVE*

Kodiak Island, often dubbed The Emerald Isle, draws tourists from around the world. According to Kodiak Island Borough and City of Kodiak reports, Kodiak sees over 60,000 visitors annually.

The 2019 cruise ship season reached 30 ships with approximately 22,000 passengers. Due to the COVID-19 pandemic, the 2020 and 2021 seasons were effectively cancelled. Slowly making a resurgence, the 2023 season is expected to bring 23 ships to Kodiak with approximately 16,000 passengers; double the amount from 2022.

The pandemic slowdown brought significant impact to the business reliant on tourism, including small independent artists and crafters, who rely on the cruise ship visitors for their livelihood.

While the purpose of the visitors' travel varies, including hunting, fishing, hiking, and wildlife viewing; tourists provide a vital contribution to the diversity of the local economy.

The Kodiak Island Convention & Visitors Bureau, also known as Discover Kodiak, has been promoting sustainable development of the tourism and convention industry throughout the Kodiak Island Borough and City since 1985. This work increases economic opportunities, jobs, and local tax revenues. Recent employment figures published by Discover Kodiak places 8% of Kodiak's labor force related to tourism.

Much of the tourism promotion work has historically focused on the City of Kodiak and the connected road system. Recently, tourism industry development has become of bigger interest in the village communities, including in areas of Cultural Tourism and Eco Tourism. Work in the Cultural Tourism sector includes the recently published Alaska Native Cultural Tourism Plan (<https://www.alaskanative.net/wp-content/uploads/Alaska-Native-Cultural-Tourism-Plan-Final.pdf>) lead by the Alaska Native Heritage Center in March 2022. Further, development plans under way at the Alutiiq Museum in Kodiak include renovations to increase museum space and the gift shop area and artist/culture-bearer workforce development.

Eco tourism includes low impact, outdoor based activities like camping, hiking, surfing, birding, kayaking, whale watching, bear viewing, etc.) on the road system and in the rural village communities. Opportunities abound for these activities around the Kodiak archipelago.

Transportation is essential component to successful tourism industry. As an island, Kodiak Island is only accessible by air or water. Alaska Airlines is currently the only commercial air carrier connecting Kodiak Island to Mainland Alaska. Island Air is the only carrier providing

MARICULTURE

STRENGTHS

1. A complimentary industry to the traditional fisheries industry in terms of marine vessel experience, equipment already owned, infrastructure, and a workforce with transferrable skills.
2. The Alaska Mariculture Task Force was established by the State of Alaska “To provide recommendations to develop a viable and sustainable mariculture industry...”
3. Applications have been submitted from multiple Tribes in the Kodiak region to establish mariculture farms.
4. The Kodiak Archipelago Leadership Institute (KALI) successfully utilized USDA funding to conduct site assessments and mapping that supported the Tribes’ current and future farm permit applications.
5. Kodiak Wildsource (owned by the Sun’aq Tribe) processed raw kelp in the 2020 harvest season and is working to improve operations to increase processing capacity.
6. Blue Evolution in Kodiak purchases and processes kelp from independent farmers, provides kelp seed, advice on farming practices and site selection, and funds research that will improve farming practices and efficiency.

WEAKNESSES

1. Limited amount of processing and farm infrastructure coupled with a limited amount of capital for farms and processing infrastructure development.
2. Lack of developed market, making funding for development of farms and processing infrastructure difficult to obtain.
3. Limited technical capacity in farm operations and management for emerging farmers in rural village communities.
4. Processing kelp into food grade materials requires high energy consumption; this is challenging in the small micro-grid communities.
5. The volume of raw materials to create bio-fuels and bio-plastics is much higher with lower value than raw materials needed for food products.

