



# ***PUTTING ALASKA'S RESOURCES TO WORK***

## ***FINAL PLAN***

**VISION: ALASKA WILL HAVE A HIGHLY SKILLED AND GLOBALLY COMPETITIVE RESIDENT WORKFORCE THAT MEETS THE CURRENT AND FUTURE NEEDS OF THE OIL, GAS AND MINING INDUSTRIES.**

**MISSION: DEVELOP AND EXPAND THE OIL, GAS AND MINING WORKFORCE GUIDED BY THIS PLAN.**

**GUIDING PRINCIPLES: WE WILL HAVE IN PLACE A WORKFORCE DEVELOPMENT SYSTEM (WDS) THAT IS:**

**INNOVATIVELY ACCESSIBLE** - WDS will provide increased access to Oil, Gas and Mining (o/g/m) training utilizing resourceful delivery methods.

**INDUSTRY LED** – WDS will be progressed through stakeholder partnerships responsive to the o/g/m industry lead.

**NEEDS DRIVEN** – WDS stakeholders will deliberately seek mutual understanding of o/g/m workforce needs and mutually commit to implementation of solutions ensuring capacity of workforce development system.

**ACCOUNTABLE** – WDS will maximize the desired o/g/m resident workforce through appropriate allocation, use and evaluation of public, private and industry resources.

**BEST PRACTICE DRIVEN** – WDS will identify, promote, implement and, when absent, develop local and national o/g/m Best Practices.

**COLLABORATIVELY GOVERNED** – WDS will align governmental policy and stewardship through cooperative partnering with the o/g/m industries, government agencies, and training providers.

**ADAPTIVELY SUSTAINABLE** – WDS resources both support long term economic development, healthy communities and education reforms while also supporting ebbs and flows of current market needs.

**SUMMARY OBSERVATIONS:**

- Oil, Gas and Mining (o/g/m) industries are a significant part of Alaska's economy requiring strategic workforce development for decades to come.
- In addition, "perfect storm" variables will further exasperate already significant projected gaps between the o/g/m trained and available workforce and the workforce needs of the industries.
- The three phases of o/g/m projects include project development, construction and operations. All three phases require workers with specific skill sets. Sometimes the skills are transferable between phases, sometimes they are not.
- Tension exists between education and training providers wanting more assurances of employment as an outcome of training and industries not providing assurances of hiring.
- Overlap exists between o/g/m and the other occupational priorities defined by the state, specifically the construction and the transportation industry. O/g/m must work towards strategic alignment with the construction and the transportation industry workforce development plans.
- Identification and utilization of "Single Points of Contacts" (SPOCs) from various stakeholder groups is key.

# 1. STRATEGY: ENGAGE

GOALS	TASKS/ACTIONS
<p><b>1.1 CAREER EDUCATION:</b> Implement an industry responsive, aggressive, coordinated, age and diversity appropriate Oil, Gas and Mining (o/g/m) career education campaign targeting students, parents, counselors, teachers, principals, administrators and school boards.</p>	<p>1.1.1 Develop and publicize a set of clear pathways for the jobs and careers in the Oil, Gas and Mining (o/g/m) fields to guide targeted stakeholders.</p>
	<p>1.1.2 Industry work with schools to provide current resources and information about themselves, testimonials, outreach events (career fairs), and participate in a continuum ranging from class room presenters and field trips to internships and apprenticeships.</p>
<p><b>1.2 INDUSTRY RECRUITMENT:</b> Implement an aggressive, coordinated, industry appropriate campaign recruiting o/g/m industry to work with key stakeholders to define workforce needs, understand Alaska’s training resources and partner in solving workforce challenges.</p>	<p>1.2.1 Coalition:</p> <ul style="list-style-type: none"> <li>• Examine and select a coalition structure for the o/g/m industries either in combination with each other or as stand alone entities.</li> <li>• Create the Industry Coalition(s) with strong contractor representation, student participation, inclusive stakeholder representation and sufficient critical mass to achieve outcomes.</li> <li>• Coalition cooperatively identifies workforce needs and assists in the development of skill and employability standards, curriculum and curriculum review.</li> <li>• Develop learning practicums, internship, mentorships and apprenticeship opportunities with trainers and students.</li> <li>• Develop a communication strategy to:                             <ul style="list-style-type: none"> <li>* attract other Alaska natural resource companies to join the Coalition,</li> <li>* establish means to inform new companies entering the Alaska workplace about the existing Alaska workforce training programs, and</li> <li>* share best practices.</li> </ul> </li> <li>• Support implementation of this plan.</li> </ul>
	<p>1.2.2 Plan:</p> <ul style="list-style-type: none"> <li>• Provide a two-, five- and ten-year plan, detailing likely skills &amp; educational needs for their workforce accounting for the various stages of project development/planning, construction and operations.(See 3.1.1)</li> <li>• Use these plans to develop appropriate training courses (e.g. gas pipeline would likely result in need for quick development of welding certifications, metal inspectors, heavy equipment operators).</li> <li>• Review and revise these plans on an annual basis.</li> </ul>
<p><b>1.3 PUBLIC AWARENESS:</b> Build public awareness and engage public in the process of developing o/g/m workforce when and where appropriate.</p>	<p>1.3.1 Continue building stakeholder, legislative and public awareness of the PARW effort.</p>
	<p>1.3.2. Develop a media strategy.</p>
<p><b>1.4 FUNDING:</b> Support a sustainable career education, recruitment and public awareness strategy. (See #4 ADAPTIVELY SUSTAIN)</p>	<p>1.4.1 Allocate a portion of workforce investment resources to engage stakeholders through career education, recruitment and marketing.</p>

