



IV. EMERGING SECTORS



Homer oysters

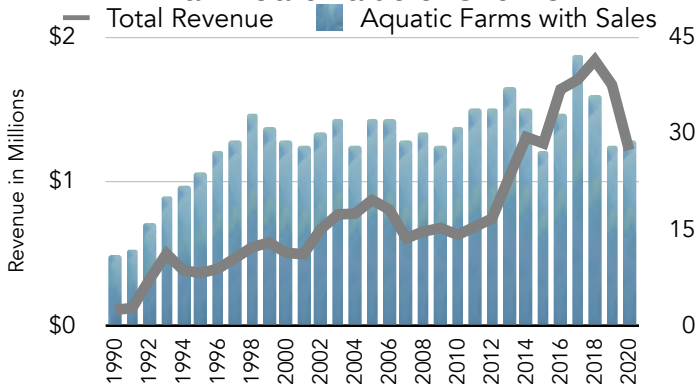


Welder at Ketchikan shipyard

Mariculture

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

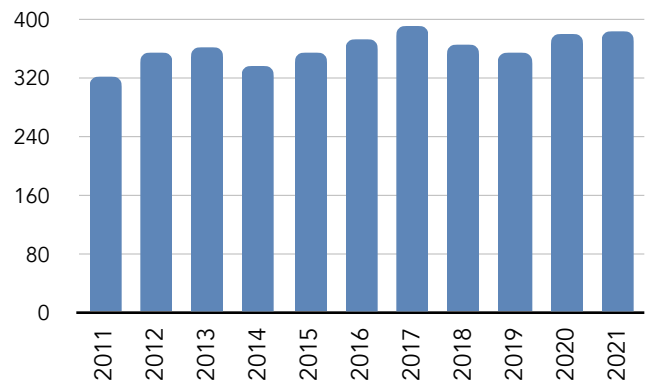
Alaska Aquatic Farm Production:
Farm Gate Value of Shellfish



Marine Services Industry

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

Ship, boat building, and repair
annual employment



Energy Innovation

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

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



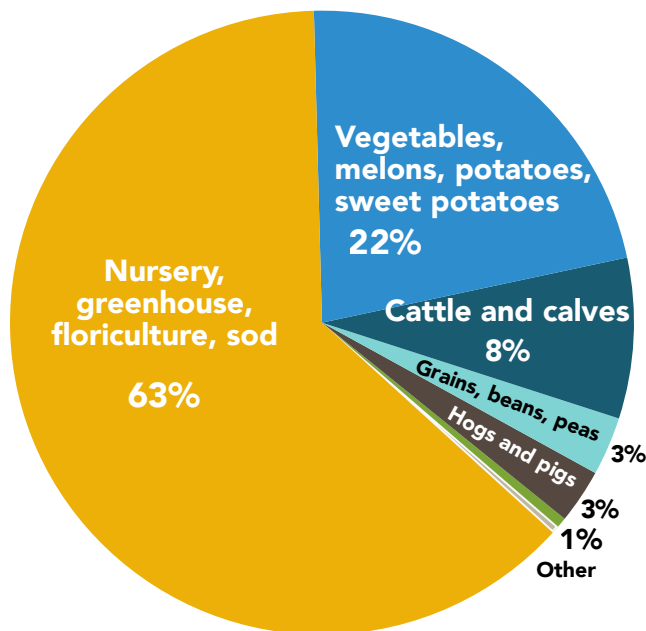
Barley harvest in Delta Junction

Denali

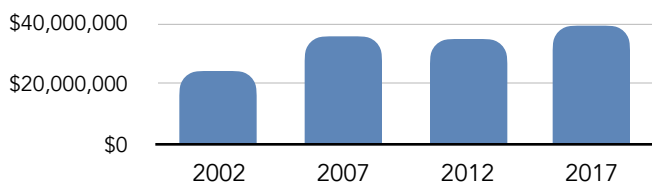
Agriculture

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

Alaska Agriculture Revenue by Type



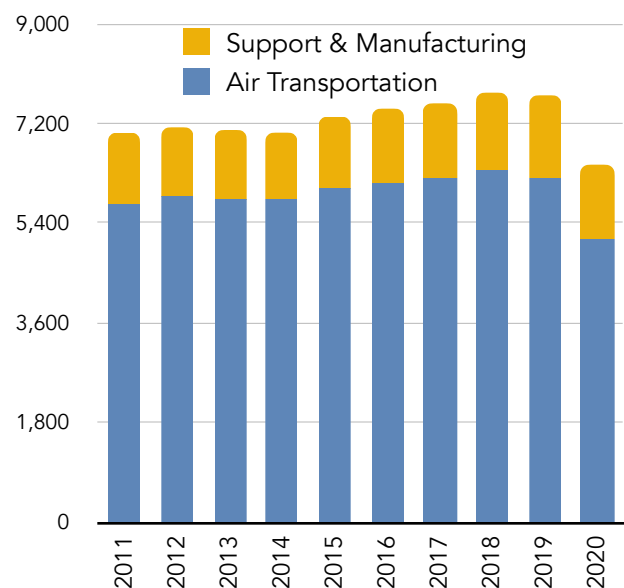
Agriculture Revenue by Year



Aerospace and Aviation

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

Aviation & Aerospace Jobs



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