
Aleutian Pribilof Island Regional Economic Development Plan

Presented to the Aleutian Pribilof Islands Association



Prepared By
The University Of Alaska
Center For Economic Development
ua-ced.org

Aleutian Pribilof Islands Association Mission

- To provide self-sufficiency and independence of the Unangan/Unangas by advocacy, training, technical assistance and economic enhancement;
- To assist in meeting the health, safety and well-being needs of each Unangan/Unangas community;
- To promote, strengthen and ensure the unity of the Unangan; and
- To strengthen and preserve Unangan's cultural heritage.



Figure 1. Church of the Holy Ascension in Unalaska. Credit: CED.

Regional Overview

Background

The Aleutians and Pribilofs Islands are part of the southwest region of Alaska. The island chain extends westward over 1,100 miles from the southwestern edge of the Alaska mainland to the Kamchatka Peninsula. The Aleutian archipelago, including the Pribilof Islands, is home to thirteen tribal organizations supported by the Aleutian Pribilof Island Association (APIA). The Unangan people have lived on these islands for millennia.



Figure 2. The Aleutian and Pribilof Islands in Southwest Alaska.

The region is characterized by extreme weather and isolated communities and is heavily dependent on fisheries for both employment and subsistence harvesting. A bounty of marine resources provides opportunity in the region, but geographic isolation creates a barrier to economic growth and results in a high cost of living.

In the past, the economy of the Aleutian and Pribilof Islands followed cycles of boom and bust as the fur trade, commercial fisheries, and military spending cycled through the region. Subsistence culture has been the mainstay throughout these waves of development.

Geography: Environmental, Climatic, Cultural, Natural Resources

The Aleutian Pribilof Region spans from the western end of the Alaska Peninsula to the Pribilof Islands cluster to the north, to the westernmost island in the Aleutian archipelago over 1300 air miles southwest of Anchorage. The region forms part of the Pacific Ring of Fire, a line of high seismic activity dotted with volcanoes and geothermal resources that encircles the Pacific Ocean. The Aleutian Islands are home to 41 active volcanoes and a larger number of inactive ones, including on the Pribilof Islands.¹

The climate for the Aleutian Islands is oceanic, which means the temperatures change relatively little between summer and winter. There is heavy rainfall throughout the year, and the area is susceptible to frequent cyclonic storms, high winds, and fog. Storms can be especially dramatic during the winter.

Due to the plethora of geothermal and wind resources that are richly distributed throughout the region, the Aleutians and Pribilofs hold potential for renewable energy development. Both the Aleutians and the Pribilofs host some of the best wind resources statewide. The region is also home to powerful

¹ Alaska Volcano Observatory. *Volcano Information*. Retrieved from <https://avo.alaska.edu/volcanoes/index.php>

hydroelectric resources. The Isanotski Pass, located next to the city of False Pass is renowned for extreme currents and has been studied for its potential to power and heat the city of False Pass through its tidal power.²

In addition to a large amount of renewable energy potential, the region is also home to many wind, hydro, and biomass projects. Communities in the region exist on an islanded power grids, so energy projects specifically benefit only the communities in which they are constructed.

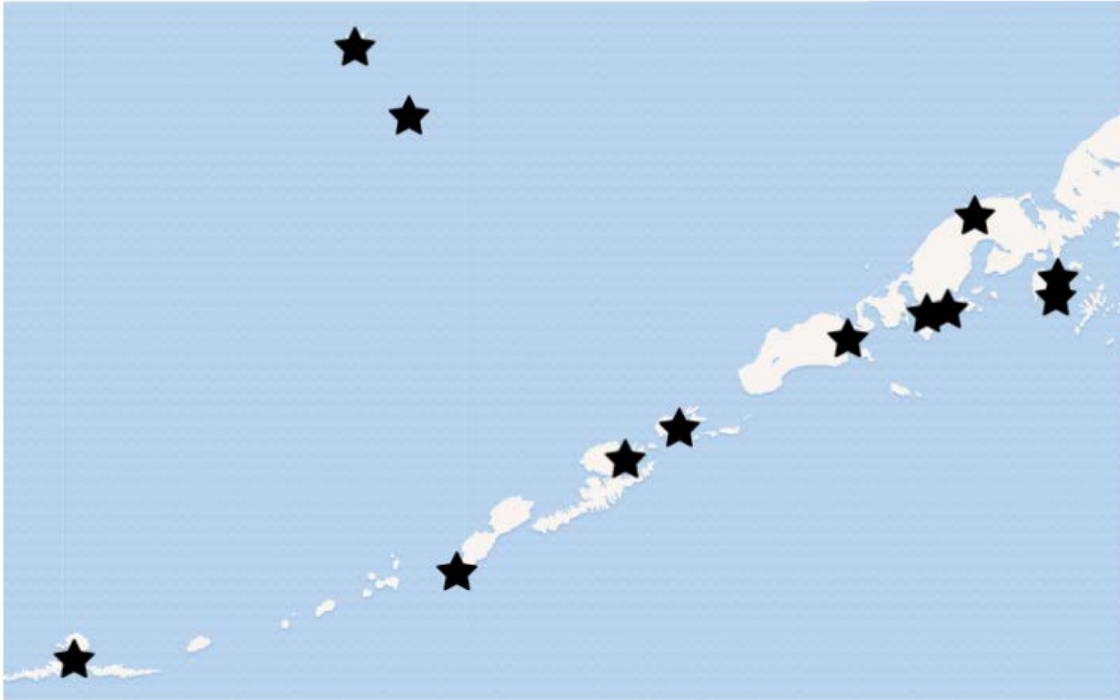


Figure 3. Location of Aleutian and Pribilof tribal communities.

