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TECHNICAL VOCATIONAL
EDUCATION PROGRAM
REAUTHORIZATION REPORT

24



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A Critical Funding Source for Alaska's Workforce Needs

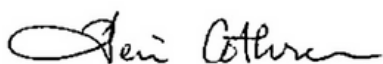
Alaska State Legislature,

While the economy is looking brighter post-pandemic, there are billions in federal infrastructure funding being invested statewide, and mining, oil, and gas have big investments on the horizon. The looming question, considering the existing workforce shortages and already competitive job market, is where will employers find the skilled workforce needed to capitalize on these opportunities?

According to the January 2024 *Alaska Economic Trends Magazine*, published by the Department of Labor and Workforce Development, worker shortages are also being compounded by migration losses and workers aging out of the workforce. They shared the Bureau of Labor Statistics estimates that Alaska has two job openings for every unemployed person seeking work. Similarly, even though the recent Anchorage Economic Development Corporation (AEDC) annual forecast luncheon projected 2024 to be a great year for the economy, AEDC President Jenna Wright also shared that workforce shortages are “going to inhibit our ability to advance the economy.”

These challenges also present opportunities. By reauthorizing the Technical Vocational Education Program (TVEP) and creating continuity of funding to support career and technical education (CTE), Alaskans can be upskilled and reskilled for employment or career advancement. Without reauthorization, the approximately \$13 million distributed annually through TVEP will significantly impact statewide access to CTE and preparing Alaskans for the generational opportunities on the horizon.

The University of Alaska (UA) is committed to meeting the state's high-demand workforce needs and ensuring Alaskans are trained for Alaska jobs. TVEP provides strategic investments across UA's three universities and thirteen community campuses to strengthen CTE programs and prepare thousands of Alaskans annually for work in Alaska. We strongly support the reauthorization of TVEP to provide continuity of this critical funding source at a critical time for Alaska's economic growth.



Teri Cothren

Associate Vice President
UA Workforce Development



TVEP Overview



The Alaska legislature established the Technical Vocational Education Program (TVEP) in 2000 from a portion of the Unemployment Insurance receipts. The program is administered by the Alaska Workforce Investment Board and provides grants to career and technical education providers for training and education that lead to high-demand occupations.

The University of Alaska (UA) system is a comprehensive and productive provider of workforce training in Alaska that has been a major recipient of TVEP as a funding source for expanding workforce development training since the program's inception. UA manages its TVEP funds as a single allocation within the UA system to initiate or enhance workforce development programs. Graduates find employment upon successful completion from both credit and non-credit programs.

UA Investment Strategies

UA manages its TVEP funds as a single allocation for one-time capital funding to upgrade technology, labs, and equipment, and to develop or expand programs aligned to high-demand workforce priorities identified by the AWIB.

UA TVEP funding distributions are administered through a competitive grant process that is inclusive of career and technical education programs across the UA System, serving all six Alaska economic regions. The proposals must meet the following criteria for funding consideration:

- ▶▶ Aligns with high-demand and/or regional workforce needs
- ▶▶ Increases access and flexibility of training delivery
- ▶▶ Assists with employment, retention, or career advancement
- ▶▶ Develops or enhances partnerships that strengthen career pathways between secondary, postsecondary, and employers

FY23 TVEP Outcomes

TVEP Allocations	% of Allocation	Grant Amount	# of Adults	# of High School Students	Total # of Participants	Investment per Participant
Alaska Vocational Technical Center (AVTEC)	17.0%	\$2,329,900	1,170	166	1,336	\$1,744
Alaska Technical Center	9.0%	\$1,233,500	85	5	90	\$13,706
Amundsen Educational Center	2.0%	\$274,100	5	0	5	\$54,820
Galena Interior Learning Academy	4.0%	\$556,800	0	211	211	\$2,639
Ilisaġvik College	5.0%	\$685,300	799	89	888	\$772
Northwestern Alaska Career and Technical Center (NACTEC)	3.0%	\$411,200	27	233	260	\$1,582
Partners for Progress in Delta, Inc.	3.0%	\$411,200	90	105	195	\$2,109
Southwest Alaska Vocational and Education Center (SAVEC)	3.0%	\$411,200	175	8	183	\$2,247
Yuut Elitnaurviat	9.0%	\$1,233,500	470	46	516	\$2,391
University of Alaska*	45.0%	\$6,167,300	3,550	1,294	4,844	\$1,273
Totals	100.0%	\$13,714,000	6,371	2,157	8,528	\$1,608

*Fairbanks Pipeline Training Center received \$867,300 in pass-through funding from the University of Alaska to support construction, oil, and gas.

UA Maximizes TVEP Funding

UA's 45% allocation trains 57% of TVEP supported students

UA is among the lowest cost per student at \$1,273

UA TVEP Supports Alaska's High-Demand Industries

The 2023 University of Alaska (UA) Workforce Reports (alaska.edu/research/wd/reports.php) capture the impact university programs have in preparing students to join Alaska's workforce. The reports answer key questions related to the largest and fastest growing occupations that require some postsecondary education and highlights UA's graduate employment outcomes from 2011 to 2022, including average wages earned, where they work in Alaska, what industries they work in, and how they help boost the Alaska hire rate.