OPPORTUNITIES

1. Polyculture farming in the Kodiak region represents a good opportunity to contribute to economic diversification.
2. The Kodiak Seafood and Marine Science Center (KSMSC) has potential to become a mariculture innovation center to conduct trainings from seed to sale, assist in product development and business planning guidance with components including hatcheries and a demonstration farm for hands-on learning.
3. Farm and processing operations could be owned locally, providing new economic diversification for rural village communities.
4. Advances in manufacturing and product development beyond food would increase the raw material demand.
5. Demonstration farms for local, prospective farmers to gain experience and technical skills while working through permitting and set up of village-based mariculture farms and hatchery operations.
6. Carbon sequestration from the natural seaweed could present additional benefits for mariculture farms and provide potential for entry into carbon markets, adding revenue to mariculture farm businesses.
7. Port Lions' connection to the Kodiak Electric Association's low cost electricity is a benefit for establishing a processing plant.

THREATS

1. Large industrial entities with sizable technical depth developing farms around the local village communities creates concern regarding rural and Alaska Native participation in the industry.
2. Over-saturation of product on the market would be an issue without increasing demand for kelp and kelp products.
3. A long and backed up permitting timeline from DEC.
4. Lack of processing capacity – farm operators may not have the ability to influence unless vertically integrated.
5. Lack of clearly defined markets for products, infrastructure, and available capital.
6. Concerns regarding ensuring rural and Alaska Native participation.

MARICULTURE - *NARRATIVE*

The Mariculture industry continues to increase with potential throughout Kodiak, Alaska, and along all coastal communities throughout the world. Mariculture is the enhancement, restoration, and farming of seaweeds, shellfish and other marine life. The industry could provide opportunities for economic growth, food security, climate change mitigation, and the future of alternative fuels and plastics. The industry is directly complimentary to traditional fisheries industry, sharing much of the same equipment (skiffs/boats, nets, and line, etc.), vessel experience, and generally is active when commercial fisheries is not. The industry helps commercial fishing ride out the “lows”, including the farming, harvesting, and processing sectors and can share a workforce with transferrable skills.

Under Alaska Governor Bill Walker in 2016, the State of Alaska Mariculture Task Force was established with a goal to grow the Mariculture industry to a \$100M industry in 20 years. The task force is tasked to provide recommendations to develop a viable and sustainable Mariculture industry producing shellfish and aquatic plants for the long-term benefit of Alaska’s economy, environment, and communities. The task worked to create action plans, training programs, development plan, academic research documents, and economic analysis of industry impacts and feasibility. The Task Force sun-setted in June 2021.

Small Mariculture farming operations have proven that the waters in the Kodiak region are hospitable to both seaweed and shellfish farming. A small oyster farm located in Larsen Bay, Alaska produced 150,000 oysters during the first year of harvest, with prospects to sell up to 2 million annually. Demand locally in Kodiak is present to sell some of that harvest, with most expected to reach diners plates on the mainland and Lower 48. The farm employs local residents in this newly created industry.

Seaweed farms located in the Kodiak Archipelago are also proving that with proper design and set-up, farmers are successfully harvesting yields of significant size. In 2020, two Kodiak kelp farms estimated a harvest of 300,000 pounds.

The kelp has a wide range of uses, including Energy (ethanol, biogas), biotextiles/biomaterials, seaweed extracts, agricultural and horticultural products/animal food; pharmaceuticals/cosmetics; nutritional and food products. Foods and pharmaceutical uses place a higher value on the raw materials and require less volume, while the energy and biomaterials uses require larger volumes of less valuable kelp inputs.

It is commonly agreed that increases in the supply of seaweed are operationally possible by increasing the acreage of active farming. Product demand however, needs to be addressed through additional research and development efforts. A Mariculture specialist at the Kodiak Seafood and Marine Science Center (KSMSC) indicates that the biggest hurdle in Alaska and the industry is to increase the demand side of the market by developing marketable products that consumers want and need. The KSMSC could become a Mariculture innovation center for both shellfish and seaweed to support development of new products and processing methods, conduct training from seed to sale and provide business planning guidance for industry participants.

