

AGIA

ALASKA GASLINE INDUCEMENT ACT

TRAINING STRATEGIC PLAN

A CALL TO ACTION



State of Alaska
Department of Labor
and Workforce
Development

Governor
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January 2008

Updated and Reprinted,
August 2009



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Executive Summary

AGIA Training Strategic Planning Document: A Call to Action

The Need: Close the Alaskan Skills Gap

Alaska stands at a crossroad of vital need and compelling opportunity. The state is in its twentieth year of steady economic growth with 48,000 new jobs projected by 2014, however in some regions unemployment is among the highest in the nation, and is ranked fifth in the nation for teens not in school and not working. Vast supplies of oil, gas, and minerals make Alaska one of the most resource rich regions in the world, yet the state faces a workforce skills gaps in critical occupations where there are either a high number of non-residents, or a significant percent are over the age of 45.

The Promise: Put Alaskans To Work

Among the most promising economic drivers is the potential construction of an Alaska gas pipeline, but the state's workforce preparedness system, including public K-12 and post-secondary education, is not meeting current industry demand. Not to be repeated is the fact that when the Trans-Alaska Pipeline System was built 30 years ago, most jobs were filled by nonresidents; Alaska's workforce was simply not prepared. Governor Sarah Palin championed the passage of the Alaska Gasline Inducement Act (AGIA) in 2007. The AGIA statute's call to action is particularly timely as it is widely understood that Alaska's natural resources must be responsibly developed to the maximum benefit of all Alaskans.

The Strategy: AGIA Training To Enhance Existing Programs

The AGIA Training Strategic Planning Document is designed to enhance Alaska's existing training programs so Alaskans are afforded the opportunity to upgrade skills and acquire new ones in preparation for gasline jobs. The plan identifies four broad strategies to address the workforce needs of the existing labor skills gap and AGIA:

- 1) increase awareness of an access to career opportunities in natural resource development,
- 2) develop a comprehensive, integrated career and technical education system that aligns training institutions and coordinates program delivery,
- 3) increase opportunities for registered apprenticeship in skilled occupations and expand other structured training opportunities, and



- 4) increase opportunities for development of appropriate training programs for operations, technical, and management workers.

The Plan: Five Years, Three Phases

While this document remains subject to updates, the training plan outlines a five-year strategically phased approach for accomplishing its strategies.

- Phase one – establish industry skill standards for training and extend accreditation to regional training centers;
- Phase two - address the existing “skills gap” and will require significant new investments in public post secondary training programs with significant expansion of registered apprenticeship programs;
- Phase three - will require information on the number of jobs created by the gasline project and focus on training for those jobs.

The plan includes the Alaska Department of Labor and Workforce Development

Research and Analysis Section’s newly identified 113 AGIA related occupations. Future updates will feature more precise job projections and a skills inventory and outreach component to the Alaska Labor Exchange System (ALEXsys), supporting gasline employer recruitment and resident hire.

The Purpose: Anchored In Collaboration and Innovation

The plan’s overall purpose is to bring Alaska into a new era of collaboration and innovation among educators and training providers, combined with strategic investments in connected, regionally delivered and accredited programs to create world class training and educational systems for Alaska. The plan will guide the Alaska Workforce Investment Board in where and how to invest in training.

The Call For Action: Engage Stakeholders To Build Capacity

The call for action now is to engage educators, trainers, sponsors of registered apprenticeships, businesses and industries in committing to finance and execute the plan’s strategies. The results will transform Alaska’s workforce preparedness system, catalyze a spirit of innovation. This will ultimately create a new economy, beyond the boom and bust cycle, where new businesses and industries are encouraged by the state’s collective capacity and expertise to train a local workforce.

Draft AGIA

Training Strategic Planning Document January 2008

The Alaska Gasline Inducement Act of 2007 requires that “the Commissioner of Labor and Workforce Development shall develop a job training program that will provide training for Alaskans in gas pipeline project management, construction, operations, maintenance and other gas pipeline related positions” (AS 43.90.470).

To fulfill this charge, Commissioner Click Bishop sought advice from concerned and knowledgeable Alaskans in identifying strategies that would best prepare the state’s workforce for the demands of gas pipeline construction. A cross section of industry, labor, education and state government representatives have been involved in the planning effort.