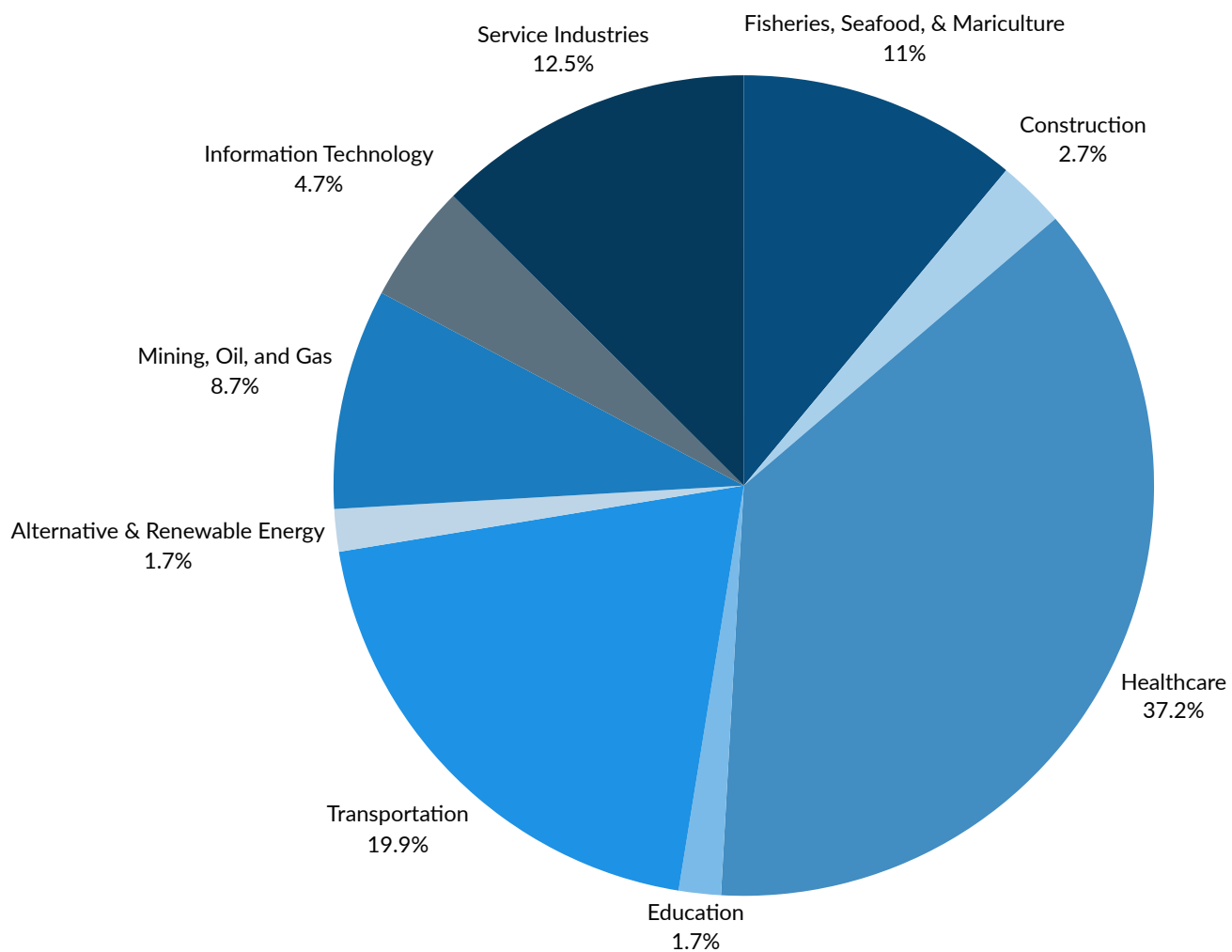
Education pays – people working jobs in Alaska that require a high school degree earn an average of \$44,679 annually, which jumps to \$63,883 for jobs that require associate degrees, \$86,140 for those that require bachelor degrees, and \$102,511 for jobs in Alaska that require graduate or professional degrees.

- Dan Robinson, Research Chief, Alaska Department of Labor and Workforce Development

Many of these programs are in high-demand fields needed to grow Alaska's economy, receive TVEP funding, and include UA's breadth of programs from short-term occupational endorsements and certificates to two-year associate degrees, and bachelor and graduate degrees. Each workforce report features a table of available UA programs related to key occupations within each industry.