The Kodiak Archipelago Leadership Institute (KALI) is supporting the development of eight Mariculture farms located around the village communities Old Harbor, Ouzinkie, Port Lions, and Larsen Bay. These farm operations intend to be ready to fill future demand and address product manufacturing locally with smaller, value-added processing and food manufacturing.

The Kodiak Economic Development Corporation received a grant from the Denali Commission to develop a pilot process to prove viability of new markets and expanded production capacity for Alaskan kelp. Along with Blue Evolution and Ocean Rain forest, the project seeks to identify new markets for Alaskan kelp through a fermentation process, ultimately combined with additional ingredients for cattle and hog feed.

CONNECTIVITY

STRENGTHS

1. The Kodiak road system has great fiber broadband internet providing excellent connection speeds that are competitive anywhere in the world
2. The Old Harbor Native Corporation owns Kodiak Microwave Systems, providing service throughout the region. Their expertise and work in the industry could assist with developing broadband internet infrastructure development throughout the region.
3. Tribes in the Kodiak Region submitted applications to the Federal Communications Commission 2.5 GHz Rural Tribal Window. The Alutiiq Tribe of Old Harbor, the Tangirnaq Native Village, Sun'aq Tribe, the Native Village of Port Lions and the Karluk IRA applied for individual licenses; while the Native Village of Akhiok, the Native Village of Larsen Bay, and the Native Village of Ouzinkie applied with Alaska Tribal Spectrum, a consortium of Alaska Tribes.
4. The Native Village of Port Lions is the recipient of an NTIA Grant to connect the village of Port Lions and Ouzinkie in the Kodiak region, and four additional villages on the Aleutian Chain with fiber internet services through GCI.

WEAKNESSES

1. The “Last Mile” of internet connectivity is the most expensive and challenging. The “First Mile” is built to Kodiak and “Middle Mile” are more easily overcome.
2. Internet service performance varies considerably from village to village and even from location to location within a village. A comprehensive speed/performance analysis should be completed.
3. Current internet connections generally occur through microwave systems that are susceptible to interruptions and damage from Kodiak’s inclement weather.
4. Public community access locations are limited and inconsistent: Old Harbor is not ADA accessible; Port Lions library connection is inconsistent; Ouzinkie has public access at city hall and tribal center – Ouzinkie Native Corporation provides access to shareholders
5. Current providers have limited financial incentive to install, maintain, and enhance broadband internet infrastructure due to the small populations of the village communities.

OPPORTUNITIES

1. Federal funding: NTIA (National Telecommunications and Information Administration) and USDA ReConnect funding programs are set to fund improving broadband internet service to rural America with some specific focus on Alaska Native and Native American communities.
2. High Speed cellular wireless: 2.5 ghz license (capable of carrying the 5G cellular network) may be utilized to overcome the high-cost of delivering the “last mile” connection.
3. Fiber from the Kodiak Electric Association’s (KEA) Terror Lake hydroelectric powerhouse could reach Port Lions and KEA is amenable to pursue this project.
4. Local municipal and/or tribal government infrastructure ownership model: Tribes or municipalities may be able to plan, develop, build, own and manage broadband internet infrastructure as an essential community facility asset.
5. A centralized entity, such as KANA or Amerind, with a dedicated subject matter expert, could provide technical assistance to municipal and/or tribal governments.
6. USDA ReConnect grant funded a project by GCI bringing fiber broadband from Kodiak down the Aleutian chain. The fiber line is planned to stop into Larsen Bay to boost the signal.
7. Community internet access points may provide internet access to residents who otherwise are not able to afford residential broadband internet (if available) or own computers.
8. Starlink, a low-orbit satellite network is growing and provides a cost-effective service that delivers broadband internet access to remote locations.
9. Broadband Internet connectivity in rural village communities may increase options for residents to work remotely, engage in e-commerce, receive education and workforce

THREATS

1. Municipal and Tribal governments entering into the broadband internet service industry comes with risk – financial, operational, and opportunity cost. A decision to pursue development of broadband internet infrastructure should be carefully considered.
2. Communities need to be ready for funding opportunities when they are announced in order to successfully submit a competitive application within the deadline. Developing a shovel-ready project proposal comes with a financial and opportunity cost risk.