Aleut, or Unangax, people have been occupying the Aleutians for roughly 9,000 years. The most well studied historical site can be found on Anangula Island, several miles west of the village of Nikolski. Because archaeological sites of this age have been located only in the eastern Aleutians, it is likely that the first movement into the island chain occurred from the Alaska Peninsula westward. The first people who moved into the region were the descendants of the early migrants from Siberian into Alaska, who crossed the Ice Age land connection between the two hemispheres, the Bering Land Bridge, which existed until about 12,000 years ago.³

When insights from Unangan oral history, archaeology, and early Russian period documents are considered, researchers believe about 12,000-15,000 Unangan occupied a territory that included the

² U.S. Department of Energy. *Feasibility of Tidal and Ocean Current Energy in False Pass, Aleutian Islands, Alaska*. Retrieved from https://www.energy.gov/sites/prod/files/2015/12/f27/apia_final_report_0514.pdf

³ *The Peopling of the Aleutians*. <http://science.sciencemag.org/content/sci/335/6065/158.full.pdf>

Aleutian Chain and Alaska Peninsula. The population was likely higher in the eastern portion of this territory due to the vast coastline and high concentration of food resources.⁴

Because of the climate, the Aleutians and Pribilofs usually remain free of sea ice, enabling year-round harvest from rich shallow waters. Traditionally, marine life was the most common source of sustenance as it was the most readily available food source for the tribes. Because the selection was ample and the food was easily accessible almost all members of the tribe could contribute. Every part of the animal would be used. Anything not eaten might be used as tools or turned into household goods, clothing, or even boats.

Russian explorers made contact with the central Aleutians in 1741 and the eastern Aleutians in the 1760s. Less than 50 years later the Unangax people had been reduced to just 2,500 people, an 80 percent reduction in population. The Unangax people were killed off or forced into slave labor, and with the men away, women and children stepped up to help provide for the family. With the Russian invasion came village relocation or consolidation, trade skills, and religion.⁵

In 1942, Japanese troops conducted airstrikes on Dutch Harbor, Unalaska. They invaded and took the villagers of Kiska and Attu village to Japan to work at internment camps for the remainder of the war. For nine other villages, their residents were evacuated and taken to Southeast Alaska where they were housed in abandoned canneries and mines where there were dismal living conditions and minimal medical care. Some of the villages were burned as not to allow the Japanese to use them or advance inland. Following the war many Unangax returned to the region, however many also did not return.

Over the decades, since the passage of the Alaska Native Claims Settlement Act, many communities in the region have rekindled efforts aimed at preserving cultural heritage. In their Local Economic Development Plan, the Nikolski tribe attested that they are a culturally active community focused on becoming self-reliant and self-determined using traditional and contemporary way. Formation of dance groups, language classes, and local culture camps is prevalent and celebrated throughout many of the communities and has been a focus for the region as a whole.

Today subsistence activities remain an essential component of life in the region. Subsistence fishing and hunting form a significant part of residents' livelihoods. In nearly all communities, a substantial majority



8,156

Population of the Aleutian and Pribilof Islands in 2017 (DOL&WD).



-4.2%

Population decline from 2010 to 2017.



13

Number of federally-recognized tribes in the region served by APIA.



9,000

Number of years the Unangax and their ancestors have inhabited the islands.



Seafood

The largest industry in the Aleutian and Pribilof Islands, employing over 3,000 individuals.

⁴ APIA. *History*. Retrieved from <https://www.apiai.org/departments/cultural-heritage-department/culture-history/history/>

⁵ <https://www.apiai.org/departments/cultural-heritage-department/culture-history/history/>

of residents use subsistence resources. The most common subsistence fish species include salmon, cod, char, and trout.⁶

For this reason and others, the risks posed by climate change are extraordinarily high. Already, neighboring regions have seen a significant shift in the types of marine life found in their waters.⁷ A significant decrease in quantity or change in the type of sea life available to residents of the Aleutian and Pribilof Islands could result in substantial additional hardship. Due to the cost of shipping goods to the remote villages in the region, the cost of living in those areas would increase dramatically if subsistence fisheries became unproductive or unavailable. Climate change is also expected to change weather patterns in the area.

Demographics

The total population for the Aleutian-Pribilof region is just over 8,000 people. The islands have seen significant declines since the early 1990s when the population was nearly 12,000.⁸ The closure of the U.S. Navy installation on Adak accounts for most of this decline. Reduced employment in commercial fisheries has also caused residents of the islands to leave in search of work in Southcentral Alaska or the Lower 48.