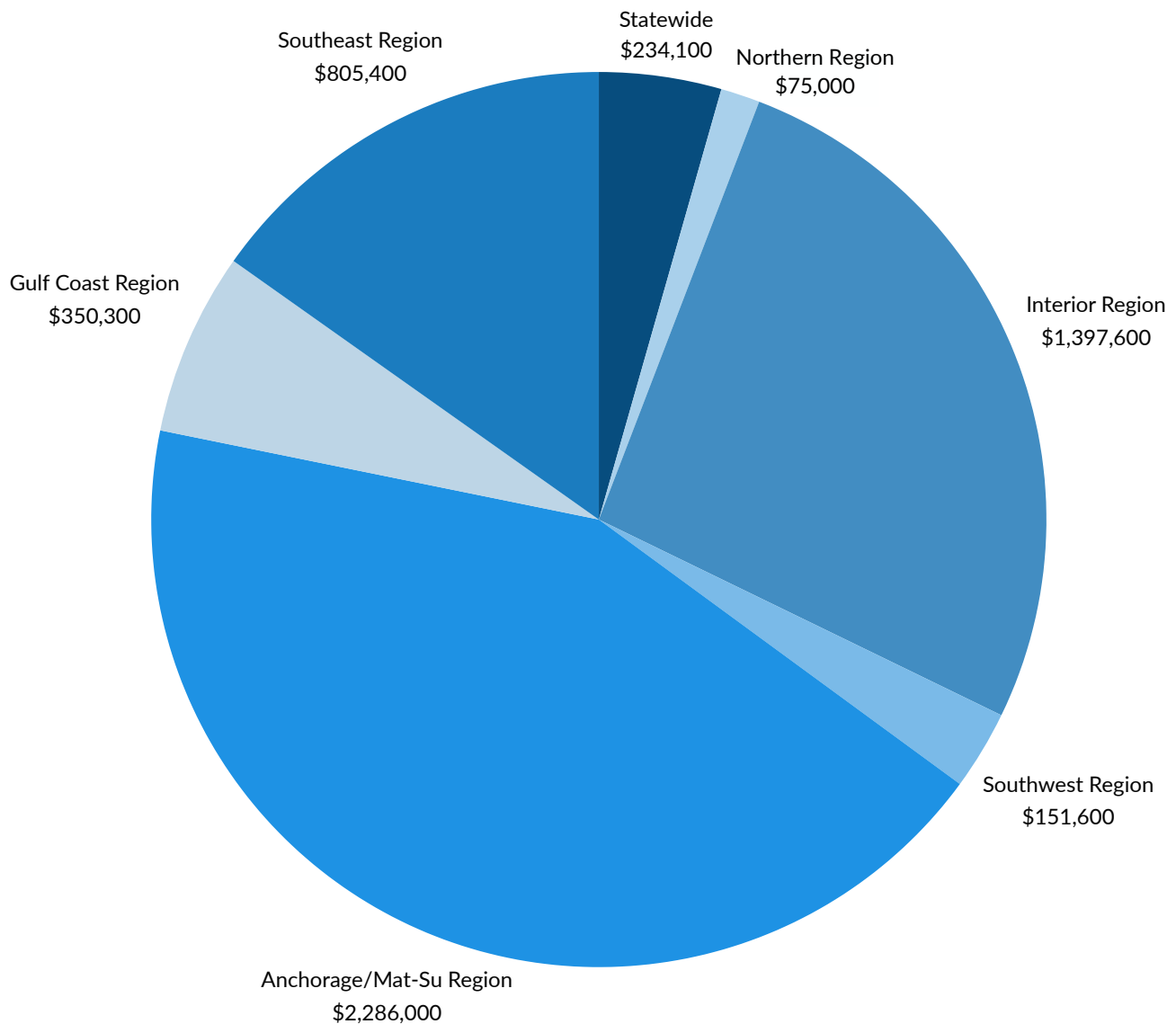


High-Demand Industries Supported by UA TVEP in FY23



In addition to these totals, Fairbanks Pipeline Training Center (FPTC) received \$867,300 in pass-through funding to support construction, oil, and gas.

Economic Regions Supported by UA TVEP in FY23



In addition to these totals, Fairbanks Pipeline Training Center (FPTC) received \$867,300 in pass-through funding to support construction, oil, and gas.

UA Graduate Outcomes

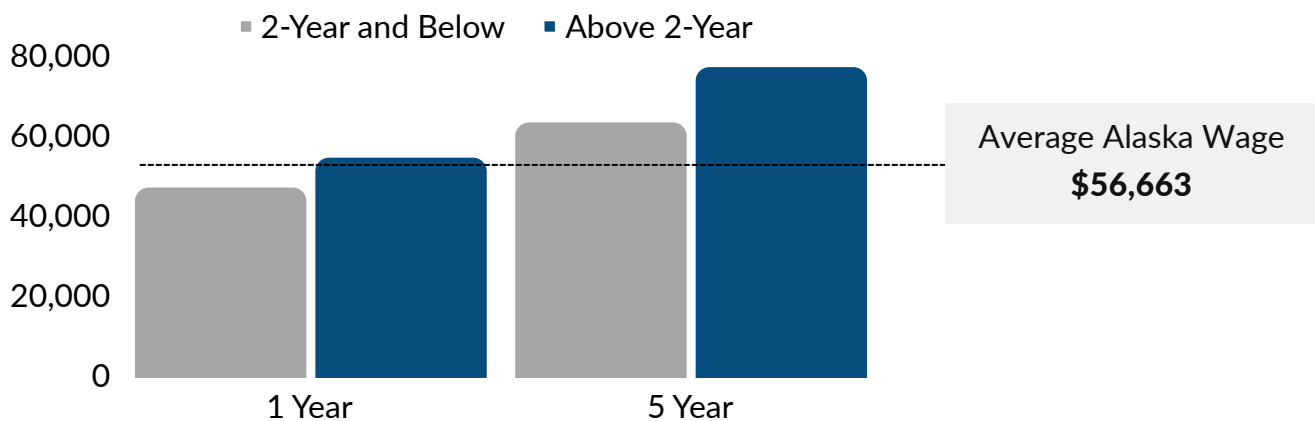
Since 2011, 26,948 students have graduated from programs relevant to Alaska's high-demand industries and produced the following outcomes:

Degree Type	Graduates	Employed in Alaska within 1 Year	Average First-Year Wage	Average Fifth-Year Wage
Certificate and Associate	10,794	80.8%	\$47,504	\$63,754
Bachelor and Above	16,154	74.3%	\$54,959	\$77,554



For comparison, residency is 79.8% for all Alaska workers.