CONNECTIVITY - *NARRATIVE*

Without adequate internet access, the village communities in the Kodiak Archipelago are unable to fully participate in today's internet-based marketplace, workplace, meeting space, and access educational opportunities. The COVID-19 pandemic has made the challenges of inadequate internet access even more evident and has played a role in decreasing populations in our village communities.

In our 21st Century world, communities with limited internet availability and speed are at a disadvantage from those with fast, reliable internet access. Fast and reliable internet connectivity is so commonplace in many parts of the United States that it is easy to forget that many of our rural communities, specifically in Indian Country, are much more limited.

The benefits of fast and reliable internet access are many, including access to commerce, entertainment, current events, research and education materials. Information can be so accessible that many with fast and reliable access often take it for granted.

The City of Kodiak and most of the Kodiak road system are connected to high-speed fiber broadband internet. However, the rural village communities have less reliable options resulting in limited internet connections. Speed, reliability, and cost all vary considerably from village to village. Public knowledge of the service providers, speeds, reliability, and costs is generally incomplete, anecdotal, and highly variable. General consensus is that internet connectivity is too slow, unreliable, and too expensive. Furthermore, it is known that many of the communities have fast and reliable internet access in schools, medical clinics, and some libraries. The services used in these locations are very expensive and rely heavily on subsidies. The accessibility to these connections are unavailable to the average homeowner and/or small business that may be located next door to one of these community facilities.

In order to understand how to move forward with improving Internet access in the Kodiak region, there needs to first be an assessment of the current conditions. Knowledge of what the current state is will be necessary in order to strategize how and where upgrade investments can and should be made.

One glaring reality is the large expense of building physical internet connectivity infrastructure. The common return on investment calculation for private industry investment makes many projects prohibitive. Public funding to connect rural communities needs to be utilized.

The Native Village of Port Lions is the recipient of an NTIA Grant to connect the village of Port Lions and Ouzinkie in the Kodiak region, and four additional villages on the Aleutian Chain with fiber internet services through GCI.

PLAN OF ACTION: FISHERIES

GOALS & OBJECTIVES

1. Establish effective fisheries policies that view fisheries as holistic ecosystems, which include participation by the indigenous people and communities that have always been tied to the sea. Effective fisheries policies would consider the impacts of fisheries management decisions on local economies, culture and heritage.
2. Obtain access to fisheries that would enable the teaching and learning between generations of indigenous fishermen and would provide a wide range of participation opportunities.
3. Manage access to fisheries that energizes fisheries related infrastructure development and restores commercial fishing as an economic driver in support of local economic growth in fishery dependent rural communities.
4. Establish a quota acquisition strategy to work towards 10% of federally managed marine resources in the Gulf of Alaska owned locally by the represented tribes through a Gulf of Alaska Community Development Quota program.
5. Anchor federal quota shares to fishery dependent rural communities in order to re-establish and support long term sustainability of a home ported small boat fishing fleet.

STRATEGIES/TASKS

Objective 1: Establish rural coastal community and Alaska Native representative presence on federal and state policy making bodies.

Objective 2: Develop a Community Development Quota (CDQ) entity for the Gulf of Alaska.

Objective 3: Increase quota share owned by the Community Quota Entities (CQEs) in Old Harbor, Ouzinkie, Port Lions, Larsen Bay, and Akhiok. Assist in the development and quota share acquisition in Karluk.

Lead Organization

Cape Barnabas, Inc.