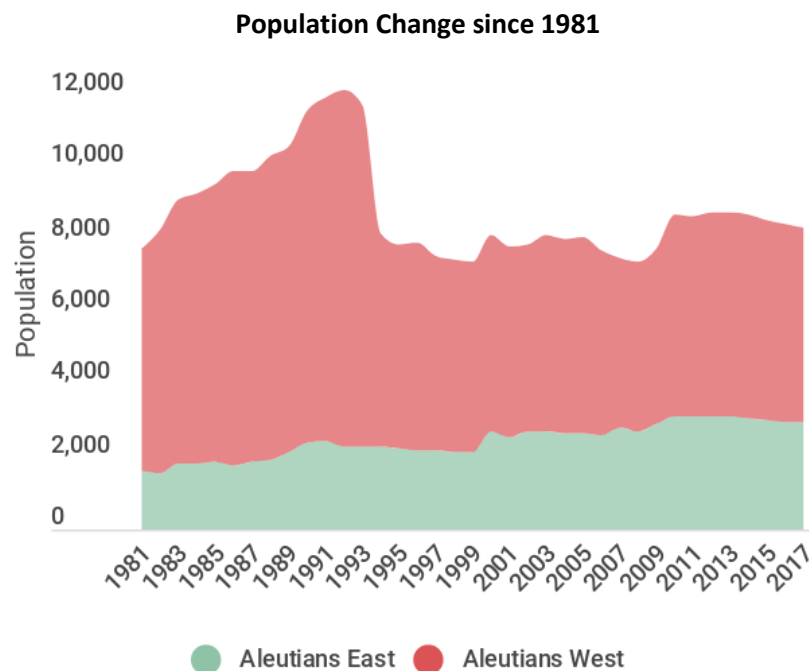


Figure 4. Source: Alaska Department of Labor and Workforce Development.

The largest cities for this area include Unalaska (4,619 residents or about half of the total population) in the Aleutians West Census Area and Sand Point (1,188 residents) in the Aleutians East Borough. The smallest villages include Nikolski, located in the Aleutians West Census Area with 17 people, and Nelson Lagoon, located within Aleutians East with a population of 30 people. Between 2010 and 2017, the region

⁶ NOAA. Community Profiles. *Alaska Peninsula/ Aleutian Islands*.

⁷ ADFG. The Effects of a Changing Climate on Key Habitats in Alaska.
https://www.adfg.alaska.gov/static/lands/ecosystems/pdfs/sp10_14.pdf

⁸ DOL&WD.

saw an overall decrease in population of 4.2%. St. George, Cold Bay, and Nelson Lagoon saw the most significant population decreases.⁹

Population and Change by Community		
	2017 Population	Percent Change since 2010
Aleutians East Borough		
Akutan	993	-3%
King Cove	925	-1%
Sand Point	915	-6%
Cold Bay	72	-33%
False Pass	42	20%
Nelson Lagoon	30	-42%
Aleutians West Census Area		
Unalaska	4,341	-1%
St. Paul	389	-19%
Adak	308	-6%
St. George	70	-31%
Atka	54	-11%
Nikolski	17	-6%
Regional Total	8,156	-4%

Figure 5. Source: Alaska Department of Labor and Workforce Development

The region as a whole exhibits a strong trend of out-migration, likely driven by a multitude of causes. The majority of the people migrating out of the region between 2016 and 2017 moved to Anchorage and the Kenai Peninsula Borough. People migrating into the region came mostly from Anchorage and the Matanuska-Susitna Borough.

⁹ Alaska Population Estimates by Borough, Census Area, City, and Census Designated Place (CDP), 2010 to 2017, Alaska Department of Labor and Workforce Development.

Migration To and From the Aleutians-Pribilofs

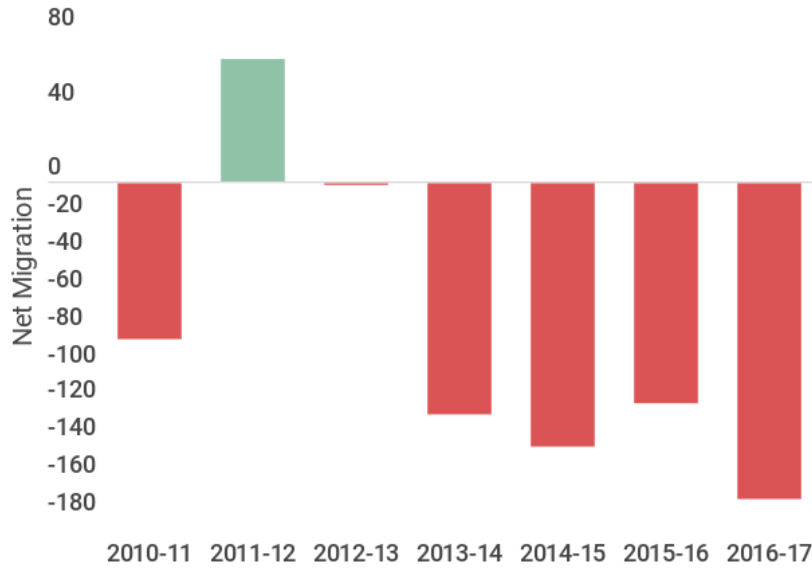


Figure 3: Regional Migration. Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section

Residents of the region are predominately of white, Alaska Native, and Asian descent. The Asian population is mostly because of historical ties to the seafood processing industry. The Alaska Native population is primarily of Unangax descent.

