

Alaska Department of Labor and Workforce Development

Gas Pipeline Workforce Development Strategic Plan



***ALASKA DEPARTMENT OF LABOR
& WORKFORCE DEVELOPMENT***

DRAFT

**Click Bishop, Commissioner
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Goal:

Ensure Alaskans are considered first for pipeline jobs today and in the future.

Challenges to Developing a Workforce for the Gas Pipeline

Current construction worker shortages and the potential for doubling the energy industry workforce within the decade to develop mining and energy resource extraction projects require the state to engage a comprehensive approach for meeting the workforce challenges.

Construction Workforce Highlights

- Alaska construction workforce exceeds 30,000. The average monthly employment is approximately 18,500 with an annual peak of 23,000. Total workers employed at some time during the year in the construction industry are approximately 38,000.
- Just over 20% of construction workers were nonresidents in 2005, as reported in *Nonresidents Working in Alaska-2005* and as measured by PFD eligibility.
- Total construction industry wages exceeded \$1 billion in 2005.
- Nonresidents earned nearly \$150 million in construction wages in 2005.
- 1,000 new construction workers needed each year to address growth and replace retiring workers
- The annual average wage for construction workers was \$55,764 in 2005.
- Skills Gap; Limited capacity to expand training opportunities

Alaska Demographic Highlights/Challenges

- Approximately 12,000 Alaskans turn 18 each year.
- Only 62% of Alaskan high school graduates remain in Alaska for training or employment each year.
- Only 28% of Alaskans age 18 to 24 attend any type of education after high school. Lowest % of any state.
- 2000 U.S. Census estimates that over 57,000 Alaskans age 18 and older do not have a high school diploma.
- Less than 60% of Alaska's 9th graders graduate high school after 4 years. Many drop out altogether. Only 7 states perform worse.
- Up to 48,000 new jobs will be created in Alaska by 2014, bringing the total to 349,000.
- Replace baby boomers exiting the workforce.

- Up to 26,000 Alaskans are officially unemployed in any month (based on UI claims).
- The number and percentage of nonresidents working in Alaska in 2005 from 18.4% in 2004 to 19.1% in 2005. The number of resident wage and salary workers grew by 2,317, while 3,899 nonresident workers were added in 2005.

Oil & Gas Industry Workforce Highlights

- Industry employs over 11,000 workers.
- From December 2005 to December 2006, the number of Oil & Gas Industry workers grew by 1,500, a 15% increase.
- Nearly 30% of oil and oilfield service workers were nonresidents in 2005.
- The industry's average **quarterly** wage is \$34,491
- Aging Workforce
- Skills Gap; Limited capacity to expand training opportunities
- Timing-Matching skills attainment with demand for skilled workers
- Commitment for gas pipeline legacy jobs

When it comes to the Gas Pipeline, the challenge to predict workforce size is daunting.

- The estimates of peak workforce vary widely from 4,300 to over 8,000.
- Some estimates indicate winter only work, while others foresee year-round construction.
- The construction start date is wide open.

At the same time, there are significant pipeline related challenges on the immediate horizon to replace aging oil pipeline infrastructure.

Bottom Line

- These are high paying jobs.
- Alaska workers are already underutilized.
- The State must take aggressive steps now to prepare for today's and future needs.

Objectives to Facilitate Opportunities for Alaskans:

By focusing the efforts of the department on four key objectives the state can ensure that any Alaskan who wants to work on building the pipeline will have the skills, knowledge and abilities to be a viable candidate for employment.

The five objectives include:

1. Prepare Alaska's youth for promising careers in the oil and gas industry.
2. Target workforce development investments toward public/private partnerships for worker skills development in construction and energy related occupations.
3. Integrate vocational and technical education with skill training providing paths to construction and energy related jobs.
4. Increase apprenticeship training and worker skills for construction and energy related jobs.
5. Make the department's one-stop career system, including the department's web-based labor exchange system, the source for employer/worker connections.

Strategies:

Within each objective the state will pursue several different strategies all focused on ensuring the state achieves the goal of Alaskans working on construction and energy industry jobs today and in the future, and the legacy jobs associated with an Alaskan gasline.

Strategies to achieve Objective 1, Alaska Youth Preparation

- Target investments to improve work readiness skills.
 - WorkKeys
- Improve vocational technical opportunities at the secondary level.
 - Construction Academies
- Provide career guidance to all high school age students.
 - High school career guides

Strategies to achieve Objective 2, Public/Private Partnerships

- Invest workforce development resources in training for jobs in pipeline construction, maritime, transportation and associated occupations, including technical math and skill instructor training.
- Invest in a public information campaign that increases public awareness of job opportunities, Alaska's labor market, including youth awareness of career opportunities.
- Invest in training equipment, facilities, and instruction technology to expand training capacity.
- Invest in web based e-commerce information system for internal and external customer information and a research platform for project evaluation, improvement, and sustainability.
- Form partnerships with energy industry companies to enhance employment of Alaskans.

