

Fisheries, Seafood, Maritime Initiative (FSMI) Annual Report

University of Alaska | Supporting the Maritime Workforce | January 2019

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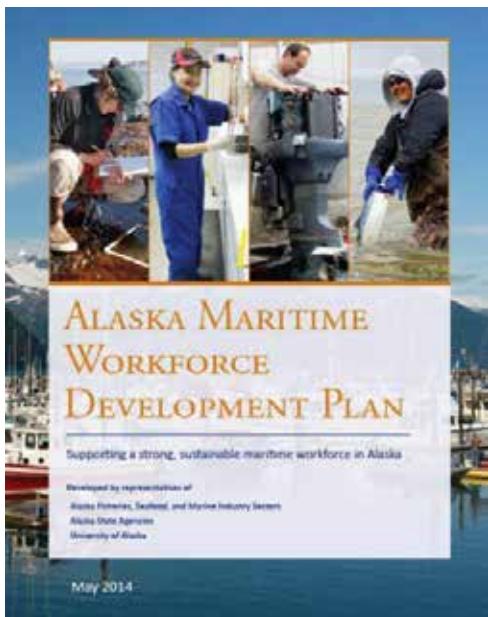


UNIVERSITY
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Many Traditions One Alaska

Sustainable Partnerships

Alaska's maritime sector is the largest employer in the state with over 70,000 jobs. Training organizations and industry have established and leveraged partnerships to address the growing workforce needs. These partnerships were formalized in 2010 leading to the publication of the Alaska Maritime Workforce Development Plan in 2014. The implementation of the plan continues through the University of Alaska Fisheries, Seafood and Maritime Initiative (FSMI) and Maritime Works.



FSMI
www.alaska.edu/fsmi

Mission: The University of Alaska's Fisheries, Seafood and Maritime Initiative supports Alaska's maritime workforce and economy by delivering education, training and research.

Maritime Works
www.maritimeworks.org

Mission: A network of industry professionals working to advance maritime workforce development, with the support of their organizations.



Partnerships Producing Results

Domestic Maritime Centers of Excellence

The 2017 Defense Reauthorization Act calls for the creation of a nationwide network of community colleges and state-operated training providers to build the maritime workforce called the Domestic Maritime Centers of Excellence or 'DMCE'. Specific regions where DMCE's will be located include the Great Lakes, Atlantic and Pacific Oceans, Gulf of Mexico, the Gulf of Alaska, and the Arctic Ocean.

The University of Alaska has been actively engaged with 15 community colleges from across the country who provide maritime-related technical training programs. During monthly audio conferences, information related to the Maritime Administration's DMCE RFP is shared even though proposals will be submitted independently to be designated as a DMCE.

The University of Alaska and the Alaska Department of Labor and Workforce Development are working closely together, in a consortium model, to submit a single proposal for Alaska.



In June of 2018, a two-day 'Shared Quarters' conference along the Houston Ship Channel was convened for the community colleges to meet with federal leaders and agencies who will be influential in the development of the DMCE. A contingent from Alaska attended the conference including UA campus and maritime program directors, AVTEC, and industry partners from APICC and Maritime Works.

In January 2019, UA will be co-hosting a 'Maritime Showcase' during a pre-conference session at the American Association of Community Colleges' Workforce Development Institute in San Diego. Thirteen community colleges will participate and provide presentations that highlight their maritime programs. The goal is to continue fostering relationships and enhance opportunities to expand programs in Alaska and across the country.

Partnerships Producing Results (cont.)

Maritime Careers Awareness Project

<https://maritimeworks.org/careers/>

APICC, who coordinates the industry efforts of Maritime Works, applied for a grant from the Alaska Community Foundation Vocational Fund for Alaska's Future and received an award to fund a career awareness project.

Utilizing subject matter experts from the three FSMI Working Groups, in collaboration with industry, the content was developed to create visual communication tools and resources to enhance awareness of the 23 priority occupations identified in the Alaska Maritime Workforce Development Plan.