Population by Ethnicity

Race	Population	Percent of Total Population
White Alone	2,393	27%
Asian Alone	3,060	34%
American Indian and Alaska Native Alone	1,864	21%
Black or African American Alone	546	6%
Two or More Races	491	5%
Some Other Race Alone	480	5%
Native Hawaiian and Other Pacific Islander Alone	179	2%

Figure 6. Source: US Census, American Community Survey, 2016.

The residents of the region are primarily male, at 61% of the population. The majority of these men are between the ages of 25 and 54, which is also the highest age range for women. The population curve for the region is standard, if not slightly skewed toward the younger ages.

Population by Age and Sex, 2017

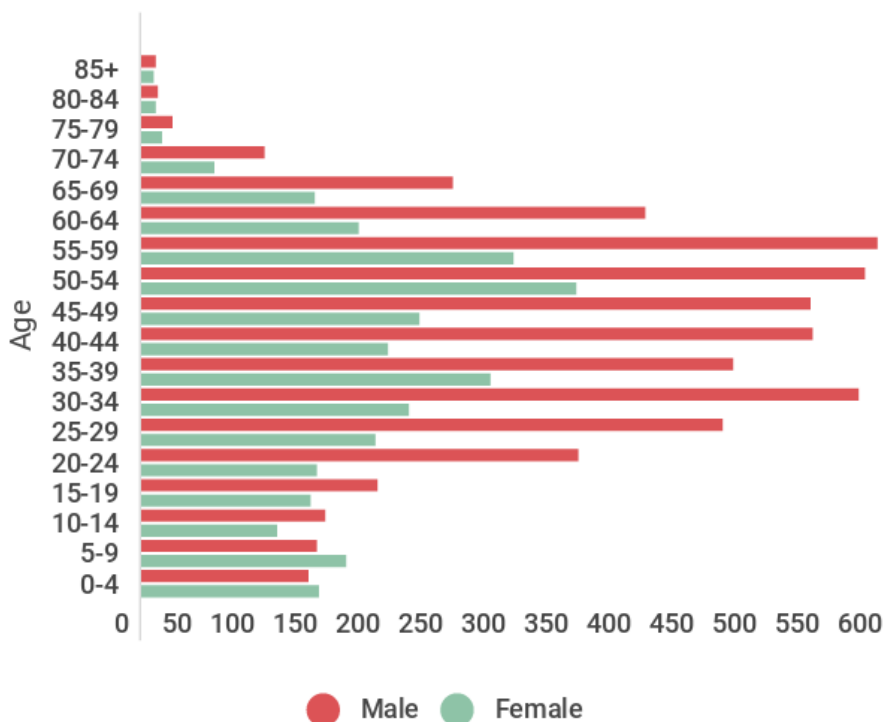


Figure 4: Age Demographics in the Aleutian-Pribilof Region

As of 2016, 88% of the population in Aleutian East Borough and 87% of the people in the Aleutians West Census Area hold a high school diploma. The region is only slightly below the 89% of the population statewide that have graduated from high school. However, the percentage of the regional community with a bachelor degree or higher is significantly lower than the statewide population. Nine percent of the people in the Aleutian East Borough and 16% of the people in the Aleutian West Census Area had at least a bachelor degree, compared to 31% statewide. However, this divergence is not surprising considering that a large number of employment opportunities in the region revolve around the fisheries and seafood industry which historically been rich in institutional knowledge and less reliant on formal education.

Industry Sectors

The unemployment rate has historically remained relatively low compared to the statewide average, and more recently Anchorage. The unemployment rate in the Aleutians East Borough in 2016 was 2.7%, and the unemployment rate in the Aleutians West Census Area was 3.3%, compared to a statewide average of 6.9% and an unemployment rate of 5.6% in Anchorage. At a community level, Adak and St. Paul have the highest unemployment rates at 10.4% and 7.3% respectively, both above the statewide average.¹⁰

¹⁰ US Census Bureau, American Community Survey, 2016.