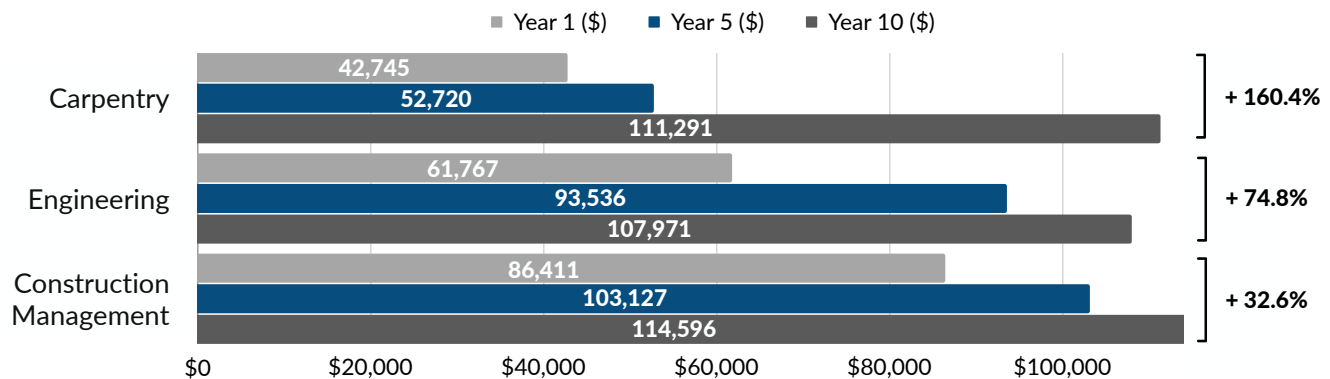
UA Graduates' Average Wages



Construction

Skilled construction workers are critical to building and maintaining Alaska's roads, ports, bridges, and other infrastructure. Growth for construction jobs almost always signals growth for the Alaska economy, and billions of investment from the Infrastructure Investment and Jobs Act is significantly increasing the construction workforce needs. UA provides 46 programs important to Alaska's construction industry. Graduates work directly in construction as well as in closely related industries such as transportation, and state and local government. Below are graduate employment and wage outcomes, and highlights of FY23 TVEP investments.

Wage Growth of High-Demand Jobs



Highlights

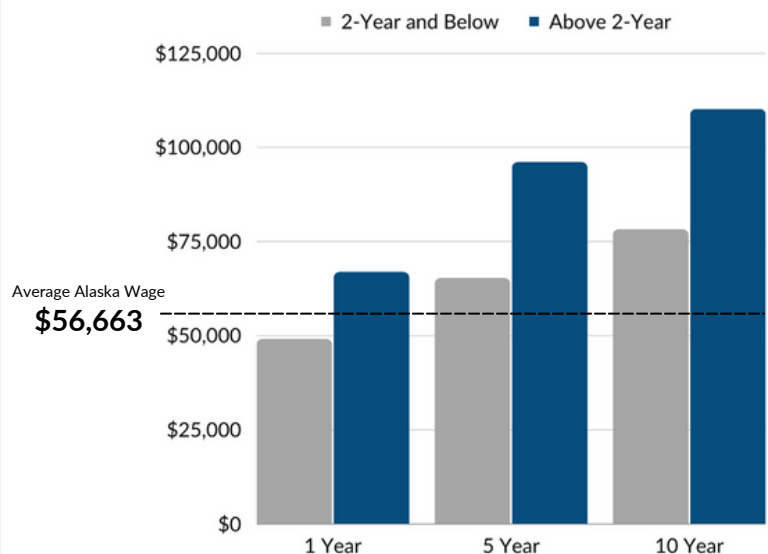
\$570,800*

of TVEP FY23 funding invested in
UA and Fairbanks Pipeline Training Center (FPTC)
construction programs

- UAF Community and Technical College grew their welding program by adding a faculty, updating curriculum that resulted American Welding Society accreditation, and updating equipment to meet safety and industry standards.
- UAS Juneau Technical Center continued to partner locally to provide high school and college students hands-on construction training and NCCER industry recognized credentials while building a house to support the community.
- FPTC delivered an Introduction to Trades program that placed 10 recent high school graduates into apprenticeships and high-paying jobs.