Participants in the planning process began with an examination of the existing training environment. They quickly determined that although steps have been taken by both government and the private sector to address worker shortages and skill gaps, the system is not meeting current workforce development demands, much less the added demands of AGIA. Participants also realized there are other major natural resource development projects underway or in the planning stages—projects that demand many of the same skills needed for pipeline construction. The planning participants concluded that focusing solely on a gas pipeline would ignore these larger issues of capacity and competition for workers. They therefore adopted a broader goal for their efforts.

Goal: Deliver an Alaskan workforce prepared for careers in construction, operations, management and other occupations related to natural resource development, including a gasline.

When examining current capacity, participants identified these areas as needing particular attention:

- Making better use of current workforce development resources through greater cooperation and coordination
- Recognizing industry’s major contributions to worker training and leveraging these resources by expanding public/private partnerships
- Creating better connections between Alaskans and the career opportunities opened up by a gasline and other development projects



The plan presented on the following pages addresses these points. It consists of a set of recommended strategies that, if implemented, will position the state to “grow its own” workforce for AGIA and for other large projects. The suggested activities are not directed at specific jobs or occupations. They are intended to build a flexible system of workforce development that can anticipate and respond to a variety of demands and that will serve Alaskans well into the future.

Planning participants recognize that implementing the plan will call for significant additional investment by the State of Alaska. In order that this investment yields the greatest return, it must be directed towards high need, and cost effective proposals. The groups strongly recommend the Alaska Workforce Investment Board review and prioritize all requests for operational and capital training funds—a role well within the Board’s charge of overseeing and coordinating Alaska’s workforce development policies and programs. To fulfill this function effectively, the Board must be empowered and strengthened. This requires adequate budget and staffing, including a full-time AWIB position to oversee AGIA training plan implementation.

The planning groups have been guided by the Principles for Alaska’s Vocational and Technical Education and Training System found in *Alaska’s Future Workforce Strategic Policies and Investment Blueprint*. Participants reviewed and endorsed the good planning efforts that have already been accomplished—for example, the *Construction Workforce Development Plan* adopted by AWIB in 2006 and the *Vocational Education Comprehensive Plan for Alaska* developed by DOLWD in 2004—and have incorporated many of the recommendations from these plans.

Planning participants also reached consensus on the following points:

- Industry employers, trade associations, trade unions, apprenticeship sponsors, local, state and federal agencies and public and private educational institutions all have a role in workforce development
- Program planners and decision makers need accurate information on employment demand and supply
- Preparation of the future workforce must start early in the educational process.
- Public/private partnerships are essential
- Training needs to be based on industry standards
- State training dollars should be targeted at programs that meet industry needs and standards, incorporate proven strategies and techniques (“best practices”) and demonstrate measurable outcomes
- Training for the gas pipeline needs to emphasize long-term careers as well as short-term jobs

In addition to the development of a strategic plan, DOLWD has begun building the data foundation for the AGIA job training program. Working with industry partners, DOLWD staff identified those occupations needed in the construction of a natural gas pipeline. In 2006, over 16 percent of workers in these occupations were nonresidents and over 37 percent were over the age of 45 – statistics that point to both current and future skills gaps. Unless these skills gaps are addressed, both sides of the labor market will suffer. Alaska’s employers will have difficulty finding the types of workers needed and significant numbers of Alaskans will remain either unemployed or discouraged.

The plan is not complete; rather, it provides a framework for further action. It will be revisited and refined frequently as more detailed information about the gas pipeline and other major projects becomes available. Carrying out the identified strategies will require concentrated effort on the part of responsible parties—the State of Alaska, industry and private training providers. Through this cooperative effort, the planning groups believe that the state can achieve the following vision:

Alaskans are trained and ready for the gas pipeline and other natural resource development jobs and these jobs are made available to Alaskans.



Strategy 1.0

Increase awareness of and access to career opportunities in natural resource development

Industry and the state need to promote understanding among Alaskans regarding career opportunities opened up by the development of the state's natural resources. Furthermore, Alaskans need information on how to prepare themselves to access these opportunities.

This strategy can be implemented by:

- Conducting public awareness campaigns
- Developing a comprehensive, one-stop information system on training opportunities and job openings in Alaska

Funding:

- Industry
- State general fund



Strategic Element 1.1

Conduct public awareness campaign

Rationale

The development of Alaska's natural resources offers enormous career opportunities for state residents. However, even those most closely involved in workforce training do not have a complete understanding of the employment demands of the various large scale projects that are underway or in the planning stages. Parents, high school students and adult workers have much more limited information on which to base career planning and goals.