Ouzinkie Holding Company

Partner Organization

Timeline:

Projected # of Jobs

5 FTEs per community

Objective 4: Insure alternative pathways to individual quota share ownership such as entry level quota pools, allocation of quota to crew and/or limitations on the time that initially awarded quota is held by an individual. Explore and encourage tribal pathways to quota ownership

PLAN OF ACTION: AGRICULTURE

GOALS & OBJECTIVES

1. Establish a sustainable, regional network of tribally-owned farms and ranches that provide for year-round food security, healthier food, and sustainable economic development opportunities for the region's Alaska Natives, the rural communities, and the entire region.
2. Develop a marketplace, food distribution network, and storage capacity to meet increased local agricultural production, availability of locally caught/processed seafood, and wholesale grocery products.

STRATEGIES/TASKS

Objective 1: Continue and develop current additional initiatives that increase the agricultural knowledge, experience, capabilities, and infrastructure of farmers and ranchers in the Kodiak Archipelago.

Objective 2: Utilize emerging food hub distribution model established through the Kodiak Archipelago Leadership Institute and the Kodiak Harvest Food Cooperative for the improved food distribution network. Connect Kodiak-based food hub operations with emerging Alaska-wide food hub alliances for broader access to produce grown state-wide.

Objective 3: Create Kodiak based hydroponic vegetable market demand and supply potential feasibility study including assessing current and future planned operations.

Objective 4: Develop framework/infrastructure to provide access to wholesale grocery products in the village communities.

Objective 5: Participate in Alaska-wide food hub alliance development to increase access for Alaska Grown produce/products in Kodiak and increase market opportunities for Kodiak grown produce/products statewide.

PLAN OF ACTION: ENERGY

GOALS & OBJECTIVES

1. Stabilize or reduce energy costs in the rural village communities in the Kodiak Archipelago while pursuing renewable energy generation opportunities.
2. Establish Kodiak based energy planning resource to assist rural village communities in energy infrastructure, policy, and initiative development.
3. Leverage expertise and affordable renewable energy generation portfolio of the Kodiak Electric Association to increase adoption of electrification technologies in the Kodiak Region.

STRATEGIES/TASKS

Objective 1: Utilize the US Department of Energy – Office of Indian Energy as a resource to provide Technical Assistance (for Tribal Council, Village/Regional Corporations, and Tribal consortia) and as a lead to potential funding opportunities.

Objective 2: Kodiak Archipelago rural village communities develop or renew Strategic Energy Plans.

Objective 3: Pursue individual village communities' energy priorities and identify evolving energy priorities.

Objective 4: Identify or create workforce development opportunities for local labor force to employ in emerging electrification industry.

Objective 5: Identify or create project/initiatives implementation funding mechanism (e.g. On-bill financing, Revolving Loan Funds, Commercial Property Assessed Clean Energy – or C-PACE).

PLAN OF ACTION: MARICULTURE

GOALS & OBJECTIVES

1. Increase Mariculture industry development in the Kodiak region by supporting product demand growth with advancement in product development and raw materials processing.
2. Rural Forum Development: At least 8 Alaska Native aquatic farms permitted and operational by 2024.

STRATEGIES/TASKS

Objective 1: Formulate Kodiak-specific marketing strategy to attract product manufacturers, highlighting Kodiak’s Mariculture growth potential, renewable energy generation portfolio, and seafood processing workforce depth.

Objective 2: Support growth/increased capacity of current kelp processing operations, including capabilities of smaller scale, value-added processing that derives a higher price point of raw materials/growers.

Lead Organization	Partner Organization	Timeline:	Projected # of Jobs
Kodiak Archipelago Leadership Institute			

Objective 3: Establish a Kodiak Rural Mariculture Workgroup/Network to support regional development of village-based Mariculture farm operations and appropriate located hatchery operations.

- Farm & Hatchery development Technical Assistance: site planning & permitting, business and operation planning, access to capital (grants/loans).
- Workforce Development: Support emerging workforce with demonstration farm/training site creation and sustainability.

PLAN OF ACTION: CONNECTIVITY

GOALS & OBJECTIVES

1. Every community to have reliable and affordable internet. The region obtains internet neutrality.
2. Every community to have a centralized location for access for individuals, Elders, students, and small businesses.