Strategies to achieve Objective 3, Integration Voc/Tec Education, Middle and Secondary Education Pathways

- Assure training of workers in construction and oil & gas industries.
- Align prevocational training with industry apprenticeship courses to streamline access to apprenticeship and career training.
- Expand industry career activities for high school age youth.
- Use established competency-based education skills assessment instruments to provide workers credit for skills and knowledge already obtained.
- Support further development of energy industry education compacts

Strategies to achieve Objective 4 Increase Apprenticeship Training Opportunities for Alaskans.

- Establish a single point of contact at job centers for apprenticeship connection.
- Promote apprenticeship and on-the-job training with employers and provide services and incentives for employers to hire apprentices.
- Encourage industry lead apprenticeship utilization standards.
- Project Labor Agreement to
 - Expedite Construction
 - Maximize Alaska Resident Hire
 - Use Local Alaska Hiring Halls
 - Use Alaska Job Center Network
 - Set Apprentice Utilization Threshold
 - Set Alaska Native Utilization Threshold
 - See Appendix 1 for further details.

Strategies to achieve Objective 5 Enhance the State's Job Center System.

- Streamline intake and improve core and intensive services at Alaska job centers.
- Streamline individual training account resources for qualified training providers.
- Create an industry-centered model to reach out to and serve targeted populations.
- Continually evaluate the effectiveness of services and programs.
- Market and deliver industry-centered job center services to high growth employers.

Actions to Date:

- Two-year plan required by the U.S. Dept. of Labor places priority on high growth energy opportunities.
- Youth Engagement in Workforce Development
 - i. Alaska Youth First program was initiated with a high growth industry training grant from the U.S. Department of Labor. The program was implemented to engage secondary school age youth in career planning and preparation, focusing on vocational careers. The program has been sustained and expended with substantial state general fund investments.
- Construction Summit report approved by the Alaska Workforce Investment Board 2006 offers strategies to improve delivery of a trained construction workforce.
 - i. Administrative Order to encourage apprenticeship utilization on public construction projects.
 - ii. Improve construction industry workforce research and information.
 - iii. Increase investment in construction industry training.
- Memoranda of Understanding to Improve Access to Training
 - i. Alaska Marine Exchange/Polar Tanker/AVTEC Training Program.
 - ii. Alaska Works Partnership/Industry Pipeliner Training.
 - iii. Numerous Others--delineate
- Vocational Technical Education Providers group ensures coordination of training programs.
 - i. Articulation agreements between AVTEC and University of Alaska.
 - ii. Referral of AVTEC graduates to union-sponsored apprenticeship programs.
- Priority given to training programs connected with high growth energy.
 - i. State Training and Employment Program Grants
 - ii. Denali Commission and Youth Grants
 - iii. Two and Ten Year Industry and Occupational Forecasts completed and corresponding occupational prioritization for training.

Resources awarded to facilitate workforce development

- \$20 million authorized, but yet to be appropriated, by federal government subject to specific provisions as identified in the Energy Bill. This would include \$3 million toward an energy industry related training facility in Fairbanks.
- \$7.5 million awarded to the department in FY 06 from the U.S. Department of Labor for pipeliner training and for high growth energy initiative.

- State Training and Employment Program offers training for construction and energy related workforce development. Total investment of approximately \$6 million per year.
- \$7.2 million appropriated from the State General Fund in FY 06, FY 07 and FY 08 for grants to the Alaska Works Partnership for pipeliner training facility and equipment.
- \$850.0 GF for Alaska Youth First Program in FY 07; \$2.3 million GF invested in FY 08 to expand program and services.
- \$1 million GF invested in the Anchorage Construction Academy in FY 07; \$3.5 million GF invested in FY 08 to continue Anchorage program and expand to Fairbanks, Kenai and Mat-su Regions.
- Ongoing investments in Adult, Youth training are necessary through DOLWD and the University of Alaska. Total expected state investment is \$70 million, with three trigger points: (1) signature by the Governor of the Alaska Gas Incentive Act; (2) final engineering and submission of Project Plan to the Federal Energy Regulatory Commission; and (3) Project Sanction. **See Appendix II Chart.**

Outstanding Activities and Objectives:

- **On going dialogue with energy industry companies and representatives around meeting industry workforce needs with Alaskans.**
- **Commitment from industry to employ Alaskans by increasing apprenticeship opportunities.**
- **Review and engagement of this plan by stakeholders: Alaska Workforce Investment Board; Industry groups; University of Alaska; and the Alaska Department of Education.**