*TVEP is one of several funding sources that supports UA construction programs

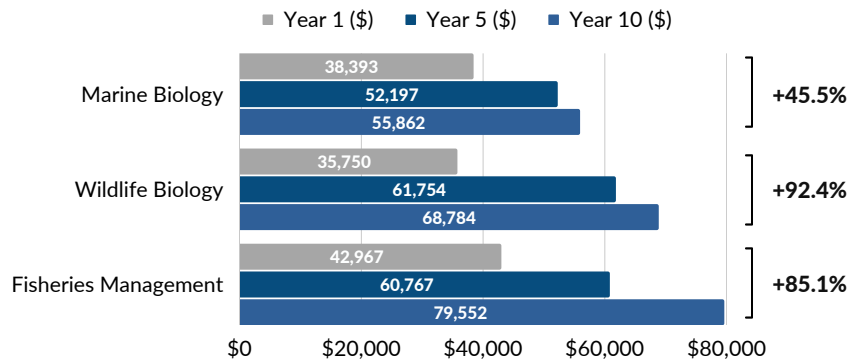
Construction Graduates' Average Wage



Fisheries, Seafood & Mariculture

Alaska's fisheries are a major economic force in the state, and University of Alaska programs focus on everything from fisheries management to marine biology and oceanography to seafood harvesting and processing, and the emerging industry of mariculture. UA has identified 19 programs whose graduates are important to fisheries and marine science in Alaska, and in addition has many non-credit offerings to support seafood harvesting, processing, and mariculture. Below are graduate employment and wage outcomes, and highlights of FY23 TVEP investments.

Wage Growth of High-Demand Jobs



Employment data provided by the Alaska Department of Labor and Workforce Development's Research and Analysis Section

Highlights

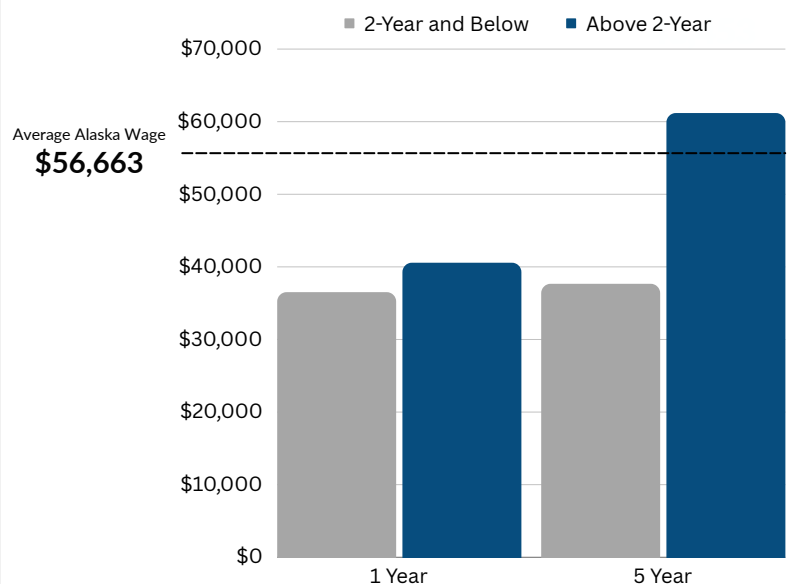
\$585,600*

of TVEP FY23 funding invested in
UA fisheries, seafood, and mariculture programs

- UAF Alaska Sea Grant (ASG) trained more than 90 seafood processors in their Alaska Seafood Processing Leadership Institute. More than 10 were promoted to managers and the majority to assistant plant managers or lead quality control assurance departments.
- UAF ASG partnered with the Alaska Research Consortium and industry to develop an Ammonia Refrigeration training program and career awareness videos to expand awareness of high-demand seafood processing employment opportunities.
- UAS Sitka campus expanded its mariculture program, including more hands-on farming opportunities and new curriculum to meet the growing local and regional mariculture workforce needs.

*TVEP is one of several funding sources that supports UA fisheries, seafood, and mariculture programs

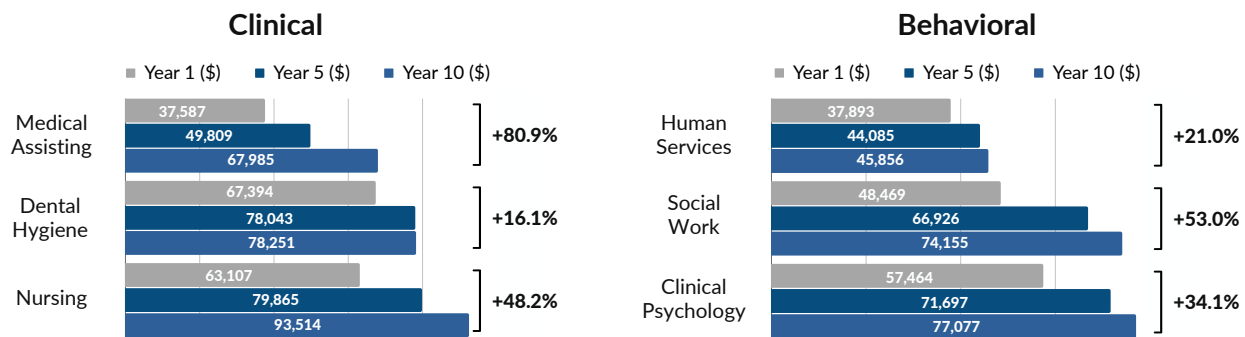
Fisheries, Seafood & Mariculture Graduates' Average Wage



Healthcare

No industry has grown as much as healthcare over the last decade and it is forecasted to continue for at least the next decade. The University of Alaska has focused on meeting that strong demand as is evidenced by the strategic investments. Since 2011, more than 6,300 graduates from clinical and behavioral health programs were working in Alaska within a year after graduation, and 4,500 of them were working directly for healthcare employers. UA provides 60 clinical and behavioral programs important to Alaska's healthcare industry. Below are graduate employment and wage outcomes, and highlights of FY23 TVEP investments.