Action Steps

- Retain professional assistance in crafting a multi-faceted public awareness strategy phased to the development of the gas pipeline and other major resource development projects
- Develop communication strategies effective in recruiting rural, Alaska Native and minority residents into training and jobs
- Identify best practices to be highlighted in the campaign
- Develop consistent—branded—messages



Responsible Parties

- DOLWD/AWIB
- Business/industry partners

Resources

- Funding
 - ▶ State general fund
 - ▶ Industry
- People
 - AGIA Training Plan Coordinator

Evaluation

Public awareness/communications plan is in place and being implemented as phased.



Strategic Element 1.2

Develop a comprehensive, one-stop information system on job openings and training opportunities in Alaska

Rationale

Once Alaskans are made aware of the employment opportunities provided by natural resource development, they need to know how they can access these jobs. In addition, they will need access to training/retraining to become prepared for employment. At present, this information is scattered and not always current. A centralized clearinghouse of information that can be accessed on-line can provide a link between individuals and opportunities.

Action Steps

- Create an inventory of available training and job openings, emphasizing jobs related to natural resource development
- Disseminate the inventory through interactive electronic and print media
- Provide for updating and maintenance of the system
- Provide incentives for trainers and employers to participate in the inventory
- Increase support for packaging and disseminating regional employment data

Responsible Parties

- DOLWD/Employment Security Division
- Alaska Commission on Postsecondary Education (ACPE)



Resources

- Materials/systems
 - ▶ ALEXsys employment data base
 - ▶ AKCIS career information data base
- Funding
 - ▶ State and federal workforce development dollars
- People
 - ▶ AGIA Training Plan Coordinator

Evaluation

A centralized, electronic source of information on training and job opportunities is established and maintained.



Strategy 2.0

Develop a comprehensive, integrated Career and Technical Education system for Alaska that aligns training institutions and coordinates program delivery

Building a strong, flexible workforce to meet Alaska's resource development needs requires a healthy CTE system—one that prepares high school students for further training and work, providing opportunities for adults to maintain job skills or acquire new ones. At present, there is little state investment in career and technical education at the secondary level and only limited support at the postsecondary level.

In addition, there is no system in place to assure that CTE operating and capital dollars are being spent in the most effective manner to meet high priority needs. Better coordination among existing training institutions and closer alignment of program offerings are essential to increasing the state's capacity to grow its own labor force.

This strategy can be implemented by:

- Developing a state initiative for career pathways
- Establishing and implementing standards for Alaskan training programs
- Incorporating career counseling and planning in the K-12 system
- Creating an integrated system of out-of-school youth and adult training and education
- Coordinating program development and delivery among the existing training programs

Funding:

- TVEP and STEP dollars
- State General Fund
- WIA and other federal training programs
- Industry



Strategic Element 2.1

Develop a state initiative
for career pathways

Rationale

Alaskan students need a clear picture of the careers available to them and what preparation is needed for those chosen careers. Students also should have easy transitions from one educational level to another. Career pathways—which lay out the academic and technical instruction related to a particular career—can assist students in planning their education and in securing employment in their field of choice.

Action Steps

- Identify models for mapping career pathways
- Survey Alaskan school districts and the private sector
- Secure examples from national sources
- “Alaskanize” nationally developed career pathways, where necessary, to fit local conditions
- Utilize business/industry/education consortia to develop industry-specific pathways if no model exists
- Provide electronic and print resources and pathway templates to public and private training providers
- Require state-funded training programs to develop and implement career pathways, including articulation between one educational level and the next
- Encourage private postsecondary training institutions to develop and utilize career pathways
- Revitalize the Career and Technical Student Organizations (CTSOs), such as DECA, Junior Achievement, etc.
- Reestablish and fill the AWIB Secondary/Postsecondary Liaison position



Responsible Parties

- Alaska Department of Education and Early Development (secondary school career pathways)
- DOLWD (state-funded training centers)
- University of Alaska system
- Private training providers
- Business/industry consortia

Resources

- Models and materials:
 - ▶ National career pathways initiatives
 - ▶ Alaska developed career pathways
- Funding:
 - ▶ State general fund
 - ▶ Federal (Carl Perkins IV, WIA)
 - ▶ Industry

Evaluation

All publicly-funded (secondary and postsecondary) training programs will be part of a published career pathway that is available to students, parents and other interested parties.