The image shows four mobile device screens arranged in a grid, each displaying a different maritime career:

- Vessel Operations:** Shows a yellow and black vessel in a harbor. Text: "You're going places. Awesome places." Job title: Able Seaman - QMED - Marine Engineer - Mats - Captain - Steward. Salary range: \$20K to \$350K. Description: From coiling rope to taking the helm, the people in vessel operations are the ones who run the ship. This is an exciting, high-paying career field with many benefits. Start or an Apprentice or Backfilling, work your way up to Able Seaman.
- Shipbuilding, and Vessel Repair and Maintenance:** Shows a worker welding. Text: "Make sparks fly and ships float." Job title: Engineer - Electrician - Fabricator - Shipfitter - Welder - Stacker. Salary range: \$22K to \$193K. Description: From building a ship or repairing one to keeping ships and boats moving, it's reading in engineering that holds just getting started in their careers after high school. Many opportunities exist with advanced training and apprenticeship programs.
- Fisheries Careers:** Shows a person fishing in a stream. Text: "Go fishing. Every day." Job title: Fishery Biologist - Fishery Biometrician - Fishery Economist - Fishery Technician. Salary range: \$40K to \$100K. Description: Studies fish and fisheries management with the goal of protecting or increasing the health of fish populations. There is a range of opportunities in this field, from research all the way to co-leading fisheries in an entire region. Job titles include fish biologist, biometrician, economist and technician. If you love research, statistics and getting outdoors, fisheries is a great career choice.
- Seafood Processor:** Shows a person working in a processing plant. Text: "Dock to table: You're feeding the world." Job title: Can Mechanist - Electrician - Engineer - Technician - Manager. Salary range: \$20K to \$156K. Description: From turning raw seafood into processing plant to fixing giant refrigerators, these are primarily land-based jobs within the commercial fishing industry. They offer a range of entry-level opportunities. A great way to kick start a long-term career in one of Alaska's strongest industries. The world's appetite for healthy, wild seafood isn't going anywhere soon. But you are - you're going up the ladder.

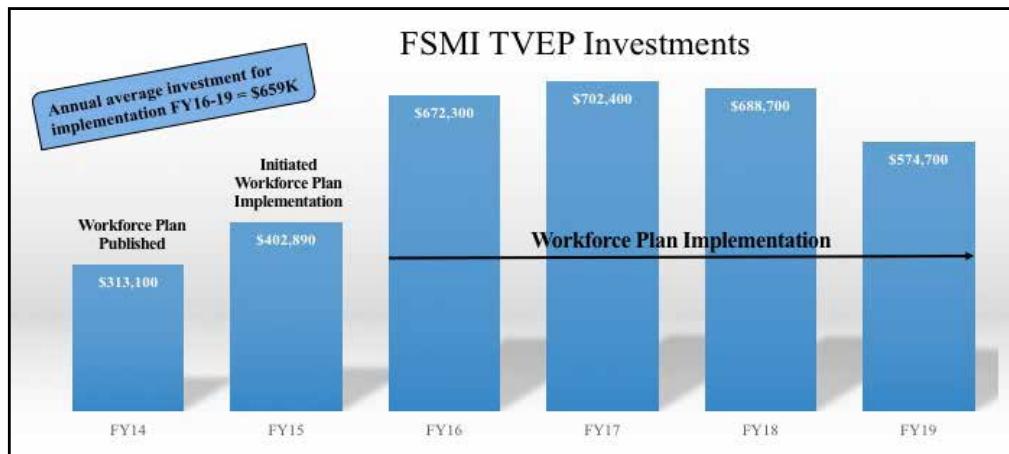
Investments & Outcomes

Photo ASMI



Since 2016, UA has invested an average of \$659K from the Technical Vocational Education Program (TVEP) into FSMI programs to support the implementation of the Alaska Maritime Workforce Development Plan.

In FY19, TVEP funds are being utilized to support program development, expansion, and delivery of maritime workforce training. This varies from short focused workshops to semester-long courses that result in USCG licensure. The funds also support ongoing FSMI coordination and investment in industry identified workforce initiatives.



Highlights

Program and Training



UAA Kachemak Bay Campus

- Collaborated with AVTEC to obtain U.S. Coast Guard (USCG) approval to provide Able Seaman and Master 100 Ton certifications. Their first Able Seaman class produced nine graduates. The USCG credentials are nationally recognized and help locals become more employable.
- They also delivered a full range of vessel repair and maintenance classes to over a 150 high school and adult participants.

UAA Kodiak College

- Focused on delivering short workshops in topics of vessel repair and maintenance (e.g., Outboard Repair and Maintenance, DC Electrical for Vessels, Refrigerated Sea Water, Gill Net Construction, Net Mending and Web Repair, Troubleshooting Gauges, and Vessel Systems Overview). These workshops are portable, serving 60-90 students a year.
- Kodiak continues to provide examinations for USCG 100-ton Licenses, and examinations for American Boat and Yacht Council (ABYC) credentials.
- Partnered with Dan Mielke from UAA Mat-Su College to deliver a Refrigerated Sea Water class to nine students last spring.