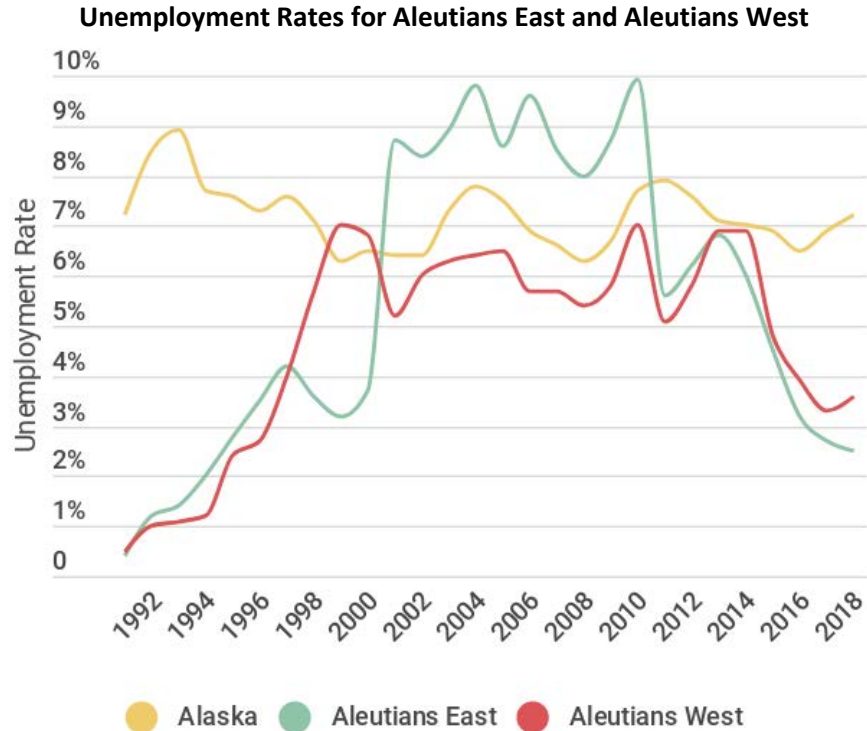


Figure 7. Source: Alaska Department of Labor and Workforce Development

Approximately 36% percent of the households in the region bring home income between \$50,000 and \$99,999. The average household income in the Aleutians East Borough in 2016 was \$76,438, well below the statewide average of \$92,191. Meanwhile, the average household income in the Aleutians West Census Area in 2016 was \$97,226, just slightly above the statewide average.¹¹

The region as a whole is heavily dependent on the fishing sector. Industry employment data shows that the manufacturing industry is the largest employment sector in the regional economy, closely followed by trade, transportation, and utilities and local government.

¹¹ US Census Bureau, American Community Survey, 2016.

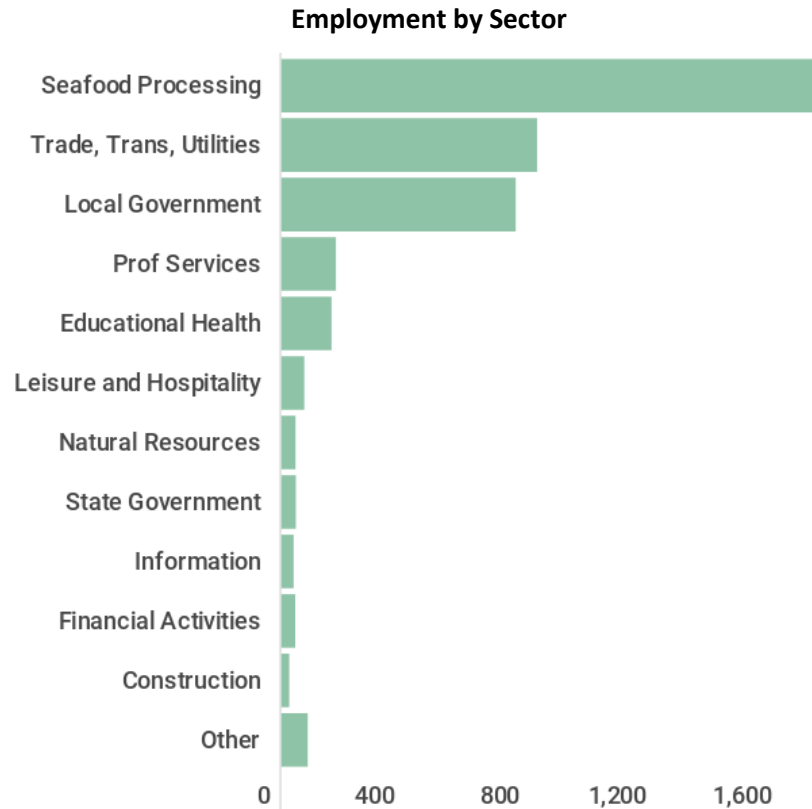


Figure 8. Employment by sector. Source: BLS, QCEW 2017.

However, manufacturing is a sector of the region's economy that has significantly declined over the past ten years according to available data. In 2007 manufacturing, or assumedly the seafood industry, employed 3,600 workers. In the past decade, the sector has declined by 53% to the 1,721 workers it employs today.

McDowell's analysis of regional trends in the commercial fishing industry shows that the number of resident permit holders in the region has declined 33%. The number of crew member licenses has fallen significantly just in the last year. Despite these employment trends, total unadjusted gross earning at the ex-vessel level doubled between 2010 and 2016 and the amount of seafood harvested quadrupled, primarily as a result of larger groundfish harvests.