Strategic Element 2.2

Incorporate career counseling and planning into the K-12 system

Rationale

Alaska's K-12 student population is its greatest pool of potential workers. Better information about career options in the state is a first step. However, students also need assistance in making realistic career choices and taking concrete steps to meet their career goals. Parents also play an important part in forming their children's aspirations and choices and need to be involved in career planning. Industry has information and resources that can help students make wise choices.

Action Steps

- Encourage school districts to utilize the Alaska Career Ready Certificate as an impetus for career planning for all students
- Create and disseminate a template for career plans, based on career pathways
- Provide awareness and training for counselors and teachers in career pathways and career plans
- Utilize industry consortia for career information, guidance materials and presentations
- Use district-to-district volunteers to assist school districts with planning
- Develop and disseminate models for involving parents in career awareness and planning
- Identify and disseminate strategies for using community resources in career exploration and planning



Responsible Parties

- DEED
- Local school districts
- DOLWD

Resources

- Materials and models
 - ▶ State and local school district career planning templates
 - ▶ DOLWD career guides and publications
 - ▶ Industry consortia-developed career information materials
- Funding
 - ▶ State general fund
- People
 - ▶ DEED Career and Technical Education Staff
 - ▶ DOLWD Career Counselors

Evaluation

All Alaskan high school graduates have a written career plan based on their selected career pathway.



Strategic Element 2.3

Establish and implement standards for Alaskan training programs

Rationale

All training should lead to employment by assuring successful completers demonstrate the technical skills and work attitudes required by industry. To meet the needs of industry and students, training programs must be consistent across the state. Developing and enforcing training standards can provide these assurances. Programs and processes that produce demonstrated student success and job placement need to be identified as “best practices” and adopted widely in training efforts.

Action Steps

- Identify and disseminate information about available industry standards
- Identify nationally-adopted standards, where available
- Use business/industry/education consortia to develop or “Alaskanize” standards if national models are not available or not sufficient for local conditions
- Inventory training programs to assess if they are based on recognized industry standards
- If current programs—either publicly or privately funded—do not meet standards, provide assistance for
 - ▶ Curriculum development
 - ▶ Professional development
 - ▶ Equipment/materials needed to meet standards
 - ▶ Expense of undergoing industry certification review
- Require all state-funded training to be based on industry standards, leading to appropriate industry certification for successful completers
- Require all state-funded training programs to adopt and implement an employability and soft skills assessment program
- Recognize training programs that meet or exceed standards



Responsible Parties

- DEED
- DOLWD/AWIB

Resources

- Models and materials
 - ▶ National standards developed by various industries
 - ▶ Existing employability and soft skills assessment programs (WorkKeys/WIN®, Youth Employability Skills, SCANS).

Funding:

- State General Fund
- Federal (Carl Perkins, WIA)
- Industry

Evaluation

All state-funded training programs meet appropriate industry standards and demonstrate inclusion of employability and soft skills.



Strategic Element 2.4

Coordinate program development
and delivery among existing training programs

Rationale

Alaska's limited training resources must be deployed in the most efficient and effective manner if the state's workforce development needs are to be met. Unnecessary duplication of programs, programs that are not adequately resourced, facilities that are underutilized or substandard, and competing administrative structures all dilute the ability of the current system to respond to demand.

Action Steps

- Create a network among existing state-supported regional training centers that will:
 - ▶ Provide technical assistance in meeting program standards
 - ▶ Serve as an umbrella for national accreditation of these centers
 - ▶ Rationalize program delivery among the centers
- Strengthen the statewide organization of career and technical training providers as a vehicle for coordination and communication
- Incentivize and recognize private providers in meeting state standards.
- Require requests for state operational and capital training dollars to be funneled through and prioritized by the Alaska Workforce Investment Board



Responsible Parties

- DOLWD/AWIB
- State-funded training centers
- Statewide career and technical training providers

Resources

- Funding
 - ▶ TVEP/STEP/state general fund
 - ▶ WIA, Denali Commission and other federal training programs
 - ▶ Industry

Evaluation

State training dollars are allocated in line with AWIB priorities. There is minimum duplication of training programs and where duplication exists, is based on demonstrated need.