Wage Growth of High-Demand Jobs



Employment data provided by the Alaska Department of Labor and Workforce Development's Research and Analysis Section

Highlights

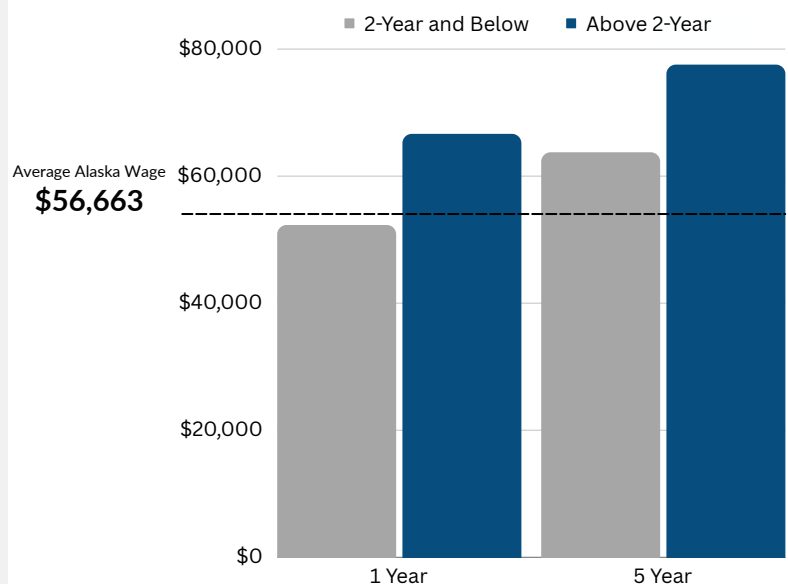
\$1,969,000*

of TVEP FY23 funding invested in UA healthcare programs

- To address the growing needs for nurses statewide, UAA College of Health (COH) strengthened outreach to rural training sites to support recruitment and retention of more than 200 nursing students.
- UAA COH welcomed 120 Anchorage School District juniors and seniors to participate in career awareness-building experiences for behavioral health and human services, including experiential learning with the Arc of Anchorage to gain employability skills for employment as paraprofessionals in human services.
- UAA and UAF Paramedicine programs expanded hands-on and online learning by upgrading simulation lab equipment and providing a dedicated skills instructor to help students prepare for licensure.

*TVEP is one of several funding sources that supports UA healthcare programs

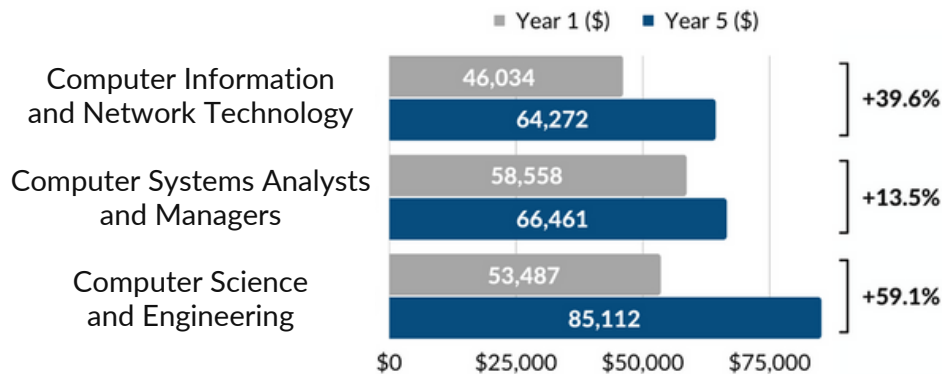
Healthcare Graduates' Average Wage



Information Technology

Graduates from IT programs find work in a range of private sector industries as well as in the public sector. About 30 percent of graduates from 14 UA programs found work in state or local government and another 26 percent in either companies categorized as Professional, Scientific, and Technical Services or Information Technology. Below are graduate employment and wage outcomes, and highlights of FY23 TVEP investments.

