

ALASKA WORKFORCE INVESTMENT BOARD
Alaska Transportation Industry
Workforce Development Plan
Final Draft 8-15-06

Alaska is an expansive state, with vast distances separating communities and between our natural resources and their markets. The transportation infrastructure upon which our economy depends – and the jobs it supports – has evolved dramatically Alaska’s transportation system is a complex network that touches on every aspect of our economy and lives, supporting tens of thousands of jobs and the families who rely on them. It is imperative that we move forward by expanding and maintaining that multi-modal network.

Source: Governor Frank H. Murkowski

Alaska’s size, geography, weather and isolation from the rest of the nation all contribute to its unique transportation system. Most transportation operators in Alaska operate in close collaboration with one another and the lines between inter-modal transportation such as trucking, air and water-borne freight are often blurred. What would involve a single delivery vehicle in most of the nation often requires a truck, ship, airplane and four-wheeler in Alaska. For purposes of developing this plan the Transportation Subcommittee simplistically broke its focus into sea, land and air.

There are nearly 19,000 wage and salary employees in Alaska’s private sector transportation and warehousing industry. Over the last decade this industry has experienced a 20 percent growth rate, three percent more than the 17 percent overall employment growth in all industries. The Research & Analysis Section of the Alaska Department of Labor and Workforce Development is projecting transportation industry employment to exceed 25,000 by 2012.

ALASKA MARITIME

No other state in the continental U.S. is more dependent on the maritime industry for the welfare of its population than Alaska. Maritime employment includes not only mariners on ships and commercial fisheries, but barge operators and tanker men, shipyard employees, and operators of tugboats, ferries, water taxis, lighterage and even hovercraft along the Kuskokwim River.

In 2003 there were about 750 jobs in Alaska’s water transportation industry plus an additional 890 persons employed by the Alaska Marine Highway System. Yet this workforce represents only a fraction of the identified maritime jobs required to serve Alaska. Many Alaska maritime jobs are filled by non-Alaskans. Additionally, more than 30 percent of the workers in many of these occupations are over the age of 45 and could retire within a decade.

ALASKA LAND

Although connected to the rest of the nation by the Alaska Highway, Alaska does not have a vast network of interstate highways connecting every community. Alaska ranks 47th in the nation in terms of highway miles. Whereas there is one mile of road per square mile in the continental United States, Alaska has a mile of road for every 42 square miles of land.

Despite the relative lack of interstate highways, trucking represents the third largest segment of the state's transportation workforce in the wage and salary sector, running 11% above the state's monthly average for all industries. On an annual monthly average there are about 2,800 trucking jobs in Alaska. Projected ten-year growth for heavy and tractor-trailer truck drivers, at 31.5 percent, is more than double the all-occupation average. This growth, coupled with a 12.2 percent non-resident worker rate and an aging worker population (42.8 percent of its workforce is 45 years of age or older), indicates a tremendous potential shortfall of land transportation workers to fulfill impending needs.

ALASKA AIR

Air transport is, by far, the largest sector of the transportation industry in Alaska, supported by more than 1,100 airports, seaplane bases and aircraft landing areas and more than 3,000 airstrips across the state. The Ted Stevens International Airport is five times larger than airports in cities of similar size elsewhere in the United States, providing one out of every nine wage and salary jobs in Anchorage. More than 8,700 Alaskans hold pilot licenses and the "average" Alaskan is apt to fly nine times a year.

The U.S. Postal Service is a key player with nearly all Alaska's mail finding its way onto an airplane and "by-pass mail", a unique subsidized program, used as a means to deliver goods to rural Alaska at the lowest rates. Furthermore, international cargo and tourism contribute significantly to this key Alaska industry sector. Although growth has been lackluster during the past six years due to new international cargo regulations passed in 2003 and the introduction of some low-cost carriers, growth is expected to be revitalized as Alaska air transport surmounts the impact of September 11, a national recession, a couple of soft tourism seasons and high fuel prices.

In aviation, there are few training sites around the country that specialize in training pilots and mechanics. For the most part, they are self-funded through tuition paid by their students. The University of Alaska, Anchorage has such a program and Embry Riddle, which is probably the most well known, has a small branch facility in Anchorage as well. While UAA has made a significant investment in flight training, the cost remains somewhat prohibitive for most potential students. Students may do their ground training in Alaska affordably, but can actually travel to Florida, pay room and board and undergo flight training there for less than the cost to fly with tuition at UAA. Flight training is a fairly long and, typically, very expensive process in order to merely

obtain a private pilot's license. Instrument and commercial ratings require substantially greater investments. Public funding to support aviation training for Alaskans has the potential to be even more meaningful than training investments in other sectors. This would be particularly significant for Alaska Natives, who may not have access to this kind of long-term training anywhere close to their home.

(Source of Data and Projections: *Alaska Economic Trends* January 2005)

OCCUPATIONAL PRIORITIES

The Transportation Subcommittee of the Alaska Workforce Investment Board's (AWIB) Workforce Readiness Committee, in conjunction with the Research and Analysis Section (R&A) of the Alaska Department of Labor & Workforce Development (DOLWD), combined data collected and analyzed by R&A with the expertise of transportation industry members to prioritize Alaska's current transportation industry workforce needs.