Strategic Element 2.5

Maintain a robust support system for youth and adult vocational education

Rationale

Many youth and adults seeking to enter jobs in natural resource occupations need skill development before they can be successful. Data indicates that there is a considerable pool of workers who have some of the skills required for these occupations, but need foundational skills upgrades, and/or remediation in order to compete successfully for good jobs. Other adults may need additional educational services such as Adult Basic Education (ABE), General Educational Development (GED), English as a Second Language, and math and language training. Prospective workers may also require other types of supportive services while in training or apprenticeships. These services can be as small as a referral for child care services, to funding a complete physical exam, but are essential to keep the student in class and allow them to be successful.

Action Steps

- Increase support for ABE and ESL programs in all regions of the state
- Identify and widely disseminate information on Web-based instruction for skills upgrading in various occupations
- Increase individual electronic access to the Alaska Job Center Network (AJCN) and the Alaska Career Information System (AKCIS)
- Encourage the use of all available supportive services provided through workforce development grantees, social service organizations, and the One-stop Job Centers, particularly training and employment services

Responsible Parties

- DOLWD
- ABE/GED Grantees
- Job Center Network



Resources

- Marketing materials
- AKCIS and ALEXsys systems
- Funding (state and federal funds)
- Personnel (job center staff and partners; providers of ABE/GED; WIA and STEP grantees)

Evaluation

- Youth and adult workers have information about obtaining natural resource development jobs
- Reduce attrition in job training and apprenticeship programs



Strategy 3.0

Increase opportunities for registered apprenticeship in skilled occupations and expand other structured training opportunities

Registered Apprenticeship is a national training system that combines paid learning, on-the-job and related technical and theoretical instruction in a skilled occupation. The purpose of a Registered Apprenticeship program is to enable employers to develop and apply industry standards to training programs that can increase productivity and improve the quality and safety of the workforce. Apprenticeship programs are the primary vehicle for the considerable private sector investment in workforce development.

Certifications earned through Registered Apprenticeship programs are recognized nationwide as portable industry credentials. Registered Apprenticeship has been utilized successfully in Alaska for over 50 years, primarily in the construction industry.

There are other models of structured training such as certificate and degree programs that use internships, cooperatives and mentorships. Many college and career and technical education programs utilize these models in engineering, project management, and similar disciplines where on-the-job (OJT) practicums are required.

This strategy can be implemented by:

- Increasing job training through construction academies, career and tech- prep programs, and pre-apprenticeship programs for entry-level employment
- Increasing employment opportunities for apprenticeships on all construction and infrastructure projects in Alaska
- Developing training incentives for employers who utilize apprenticeships and other structured OJT
- Establishing a funding mechanism to support apprenticeships and other structured training opportunities

Funding:

- Davis-Bacon training benefit
- Tax credits/WIA funding, and public and private investments
- State training fund established through AS36.05.045
- Industry



Strategic Element 3.1

Increase job training through construction academies, career and tech-prep programs, and pre-apprenticeship programs for entry-level employment.

Rationale

Training that utilizes actual work experience along with classroom instruction is a time-proven method for placing people in jobs. The success of construction and other skill academies in all parts of Alaska and with youth and adult workers indicates such efforts are cost-effective preparation for entry-level positions. Tech prep programs transition secondary students to postsecondary programs, including apprenticeship.

Action steps

- Increase state funding for workforce development programs that utilize structured training opportunities
- Use state dollars to leverage private support for structured training opportunities
- Increase state support for tech prep programs at both the secondary and postsecondary level

Responsible Parties

- DOLWD
- DEED
- University of Alaska
- Private sector training entities



Resources

- Funding
 - ▶ State training fund
 - ▶ Industry support for academies

Evaluation

Skill academies are offered in various regions of the state. Tech prep opportunities are available in all state high schools. Training programs at all levels utilize some form of structured, on-the-job training.



Strategic Element 3.2

Increase employment opportunities for apprenticeships on all construction and infrastructure projects in Alaska

Rationale

Employers have long been the major source for job training. Private investment in specific skill development—primarily through union and non-union apprenticeships—far outstrips public expenditure for occupational training. Currently in Alaska, there is considerable room for expansion of apprenticeship opportunities on both public and private projects.

Action Steps

- Require apprenticeship employment on all state funded construction projects
- Inform employers of the benefits of apprenticeship utilization
- Create an information system that tracks apprenticeship hire by trade

Responsible Parties

- DOLWD
- State government agencies having capital projects
- Private employers



Resources

- Funding
 - ▶ State capital projects
 - ▶ Davis-Bacon training benefit
 - ▶ Union training trusts
 - ▶ Industry
- Persons
 - ▶ Federal Apprenticeship Office
 - ▶ State Apprenticeship Coordinator

Evaluation

Apprenticeship slots are utilized on all state-funded construction projects, including major maintenance. Number of apprentices employed on private projects increases, as indicated by the apprentice tracking information system.