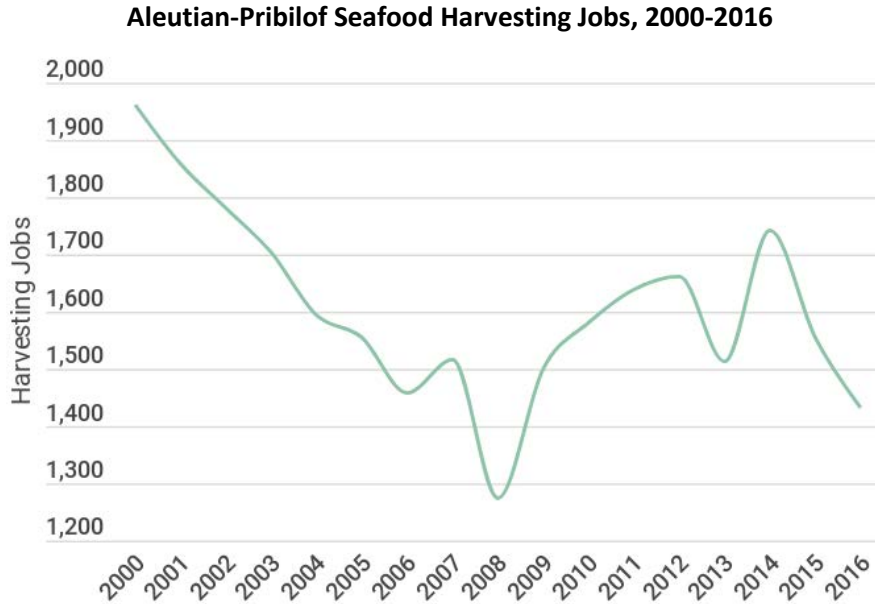


Figure 9. Source: Alaska Department of Labor and Workforce Development

Comparatively, employment in the trade, transportation, and utilities and professional and business services sectors have both significantly increased. Approximately 200 new people have been employed in trade, transportation, and utilities, causing the industry to surpass local government as the second largest in the regional economy. The professional and business services sector grew the most having increased by 123% over the previous ten years.

Aleutian-Pribilof Seafood Harvesting Jobs by Species, 2016

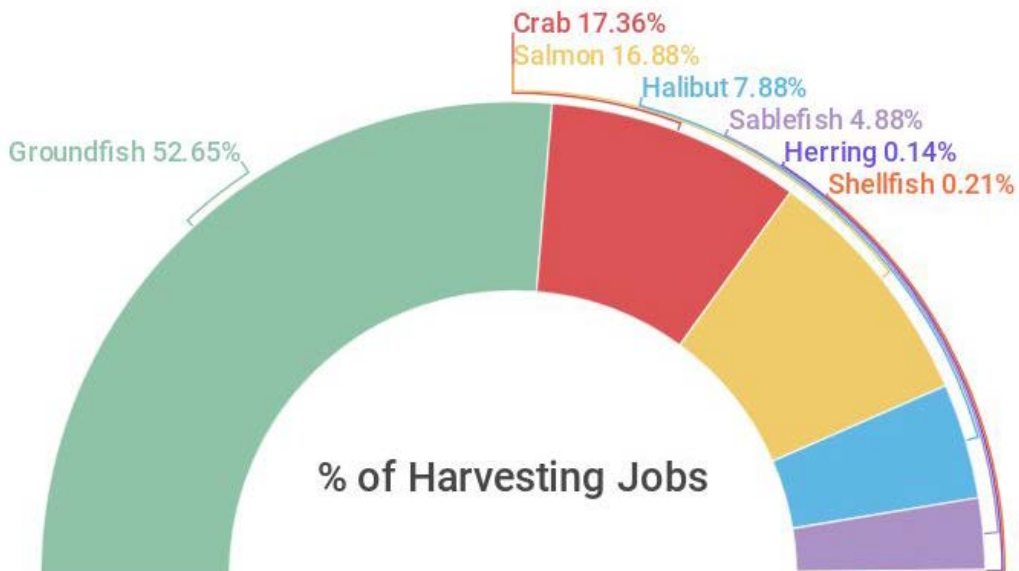


Figure 10. Source: Alaska Department of Labor and Workforce Development.

Commercial Fisheries Permits Held By Aleutian-Pribilof Residents

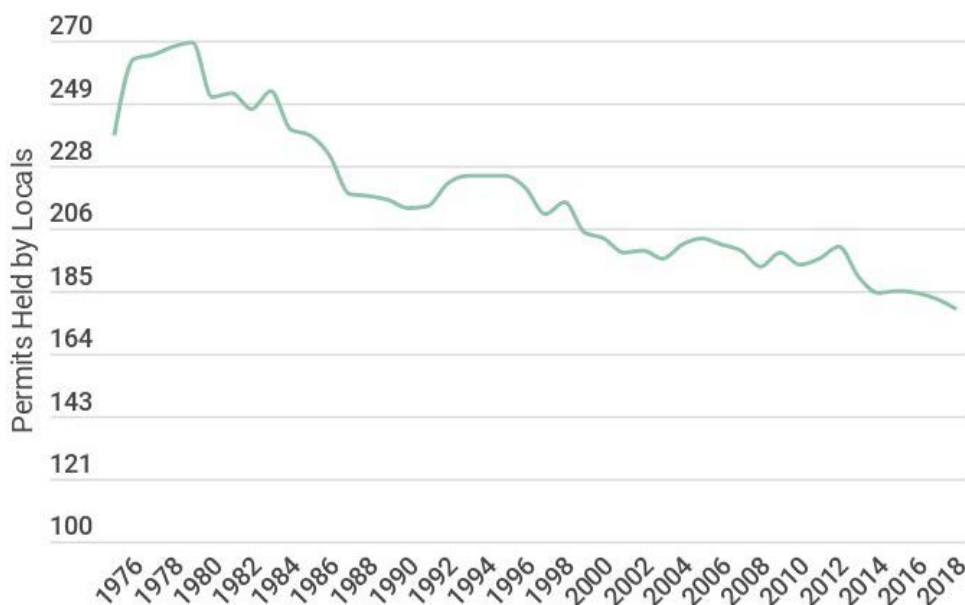


Figure 11. Source: Commercial Fisheries Entry Commission.