STRATEGIES/TASKS

Objective 1: Identify a central organization or agency to organize, support regional efforts, advocate for regional access, and leverage funding opportunities.

Lead Organization	Partner Organization	Timeline:	Projected # of Jobs
Kodiak Area Native Association	Tribes and/or Municipal governments	10/21/2021 to 9/30/2023	Unknown at this time

Objective 2: Identify/source a subject matter to assist in understanding the complexity of available options and advise communities.

Lead Organization	Partner Organization	Timeline:	Projected # of Jobs
Kodiak Area Native Association	Tribes and/or Municipal governments	10/21/2021 to 9/30/2023	Unknown at this time

Objective 3: Pursue additional opportunities such as Starlink, the 2.5 GHz Tribal Licensing, and available funding.

Lead Organization	Partner Organization	Timeline:	Projected # of Jobs
Kodiak Area Native Association	Tribes and/or Municipal governments		Unknown at this time

PLAN OF ACTION: TOURISM

GOALS & OBJECTIVES

- 1. Establish the Kodiak Archipelago as a top tourism and recreation destination with sustainable development of infrastructure and utilization of resources as an industry priority.
- 2. Increase local and cultural tourism infrastructure and participation to grow the sector and increase tourist-oriented visitors.

STRATEGIES/TASKS

Objective 1: Promote investment in current and future tourism opportunities and infrastructure to improve visitor experiences.

Lead Organization	Partner Organization	Timeline:	Projected # of Jobs
Discover Kodiak	Kodiak Chamber of Commerce; City and Borough	June 2024	Unknown at this time.

Objective 2: Create an archipelago-wide Native Tourism group to share information, intersect with State-wide and Alaska Native Cultural Tourism Plan efforts, and develop shared marketing efforts

Lead Organization	Partner Organization	Timeline:	Projected # of Jobs
Alutiiq Museum	KANA	June 2024	Additional jobs possible with grant funding or industry investment

Objective 3: Develop and offer artist & culture-bearer workforce development training opportunities and resource depository to address rising interest and opportunities in cultural tourism.

Lead Organization	Partner Organization	Timeline:	Projected # of Jobs
Alutiiq Museum	KANA	June 2024	Additional jobs possible with grant funding or industry investment

BUILDING ECONOMIC RESILIENCE

Our perception of Economic Resilience was altered for generations at the start of 2020 with the sudden shutdown of our way of life in the wake of the COVID-19 pandemic. The resulting economic impacts were sudden and hard for many people, industries, and communities. At the same time, depending on a person's economic status, career/profession/job, or industry, the economic impact may have been more limited.

The pandemic was not the traditional event that could rock an economy. For Kodiak and Alaska, an earthquake or tsunami natural disaster might be most prominent. The pink salmon disaster or cod collapse is also in our recent memory for the fishery industry in Kodiak. The Alaska State budget is still experiencing fall-out from the steep drops in the price of oil.

Building economic resilience to mitigate negative impacts to the economy as a whole requires preparation and planning. Economic diversification allows the risk of the impact to any one industry to be spread. Disaster preparation planning in advance of an event provides the opportunity implement the plan in reaction to the event instead of getting caught without a plan.

This CEDS addresses economic diversification in the following ways:

ENERGY SECTOR

The Kodiak Electric Association (KEA) is known world-wide as an example of renewable energy generating nearly 100% of electricity through hydro and wind. KEA powers the Kodiak road system and the village community of Port Lions with electricity costs that are competitive with that of Alaska's railbelt. KEA's energy production portfolio provides evidence that the climate and geography of the region is capable of supporting renewable energy production.