Strategic Elements 3.3

Develop training incentives for employers who utilize apprenticeships and other structured OJT

Rationale

While many employers already use apprentices, there is considerable room for growth, particularly among smaller firms. Identifying and providing appropriate incentives can be a cost-effective way for the state to leverage private funding and to increase apprenticeship and other on-the-job training slots across many skill areas.

Action Steps

- Identify incentives that have been used elsewhere to encourage apprentice and other OJT utilization
- Adopt those incentives that would be most effective in the Alaska context
- Provide technical assistance to firms wanting to establish or increase apprentice/ OJT use

Responsible Parties

- DOLWD



Resources

- Funding
 - ▶ WIA/other federal workforce development funds
 - ▶ State general fund
- People
 - ▶ State/Federal Apprenticeship Coordinators

Evaluation

Incentive system is in place and is being utilized by employers to develop or expand apprentice/OJT utilization, as indicated by the apprentice tracking information system.



Strategic Element 3.4

Establish a funding mechanism to support apprenticeships and other structured training opportunities

Rationale

Legislation exists (AS36.05.045) that assesses a fee on all state and federally funded construction projects. Currently, these funds accrue to the general fund, but they could be used to establish a training fund that is a separate account subject to Legislative appropriation under the authority of the DOLWD Commissioner. Funds deposited into the account would not lapse at the end of the fiscal year, unless otherwise provided for by the Alaska legislature. The approximately \$2 million dollars per year generated could provide partial funding for the activities recommended in this plan. Additional appropriations could be made to the fund, as determined by the Legislature.

Action Steps

- Introduce legislation to establish a training fund from receipts collected under AS 36.05.045