Wage Growth of High-Demand Jobs



Employment data provided by the Alaska Department of Labor and Workforce Development's Research and Analysis Section

Highlights

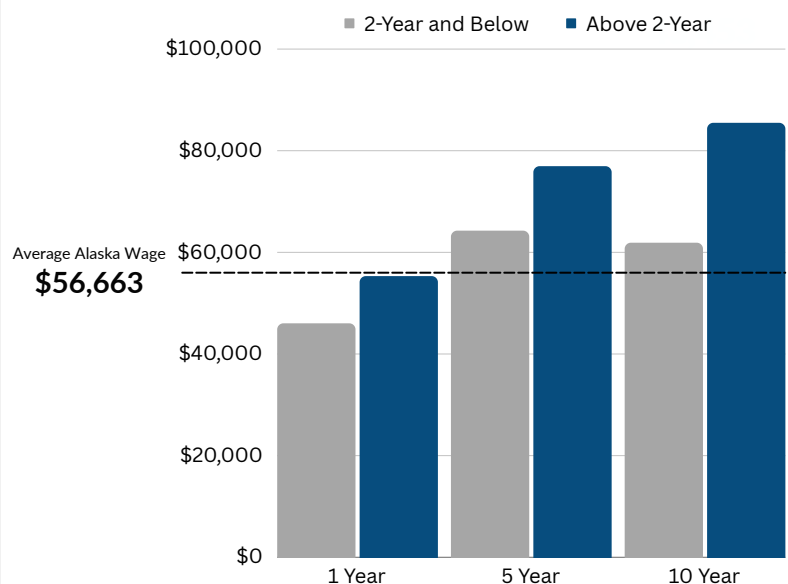
\$248,700*

of TVEP FY23 funding invested in UA information technology programs

- UAA Mat-Su enhanced their Summer Robotics camp with a new robotics and animatronics building display, increasing attendance of STEM Day at UAA to more than 1,500 people.
- UAA Anchorage and Mat-Su upgraded their virtual lab server, allowing 71 students more than 543 hours of hands-on experience with hardware and virtual operating systems and environments.

*TVEP is one of several funding sources that supports UA information technology programs

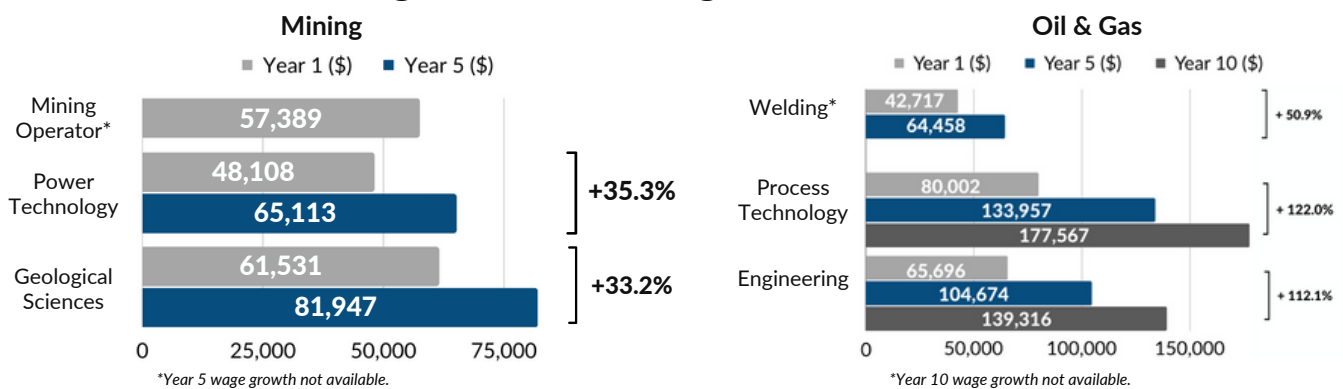
Information Technology Graduates' Average Wage



Mining, Oil, & Gas

Alaska's six large mines are already an important part of the state's economy, and the demand for the minerals and metals mined in Alaska is expected to grow. Factors include the ongoing transition to electric vehicles and concerns about international supply chains. UA's mining programs are specifically targeted to industry's needs and provide training critical to mining and other industries, such as oil and gas. The oil and gas industry has been a primary driver of the Alaska economy for decades. Wages are high and the education required for many of these jobs are also valuable to several other industries. Even prior to the worker shortage created partly by the pandemic and partly by demographics, engineers, welders, and process technicians were in high demand. Below are graduate employment and wage outcomes, and highlights of FY23 TVEP investments.

Wage Growth of High-Demand Jobs



Employment data provided by the Alaska Department of Labor and Workforce Development's Research and Analysis Section

Highlights

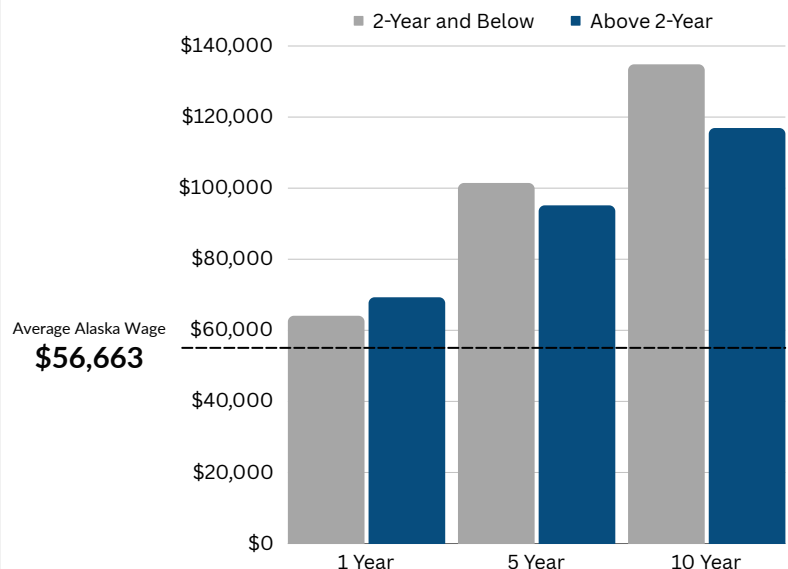
\$593,000*

of TVEP FY23 funding invested in UA and Fairbanks Pipeline and Training Center mining, oil, and gas programs