The village communities in the Kodiak Archipelago have actively engaged in energy planning for many years. The regional leaders and stakeholders are working to reduce dependence on diesel fueled electricity generation to reduce or stabilize costs and increase community resilience and self-sufficiency. Energy efficiency efforts will allow communities to increase the customer base and energy usage without the need to scale up energy generation infrastructure. Reducing diesel fuel usage also reduces the impact of fuel delivery issues, including from natural disasters, the potential for fuel/oil spills, worldwide fuel supply issues, and fluctuating fuel prices.

BROADBAND INTERNET

Since March 2020, access to broadband internet speeds has provided employment and educational opportunities as our daily in-person interactions ground to a halt. People without access to broadband internet speeds were at a clear disadvantage – unable to work remotely, attend school remotely, or even access the much needed government recovery programs intended to support families and communities to weather the economic shutdown.

Bottom line, in order to participate in the modern economy and world, our communities need access to broadband internet. Long term economic resilience and recovery will be challenging without it. Faster, reliable, and more affordable internet creates opportunities for economic development and increased economic resilience.

FISHERIES

Sustainable and responsible harvesting practices with access to fishery resources that is anchored to the coastal village communities will move the Kodiak region towards increased economic resilience. The wide diversity of fishery species in the Kodiak Archipelago provide nearly year-round industry opportunities. Economic resilience is contingent on establishing effective fishery policies that view fisheries as a holistic ecosystem, to include participation by the indigenous people and communities that have always been tied to the sea, and considers the impacts of fisheries management decisions on local economies, culture, and heritage.

Alaska Native and rural coastal community representation on federal and state policy making bodies is essential to returning fisheries access to our small coastal communities. Returning fisheries access to our small coastal communities shall provide increased community and economic resilience.

AGRICULTURE

Increased participation in the agriculture industry in Kodiak, and particularly in our village communities, will provide for increased, long-term economic stability and resilience. Locally grown produce and products will increase Kodiak's food security and reduce our reliance on foods imported into Alaska from the outside. With a major focus remaining on satisfying the local demand is foremost, increasing production beyond local demand creates opportunity for exporting off-island throughout Alaska.

The emerging hydroponic agriculture industry increases opportunities to year round production. Utilizing the reliable, cost-effective, renewable energy generation on the Kodiak road system and Port Lions should be explored for greater local resilience.

MARICULTURE

Access to clean coastal waters, a workforce that is experienced in a marine environment, existing infrastructure and marine equipment used in the fishing industry, and a growing and harvesting season that is naturally outside of main fisheries provides prime Mariculture industry participation. Mariculture, and polyculture (seaweed and shellfish farming) will provide economic diversification that supports increased economic resilience.

The Mariculture industry in Kodiak presents opportunities for both product or raw material export and the potential for foreign direct investment. Food and pharmaceutical grade raw ingredients are used worldwide for product manufacturing. Emerging technology to manufacture Mariculture raw materials into bioplastics and biofuels could provide manufacturing opportunities right in Kodiak, with some interest from foreign-owned companies looking at expansion into Alaska.

The Mariculture industry has an opportunity for carbon sequestration, supporting reduction of climate change impacts and reducing climate adaptation actions.

TOURISM

Increased tourism capabilities and infrastructure in Kodiak and participating village communities supports increased economic diversification in the region. Statewide, visitor industry employment represents 1 out of 13 jobs, which varies around the state. At report time, this figure for the Kodiak region is not known. Tourism is an export of the tourists' experience. Export activities are drivers of economic development and economic diversification.

The tourism sector was impacted significantly by the Covid-19 pandemic due to travel restrictions and stay at home orders. The pandemic caused cruise ship cancellations for all of the 2020 season and nearly all of the 2021 season. Tourism businesses that survived the economic fallout of the pandemic are experiencing pre-pandemic levels of business return.

TRADITIONAL DISASTER RESPONSE AND PREPERATION

Nearly 60 years ago, the 1964 tsunami decimated downtown Kodiak and totally destroyed the villages of Kaguyak and Afognak. To this day, we are still living and developing infrastructure at sea level and subject to potential devastation.