Responsible Parties

- Alaska Legislature
- DOLWD

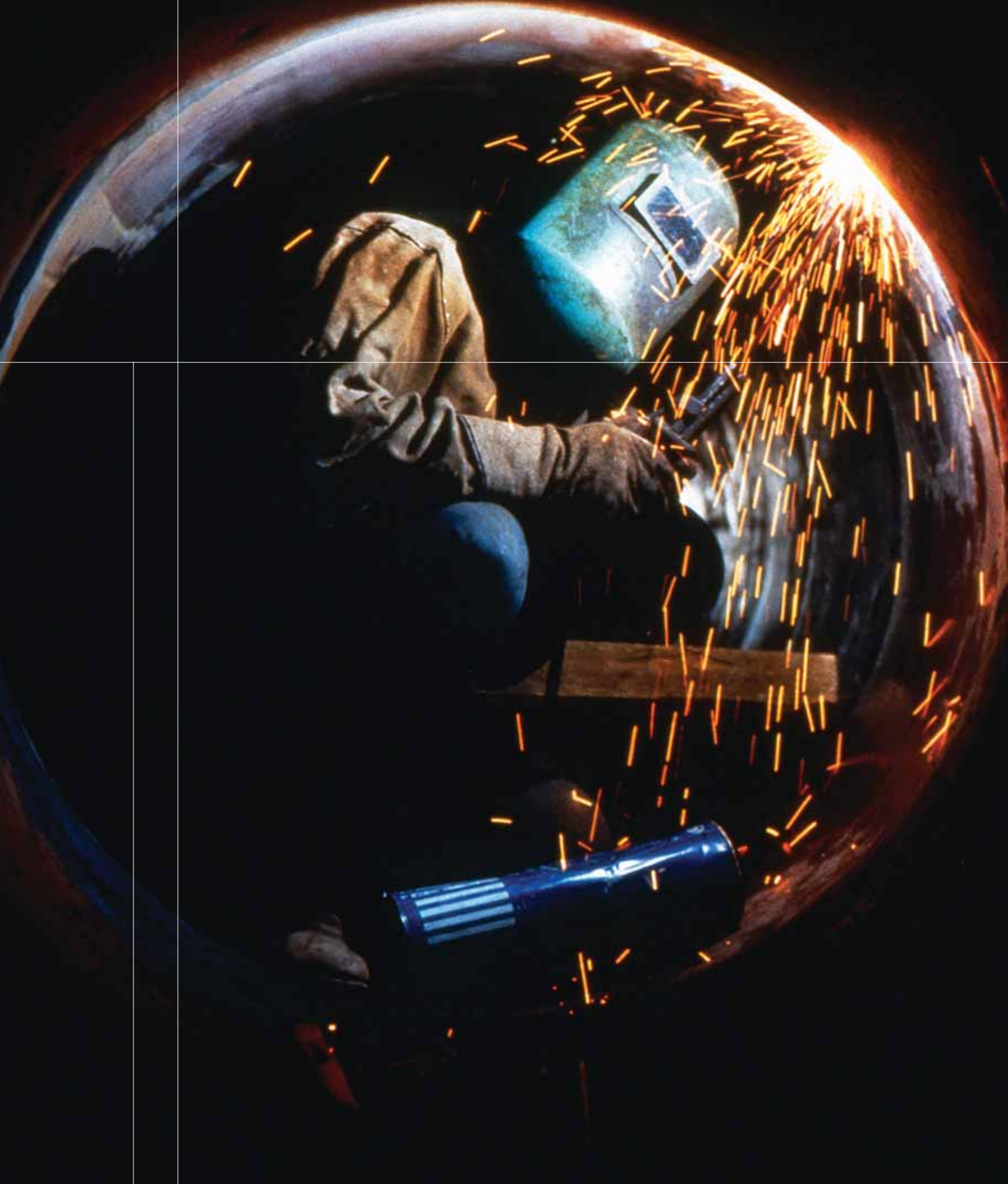


Resources

- Funding
 - ▶ AS36.05.045 fees
 - ▶ Additional appropriations to the fund

Evaluation

AS36.05.045 is amended to establish a training fund. Annual appropriations are made to the fund from assessed fees.



Strategy 4.0

Increase opportunities for development of appropriate training programs for operations, technical and management workers

These jobs range from professionally-certified and degreed positions to support functions for industries impacted by natural resource development. Degree programs such as engineering and science, process operations and technical positions require both academic/conceptual education and work-place application.

This strategy can be implemented by:

- Expanding programs in the postsecondary system for critical jobs such as engineering, environmental sciences, etc
- Recruiting additional Alaskan high school graduates into these programs
- Increasing internships and work-cooperatives for both secondary and postsecondary students
- Assuring better articulation between incumbent workers and management programs/degrees

Funding:

- Increased funding for UA and other postsecondary institutions in target programs
- Tax credits for internships
- Support for applied academics as part of state funding for career and technical education
- Industry contribution to specific certificates and degrees



Strategic element 4.1

Expand programs in the postsecondary system for critical jobs such as engineering, environmental sciences, technical operations and management

Rationale

Professional, technical and managerial employees have highly-transferable skills that provide excellent long-term career prospects. At present, these occupations have a large number of non-resident hires. The state's current capacity to train for these careers is severely strained. Expanding capacity to meet additional demand requires considerable lead time in order to secure the necessary faculty and to recruit qualified students.

Action Steps

- From DOLWD data, identify the high priority occupations in which there are significant current shortages
- Assess in-state postsecondary capacity to address these shortages
- Engage the University of Alaska, state/regional training centers and other certificate/degree granting institutions in developing a comprehensive plan to expand capacity
- Prioritize funding requests for program start-up or expansion through AWIB
- Explore loan forgiveness for students completing degree programs in target areas for which no in-state program is available

Responsible Parties

- DOLWD/AWIB
- University of Alaska
- AVTEC/State-funded training centers
- Private certificate/degree granting institutions



Resources

- Materials and equipment
 - ▶ Industry
- Funding
 - ▶ TVEP and STEP dollars
 - ▶ State general fund
 - ▶ Industry for specific programs

Evaluation

State capacity in certificates and degree programs in professional, technical and managerial occupations is sufficient to meet industry needs.



Strategic Element 4.2

Recruit more Alaskan high school graduates into programs leading to professional, technical and managerial certificates/degrees

Rationale

Because these occupations provide excellent long-term potential, they make attractive career choices for Alaskan youth. However, students who wish to pursue careers in these areas need begin preparation early by taking the necessary math and science courses in high school.