Natural resources and mining was also a growing sector for regional employment. The industry grew by 200%, from the 15 employees that were employed in the industry in 2007.

Infrastructure Overview

Given that the region is, for the most part, an extensive collection of island communities, mobility throughout the region is mostly limited to access by air and water. All of the communities in the region host an established airport with either a gravel or asphalt runway. However, due to high winds and difficult conditions most of the year King Cove is particularly difficult to access. Ten miles away Cold Bay hosts two runways which are accessible in most weather conditions.

Airports in the Aleutians-Pribilofs

City Served	Airport Name	Runway Type	Number and Length of Runway in Feet
Adak	Adak Airport (ADK)	Asphalt	One—7,790
Atka	Atka Airport (AKA)	Asphalt	One—3,100
Akutan	Akutan Airport (7AK)	Asphalt	One—4,500
Cold Bay	Cold Bay Airport (CDB)	Asphalt	Two—10,415 and 5,125
False Pass	False Pass Airport (KFP)	Gravel	One—2,100
King Cove	King Cove Airport (KVC)	Gravel	One—3,360
Nelson Lagoon	Nelson Lagoon Airport (NLG)	Gravel	One—4,000
Saint George	Saint George Airport (STG)	Asphalt	One—5,000
Saint Paul	Saint Paul Island Airport (SNP)	Asphalt	One—6,500
Sand Point	Sand Point Airport (SDP)	Asphalt	One—5,200
Unalaska	Dutch Harbor Airport (DUT)	Asphalt	One—3,900

Figure 12. Source: Alaska DOT&PF.

In 2015 and 2016, an average total of 34,000 passengers disembarked from airplanes flown by Pen Air. Of those passengers, it is estimated that if an average of 3% were tourists. That would result in the conclusion that there were 1,027 tourists between the two years (McDowell's Aleutians/Pribilof Islands Visitor Industry Report).

The Alaska Marine Highway system also services much of the region. The M/V Tustumena sails through Dutch Harbor, Akutan, False Pass, Cold Bay, King Cove, and Sand Point. From April through early October, the ferry sails about ten times on that route. (McDowell's Aleutians/Pribilof Islands Visitor Industry Report). Weather influences how frequently the ferry sails every year. Disembarking passenger number has varied throughout the years, with 2012 having 3,686 disembarking passengers compared to 2013 having a low count of 806 (McDowell's Aleutians/Pribilof Islands Visitor Industry Report).

Although not all of the communities in the region are serviced by the Marine Highway system, each of the communities has a harbor. Below is a snapshot of some of the prominent ports and docks in the region.

Ports and Harbors in the Aleutians-Pribilofs

Port	Details
Adak Port	Ice free deep-water port with two fully equipped cargo piers and a fueling pier.
Akutan Harbor	Recently completed large boat harbor.
False Pass Harbor	A boat harbor with electricity and water at the flocks as well as a dock.
King Cove Harbor	The Department of Ports and Harbors operates three city-owned marine facilities: The Alaska Marine Ferry & Freight Dock, the Small Boat Harbor, and the (Babe) Newman Large Boat Harbor.
Saint George Harbor	Recently completed inner harbor that lies 5 miles from the city of Saint George in Zapadni Bay.
Sand Point Harbor	25-acre boat harbor that includes four docks, 134 boat slips, a barge off-loading area, and a lift that has a 150-ton capacity.
Unalaska/Dutch Harbor	The Department of Ports and Harbors operates six City-owned marine facilities: The United States Coast Guard (USCG) Dock, the Unalaska Marine Center Dock (UMC), the Spit Dock, the Spit Light Cargo (LCD), Robert Storrs International Small Boat Harbor (Storrs) and Carl E. Moses Boat Harbor (CEM).

Figure 13. Source: Community and Regional Affairs.

Broadband availability in the region varies. As of 2014, DSL broadband was available in Cold Bay, King Cove, Sand Point, Atka, Saint George, and Nikolski, and cable broadband was available in Unalaska.¹²

The housing stock in the region varies from community to community depending on population dynamics; however, regionally there are currently approximately 2,800 homes in the region. One thousand five

¹² Connect Alaska. *Broadband Service Inventory*.

hundred ninety of those are presently occupied, 230 are for sale or rent, and 980 are seasonal or otherwise unoccupied. Of the occupied units, 3.6% are estimated to be overcrowded in the Aleutians East Borough, and 9% are expected to be overcrowded or severely overcrowded in the Aleutians West Census Area.

Out of the current housing stock, homes built in the 1960s have a one-plus star energy rating, compared to four-star energy rating for houses built in the 1990s and five-star energy rating for houses built in the 2000s. Fifty-three percent of the homes in the region were built between 1970 and 1980, and only 9% of the current housing stock in the region were built in the 2000s. It's reasonable to assume a large amount of the housing stock in the region lacks energy efficiency upgrades.

In 2015 the average property value was \$217,500 in the Aleutians West Census Area and \$126,100 in the Aleutians East Borough. A large number of households in the region are cost burdened. Roughly 1 in 4 homes in the Aleutians West Census Area spend more than 30% of their income on housing costs.