UAA Prince William Sound College (PWSC)

- Since 1998, PWSC has been assisting Alyeska Pipeline Service Company to conduct annual oil spill response training under the Ship Escort/Response Vessel System Fishing Vessel Program. The training is offered in six ports around the state to over 1800 students annually on over 420 fishing vessels.
- PWSC is actively engaged with the City of Valdez to develop and build the workforce necessary to support the multi-year project to build a new harbor basin and upland facilities.
- Their Millwright program produces graduates in high-demand across multiple industries, including seafood processing plants. PWSC now has the ability to delivery this program around the state.

UAF Bristol Bay Campus (BBC)

- In 2018, BBC and the CFOS Marine Advisory Program partnered to develop a Maritime Career and Technical Education Pathway for entry-level fisheries jobs and career exploration to high school students, expanding the Maritime Technical Program. They offered classes and/or workshops in outboard engine Maintenance and repair, diesel engine maintenance and repair, crew skills training, and marine safety training.



UAS Chancellor Rick Caulfield at the grand opening of the Maritime Training Center

UAF College of Fisheries and Ocean Sciences (CFOS)

- CFOS is now offering two new programs: Master's in Marine Studies that is project focused and a STEM/Blue Master's in Business Administration.
- They are averaging student enrollments of 50-70 per year and emphasizing a cohort model to increase student success and retention. Students must also complete at least one internship and many end up completing multiple.

Alaska Sea Grant, UAF CFOS

- Delivered the biennial Alaska Young Fishermen's Summit for 84 young fishermen to learn about owning and managing a commercial fishing business, fisheries policy, and operational skills.

UAS Sitka Campus

- Their Fisheries Technology Program was awarded a National Science Foundation grant for three years to support delivery of aquaculture and mariculture courses and labs, including a semester-long intensive course in salmon culture.

UAS Ketchikan Campus

- Ketchikan Campus finished their Maritime Training Center (MTC) renovation and hosted a grand opening for Southeast Conference Annual Meeting attendees. The \$5.8 million facility features state-of-the-art bridge and engine simulators, metal welding facilities, and diesel, hydraulics and refrigeration labs. Courses focused on the deck-side of the maritime industry are delivered at the MTC for the following programs: Marine Transportation, Maritime and Multiskilled Worker, and Marine Industrial and Fabrication.
- They are continuing to partner with Vigor Alaska to provide specific shipyard training in areas of construction math, nautical blueprint reading, welding, diesel engine repair, refrigeration, marine electrical and hydraulics. Another key industry partner, The Alaska Marine Highway System, provides internships to students who successfully complete the Maritime Multiskilled Worker program.

Student Success

Photo: ASMI



UAA Kodiak College Vessel Repair and Maintenance Workshops: Brennan Bogardus

Interested in the commercial fishing industry, but knowing very little, Brennan first took a Nautical Knots class while in high school. Wanting to know more and land a summer job, he enrolled in additional maritime workshops offered through Kodiak College. In his own words, Brennan describes what the training has provided. "These classes have taught me valuable life skills and increased my employability. I have been able to work in the fishing industry during high school and plan to continue to do so through college."

UAA Prince William Sound College (PWSC) Millwright Program: Terrence McCabe

While serving in the U.S. Coast Guard in Valdez, Terrence began taking classes and graduated from PWSC in 2017 with a Millwright Occupational Endorsement Certificate. He developed skills that greatly assisted him with his daily work in the Coast Guard: "I was really able to work on my welding and get much better at it. We also learned a lot about pumps and turbines, which is super beneficial especially for people being stationed on boats."



Photo: Chelsea Haisman

Alaska Sea Grant, UAF CFOS, Alaska Young Fishermen's Summit: Ken Jones

Ken Jones is a third-generation salmon fisherman from Cordova, Alaska. He has attended the Alaska Young Fishermen's Summits twice and credits it with helping him gain an in-depth understanding of Alaska's complex fishery regulatory process as well as enabling him to hone his business management skills. Jones serves on the Cordova City Council and several local boards. He has served as an alumni speaker at the Alaska Young Fishermen's Summit, sharing his experiences with newcomers to the industry.