Action Steps

- Start early in the educational process to encourage students in these careers, using proven success strategies such as those used in the Alaska Native Science and Engineering Program (ANSEP)
- Expand the use of applied academics in secondary math and science courses
- Increase summer engineering, science and technology camps
- Develop tech prep and other secondary/postsecondary articulation agreements in these occupational areas
- Utilize the regional training centers as pipelines for transitioning rural high school completers into these programs
- Initiate a state matching program for scholarship support for students in these programs

Responsible Parties

- DEED/School districts
- University of Alaska
- DOLWD
- AVTEC/State-funded training centers
- Industry consortia



Resources

- Models and Materials
 - ▶ ANSEP
 - ▶ Existing math and science camps
- Funding
 - ▶ State Foundation funding
 - ▶ State general fund
 - ▶ Federal/state grant funds for camps
 - ▶ Industry
- People
 - ▶ DEED program specialists
 - ▶ UA program faculty

Evaluation

Increased numbers of Alaskan high school students enroll in certificate and degree programs leading to professional, technical and management careers in natural resource development.



Strategic Element 4.3

Increase internships and work-cooperatives for both secondary and postsecondary students

Rationale

All students—whether they are training for a skilled craft or for a professional or technical occupation—benefit from on-the-job experience during their training program. Such experience can also lead to job placement after training is completed. Many of the major employers in natural resource industries already use internships and other forms of work experience to recruit their workforce. However, there is the potential for expanding these opportunities beyond the core companies.

Action Steps

- Identify existing internship and work cooperative programs
- Disseminate successful industry practices in providing meaningful work experiences
- Use industry to industry contacts to promote such programs and practices
- Provide technical assistance to companies that want to develop internships
- Encourage continued cooperation between industry consortia and certificate/degree program staff



Responsible Parties

- Certificate/degree program faculty and staff
- Industry consortia

Resources

- Models and materials
 - ▶ Model internship/work experience programs
 - ▶ Industry consortia
- Funding
 - ▶ Industry employers
 - ▶ TVEP

Evaluation

Students in certificate and degree programs leading to professional, technical and managerial occupations have meaningful on-the-job experience as part of their educational program.



Strategic Element 4.4

Assure better articulation between incumbent workers and management programs/degrees

Rationale

Many of the supervisors and managers needed for the gas pipeline and other natural resource development projects will come from the current workforce. These workers often already have much of the knowledge and skills imparted in a formal certificate or degree program. Recognizing this prior experience in terms of college credit can accelerate program completion. Short courses on specific supervisory and management topics can also speed the advancement of current workers.

Action Steps

- Expand the use of awarding of credit for prior experience in university-level professional or technical certificates and degrees
- Offer short term, developmental instruction in supervision, safety management and other topics identified by industry

Responsible Parties

- Postsecondary program faculty
- State-funded training centers
- Industry associations
- Apprenticeship sponsors



Resources

- Models
 - ▶ Associate Degree in Apprenticeship Technologies
- Funding
 - ▶ Industry, for professional development of current workers

Evaluation

Incumbent workers advancing to supervisory positions have access to the necessary developmental instruction and to certificate/degree programs that acknowledge their prior experience.



Strategic Element 4.5

Increase job opportunities by expanding capacity to deliver incumbent worker training focused primarily on helping workers keep pace with technological changes and including journeyman craft worker skills upgrades

Rationale

Many of the current workers are required to keep pace with technological changes and journey level craft workers in particular need opportunities for skill upgrades to keep or advance in their job.

Action Steps

- Expand flexibly offered incumbent worker training
- Offer short term, developmental instruction in technology and skill upgrades

Responsible Parties

- Postsecondary program faculty
- State-funded training centers
- Industry associations
- Apprenticeship sponsors



Resources

- Models
 - ▶ Contract and corporate training programs
- Funding
 - ▶ State General Funds
 - ▶ STEP
 - ▶ WIA

Evaluation

Incumbent workers advancing in and maintaining employment in their given field.



Glossary

The following abbreviations are used throughout the plan.

ABE	Adult Basic Education
AGIA	Alaska Gasline Inducement Act
AKCIS	Alaska Career Information System
ANSEP	Alaska Native Science and Engineering Program
AVTEC	Alaska Vocational Technical Center
AWIB	Alaska Workforce Investment Board
CTE	Career and Technical Education (formerly known as Vocational Education)
CTSO	Career and Technical Student Organizations
ESL	English as a Second Language
GED	Graduate Equivalency Degree
DEED	Department of Education and Early Development
DOLWD	Department of Labor and Workforce Development
OJT	On the Job Training
SCANS	Secretary's Commission on Achieving Necessary Skills
STEP	State Training and Employment Program
TVEP	Technical Vocational Education Program
UA	University of Alaska
WIA	Workforce Investment Act





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