The Kodiak Island Borough maintains a regional Hazard Mitigation Plan and Emergency Operations Plan. These plans, while they do include components that support mitigation and emergency response in the village communities, largely focus on the most populated areas of the Kodiak road system. The village specific Emergency Response Plans have not been updated in over 20 years.

Outside financial and expert resources should be researched and engaged with to update Emergency Operations Plans with specific and pro-active engagement with residents and leaders in our village communities throughout the Kodiak Archipelago.

EVALUATION FRAMEWORK

Number of jobs created after implementation of CEDS:

- Internet Connectivity: 1 FTE for central planning organization for project planning and implementation
- Fisheries: 10 seasonal fishing jobs in 3 communities
- Food Security: 3 FTE between village farms and Kodiak Food Cooperative
- Additional: as Goals and Objectives are formalized in following CEDS updates, more job created will be documented.

Jobs created directly with success of 3 of CEDS goals: 4 FTE's and 30 seasonal fishing jobs.

Number and types of investments undertaken in the region:

FOOD SECURITY:

The Kodiak Archipelago Leadership Institute received grant funding through the Administration for Native Americans Social and Economic Development Strategies to establish year-round access to organic, locally-grown lettuces and greens in six of the Kodiak Archipelago's tribal communities. This project will establish a network of Alaska Native owned farms that operate year-round to address the region's need for fresh, locally-grown food.

Total funding: \$372,353

The Kodiak Food Cooperative received a USDA Local Foods Promotion Program grant to connect local producers with Kodiak's consumers by expanding operations and establishing an online food hub for producers to connect directly with consumers; support the processing, aggregation, distribution, and storage of local and regional food products marketed locally or regionally; and, assist producers to develop and implement food safety plans and achieve food safety certifications. Total funding: \$292,940

ENERGY:

Energy Infrastructure: The City of Ouzinkie is the announced recipient of approximately \$1.3M USDA High Energy Cost grant to replace the aging and failing hydroelectric turbine. The hydroelectric turbine replacement is Phase 3 of a 3 Phase project to fully replace the entire hydroelectric systems, including a new spillway/dam and new penstock. Projections indicate the community should be able to generate a good portion of the needed electricity from their hydroelectric resource for many years to come. Stabilizing and reducing the cost of electricity is primary objective for the community. Construction is expected to conclude in Summer 2024.

Additional quantity and type of investment in the Energy Economic Cluster will be determined based on each of the village communities' implementation of identified priorities.

Number of jobs retained in the region:

Job retention in the Kodiak Region, specifically in the village communities, is primarily related to the Food Security economic cluster. There are seven jobs that were retained through the continuation of the Administration for Native Americans grant that has a goal to create self-sustaining agricultural business that will be owned by the tribes in four village communities.

Amount of private sector investment in the region after implementation of the CEDS, and changes in the economic environment of the region.

Food Security

The Kodiak Food Cooperative has achieved 620 members at an investment of \$150 each, for a total to date of \$93,000.

Fisheries/Maritime

Private sector will be required by the fishing industry to support full utilization of fishing quota in Ouzinkie, Old Harbor, and Port Lions should the quota acquisition objective be completed. The goal of retaining fisheries shares locally, anchored to a community will improve the local economic conditions of the region.

Energy

With goals to reduce the cost of electricity for village residents improves economic conditions of individual consumers and could encourage private investment in entrepreneurial ventures that would otherwise be cost prohibitive with high cost electricity.

APPENDICES

United States Census Bureau

University of Alaska Center for Economic Development

United States Coast Guard, Command

United States Coast Guard Webpage

Economic Impact of the Seafood Industry on the Kodiak Island Borough

Tribal ETEPs

Kodiak Regional Energy Plan, Alaska Energy Authority

Kodiak Chamber of Commerce

Discover Kodiak

Kodiak Archipelago Leadership Forum, Virtual Meetings

2015-2021 Kodiak Rural Regional Comprehensive Economic Develop Strategy