- UAA Kenai Peninsula College converted the Industrial Process Instrumentation Program to online, increasing accessibility for remote learning.
- Helping to meet demand with the development of the Manh Choh project outside of Tok, UAF Mining and Petroleum Training Service provided surface and underground mine training, producing 10 surface miners.
- Fairbanks Pipeline Training Center delivered an Introduction to Trades program, placing 10 high-school graduates into apprenticeships and high-paying jobs.

*TVEP is one of several funding sources that supports UA mining, oil, and gas programs

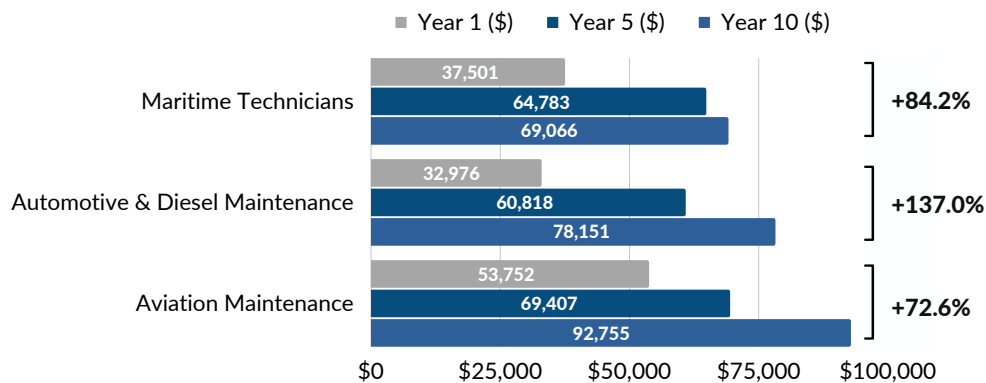
Mining, Oil, and Gas Graduates' Average Wage



Transportation

With more than 570,000 square miles of land – 16 percent of the U.S. total – and nearly 75,000 square miles of water, the transportation sector plays an outsized role in Alaska's economy. UA has 24 programs to train workers critical to the state's air, land, and water transportation infrastructure. Programs include training for pilots, air traffic controllers, heavy equipment operators, marine transport workers, and global supply chain managers, among others. Below are graduate employment and wage outcomes, and highlights of FY23 TVEP investments.

Wage Growth of High-Demand Jobs



Employment data provided by the Alaska Department of Labor and Workforce Development's Research and Analysis Section

Highlights

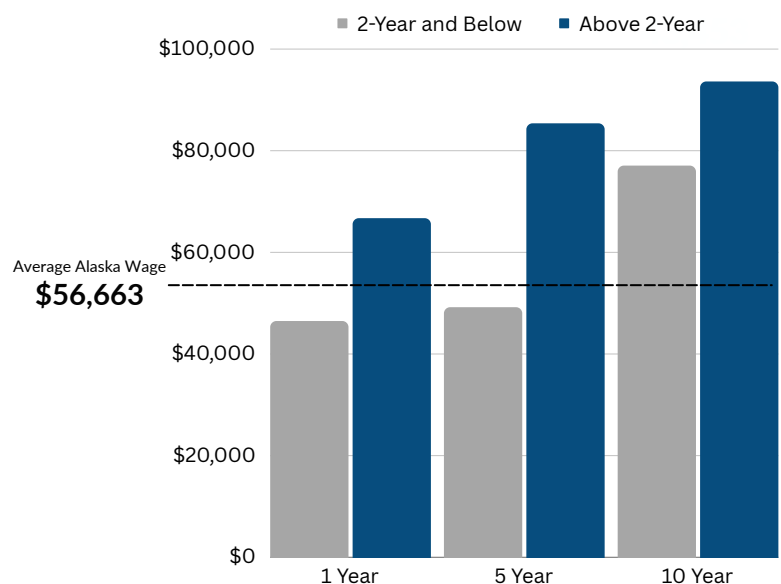
\$1,053,200*

of TVEP FY23 funding invested in UA transportation programs

- UAA Prince William Sound College expanded capacity to train 38 students, 42% were high school dual enrollment students, with high-demand maritime skills for their coastal community.
- UAA Aviation Maintenance Technology expanded courses to remote communities, combining training and work-based experience to advance currently-employed individuals to obtain FAA Mechanic certification.
- UAF Automotive Technology acquired new vehicles used to train students in diagnosis and repair, providing students with practical, hands-on mechanic experience.
- UAS Ketchikan Marine Transportation program continued to provide critical training to more than 200 mariners employed by the Alaska Marine Highway System, Inter-Island Ferry Authority, tug and barge companies, NOAA, US Coast Guard, and visitor and fishing partners.

*TVEP is one of several funding sources that supports UA transportation programs

Transportation Graduates' Average Wage






UNIVERSITY
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Many Traditions One Alaska

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