SWOT Analysis

The Aleutian and Pribilof tribes have thrived for millennia thanks to bountiful marine life that continues to sustain a subsistence culture. The commercial seafood industry fuels a cash economy that generates livelihoods for thousands of residents in the region. The natural, rugged beauty of the islands attracts some visitors and has the potential to draw more. At the same time, economic opportunities elsewhere are leading to out-migration and population loss. Commercial fishery employment has declined as permits have left the region, limiting options for those that wish to stay and earn a living.

SWOT analysis (strengths, weaknesses, opportunities, threats) provides a means to assess these factors for the region as a whole. Strengths and weaknesses are factors internal to the region, while opportunities and threats are external elements.



Resilience

Natural disasters, economic shocks, and environmental concerns pose threats to the livelihood of the tribal members in the Aleutian and Pribilof Islands. Economic and community developers around the world increasingly recognize that long-term resiliency to negative trends and events is a key aspect of strategic planning. Resiliency measures can be broken into steady-state activities, to promote the long-term health of the region, and responsive activities as a result of a specific event.¹³

Steady-State Resiliency Measures

Measures	Steps Being Taken
Engaging in comprehensive planning efforts that involve extensive involvement from the community in defining and implementing a collective vision for resilience that includes the integration and alignment of other planning efforts and funding sources	<ul style="list-style-type: none"> • APIA Regional Plan • Local Economic Development Plans for tribes • Southwest Alaska Regional CEDS
Undertaking efforts to broaden the industrial base with diversification initiatives that (a) build on the region's unique assets and competitive strengths, and (b) provide stability during downturns that disproportionately impact any single cluster or industry;	<ul style="list-style-type: none"> • Cultural and eco-tourism planning • Mariculture development
Building a resilient workforce that can better shift between jobs or industries when their core employment is threatened	<ul style="list-style-type: none"> • APIA Employment Services
Ensuring redundancy in telecommunications and broadband networks to protect commerce and public safety in the event of natural or manmade disasters;	<ul style="list-style-type: none"> • Regional broadband initiative
Promoting business continuity and preparedness (i.e., ensuring businesses understand their vulnerabilities)	<ul style="list-style-type: none"> • Tribal Resource Guide for Aleutian and Pribilof Islands

Responsive Resiliency Measures

Measures	Steps Being Taken
Conducting pre-disaster recovery planning to define key stakeholders, roles, responsibilities, and key actions	
Establishing a process for regular communication, monitoring, and updating of business community needs and issues	
Establishing a capability to rapidly contact key officials to coordinate a need assessment	
Establishing coordination mechanisms and leadership succession plans for recovery needs	

¹³ EDA, *Comprehensive Economic Development Strategy Content Guidelines*.

APIA Goals and Objectives



1. Strengthen community planning capacity

- Develop local economic development plans (LEDPs) for each tribe
- Plan a region-wide economic development summit
- Assist tribes in accessing funding for priority projects
- Provide a tribal resource guide to all tribes

Partners: Tribes, Southwest Alaska Municipal Conference, Aleutians East Borough, Center for Economic Development.



2. Increasing locally grown food through hydroponics

- Evaluate community interest in hydroponics
- Provide technical assistance
- Identify funding sources

Partners: Equipment vendors, tribes, funding agencies.



3. Promote local hire in the seafood industry

- Collaborate with seafood companies
- Assess training needs

Partners: Tribes, seafood processors, APICDA, CBSFA, Department of Labor and Workforce Development.

APIA Goals and Objectives



4. Ensure that every tribe has a Tribal Employment Rights Office (TERO)

- Work with tribes about their interest in obtaining TERO agreement
- Provide technical assistance to tribes on how to get a TERO agreement

Partners: Tribes, BIA.



5. Strengthen partnerships and resource sharing with Community Development Quota (CDQ) groups

- Identify areas for collaboration among APIA functions
- Identify interest in supporting Head Start programs
- Secure agreements with Central Bering Sea Fishermen's Association (CBSFA) and Aleutian Pribilof Islands Community Development Association (APICDA)

Partners: Tribes, CBFSA, APICDA.



6. Improve access to quality housing in tribal communities

- Collaborate with seafood companies
- Assess training needs

Partners: Aleutian Housing Authority, Alaska Housing Finance Corporation, Housing and Urban Development (HUD).

APIA Goals and Objectives



7. Promote and support tourism development in the region

- Create a tourism kiosk for APIA
- Identify community interest in tourism development
- Develop ecotourism opportunities
- Develop cultural/historic tourism opportunities

Partners: Tribes, Alaska Travel Industry Association (ATIA), local chambers, convention and visitor bureaus.



8. Cultivate entrepreneurship and small business success

- Match community needs to entrepreneurs
- Partner with the University of Alaska Anchorage Business Enterprise Institute, including the Small Business Development Center
- Develop programs to invest in or finance small businesses
- Create a "Shark Tank" style entrepreneurship competition

Partners: Tribes, Business Enterprise Institute, Small Business Development Center, Center for Economic Development, APICDA

APIA Goals and Objectives



9. Strengthen workforce development and career opportunities

- Develop human resources list of skills in each community
- Conduct HAZMAT training for tribal members
- Conduct HVAC training for tribal members
- Use EPA IGAP funds to train tribal members for quality assurance jobs at processing plants
- Host career week in each community to spread awareness of opportunities

Partners: Tribes, Alaska Department of Labor and Workforce Development,