Priority Ranked Occupational Listings

TRANSPORTATION (combined)

1. Airline Pilots, Co-Pilots and Flight Engineers*
2. Commercial Pilots*
3. Truck Drivers, Light or Delivery Service
4. Aircraft Mechanics & Service Technicians
5. Captains, Mates and Pilots of Water Vessels
6. Laborers & Freight, Stock, and Material Movers, Hand
7. Transportation Storage and Distribution Managers
8. Bus Drivers, Transit and Inter-city
9. Bus and Truck Mechanics and Diesel Engine Specialist
10. Sailors and Marine Oilers
11. First Line Supervisors/Manager of Transportation and Material Moving
Machine and Vehicle Operators
12. Reservation and Transportation Ticket Agents and Travel Clerks
13. First line supervisors/Managers of Helpers/Laborers and Material Movers
14. Taxi Drivers and Chauffeurs
15. Cleaners of Vehicles and Equipment
16. Cargo and Freight Agents
17. Ship Engineers
18. Flight Attendants
19. Airfield Operations Specialist

AIR

1. Airline Pilots, Co-Pilots and Flight Engineers*
2. Commercial Pilots*

3. Aircraft Mechanics & Service Technicians
4. Reservation and Transportation Ticket Agents and Travel Clerks
5. Cargo and Freight Agents
6. Flight Attendants
7. Airfield Operations Specialist

* Although the subcommittee recognizes the priority of these occupations in terms of workforce needs and compensation, training funding for these occupations is not provided through the publicly workforce investment system due to high training costs. The AWIB recommends that the One-Stop operator take measures to help coordinate information and resources for those job seekers interested in becoming pilots and flight engineers.

LAND

1. Drivers
 - Truck Drivers, Heavy & Tractor Trailer
 - Truck Drivers, Light or Delivery Service
2. Bus and Truck Mechanics and Diesel Engine Specialists
3. Bus Drivers, Transit and Inter-city
4. Laborers & Freight, Stock, and Material Movers, Hand
5. Transportation Storage and Distribution Managers
6. First Line Supervisors/Managers of Transportation and Material Moving Machine and Vehicle Operators
7. First Line Supervisors/Managers of Helpers/Laborers and Material Movers, Hand
8. Taxi Drivers and Chauffeurs
9. Cleaners of Vehicles and Equipment
10. Cargo and Freight Agents

SEA

1. Captains, Mates and Pilots of Water Vessels
2. Sailors and Marine Oilers
3. Ship Engineers

Building the Transportation Workforce:

- ▶ ***Vision*** – Alaska has a highly skilled and competitive resident transportation workforce that meets the needs of the industry employers.
- ▶ ***Goal*** – Maximize the number of Alaskans working in transportation to meet industry needs.
- ▶ ***Process – The Plan will encompass four objectives which are included in each desired outcome:***
 1. Increase the access to information, support services, training and employment through effective outreach and marketing of transportation related occupations and careers.
 2. Provide quality education and training that provides Alaskans with the skills necessary to competitively secure employment in transportation related occupations.
 3. Obtain employment for all who successfully complete training and demonstrate that they have the skills necessary to be competitive in Alaska’s labor force.
 4. Insure that Alaskans who choose to enter the transportation workforce have the support necessary to complete training and stay in the workforce.
- ▶ ***Desired Outcomes –***
 1. Increase the number of Alaska **students** who **choose transportation** and enter career training
 - A. Compile and develop career education materials and curriculums.
 - B. Disseminate to counselors, teachers, administrators, parents and students throughout the state.
 - C. Provide outreach activities through job fairs, classroom presentations, Career Technical Student Organizations, job shadowing, etc.
 - D. Articulate agreements to connect secondary and postsecondary training opportunities.
 - E. Provide innovative outreach activities to potential labor pool including incumbent workers, Alaska Native and rural populations, retirees, etc.
 2. Increase the **number** of Alaskans **trained** for transportation employment in proportion with industry demand.
 - A. Align existing programs with academic and industry standards for transportation.
 - B. Provide adult basic education to all entry trainees when required.
 - C. Increase number of students enrolled and completing apprenticeship training programs.

- D. Enhance delivery methods to provide greater accessibility of training utilizing rural training centers, distance learning, web-based programs, fast-track training, etc.
 - E. Train and ensure availability of instructors in adequate numbers to provide needed training.
3. Increase the **number** of Alaska residents **employed** in the transportation industry.
- A. Work with industry partners to project workforce needs.
 - B. Work with trainers to schedule training to align with industry need in terms of timelines, number and skill sets.
 - C. Work with industry partners, trainers and students to connect training program completers to job opportunities (e.g. internships, mentorships, apprenticeships).
4. Increase **capacity** of transportation training providers **to supply training** and develop workers through increased funding, industry support and policy support.
- A. Fund career education, outreach and recruitment strategies that target the trainee, trainers and industry.
 - B. Fund delivery methods that enhance accessibility for more Alaskans.
 - C. Fund rural training centers when such investment demonstrates a significant return on investment.
 - D. Fund instructor-training programs to ensure a sufficient number of instructors to meet training demand.
 - E. Partner with industry, training providers, unions, targeted workforce and DOLWD to carry out this plan.
 - F. Promote policies that support training of the transportation workforce.
 - G. Create an incentive based process for transportation employers who conduct outreach.