## 2. STRATEGY: TRAIN (*WHO*)

GOALS	TASKS/ACTIONS
<b>2.1 K-12:</b> Integrate vocational, technical and career education throughout each student's K-12 educational experiences.	2.1.1 Integrate vocational, technical and career education in-all teacher preparation programs.
	2.1.2 Institute professional development system for teachers that updates and provides tools for the integration of vocational, technical and career education into the educational processes (contextual learning).
	2.1.3 Utilizing the model of career awareness and exploration in elementary and middle school and preparation and articulation in high school inspire and equip Alaska's youth to pursue o/g/m careers.
	2.1.4 Focus on common employability skills and knowledge applicable to any areas of o/g/m jobs and careers and multiple career preparation paths following high school.
	2.1.5 Support Career Technical Student Organizations that correlate to the o/g/m careers (Skills USA and FFA).
	2.1.6 Tech Prep Plan (consistency and alignment with Tech Prep Consortium)
<b>2.2 POSTSECONDARY:</b> Target postsecondary training infrastructure to satisfy o/g/m workforce development need.	2.2.1 Conduct a baseline assessment of postsecondary programs, skill standards and program outcomes detecting gaps and determining capacity.
	2.2.2 Develop strategy linked to o/g/m priorities to address gaps and optimize capacity.
	2.2.3 Increase Alaska intern and apprentice program enrollments in the o/g/m priority occupations.
	2.2.4 Obtain industry support of post secondary programs including trainers access to subject matter experts, instructor and student mentorship, equipment donations, etc.
<b>2.3 RETRAIN:</b> Provide for resident workforce retraining as needed.	2.3.1 Access and train those willing and capable to productively contribute to workforce from among: <ul style="list-style-type: none"> <li>• Native corporations (access shareholders),</li> <li>• incumbent workers,</li> <li>• underemployed,</li> <li>• part time workers seeking full time employment,</li> <li>• military, and</li> </ul> etc.
	2.3.2 As new demands develop within the same job, industry and trainers work together to provide technology and skills upgrade training.
<b>2.4 RETIREE:</b> Capitalize on the wealth of expertise in the retiree labor pool.	2.4.1 Recruit retirees to re-enter the workforce.
	2.4.2 Retrain retirees as instructors to train new workers.
	2.4.3 Enlist retirees to serve as mentors to new workers.

## 2. STRATEGY: TRAIN (*HOW*) - continued

GOALS	TASKS/ACTIONS
<b>2.5 STANDARDS BASED:</b> Ensure all education and training is meeting industry employability, academic, technical and skill requirements producing a competent and productive workforce.	2.5.1 Support a state-wide employability certification for students who meet the state standards (e.g. YES)
	2.5.2 Ensure documented standards are in place for high priority occupational skill sets.
	2.5.3 Ensure standards are shared, widely accessible to all stakeholders and taught through o/g/m curricula.
	2.5.4 Review standards on an ongoing basis and revise as needed to keep pace with industry need.
	2.5.5 Promote training resulting in industry recognized certifications.
<b>2.6 SKILL SETS:</b> Strategically direct resource allocation among competing skill sets training.	2.6.1 Common Skill Sets: Provide foundational education and training in the area of common needs and skills among diverse o/g/m employers increasing the pool of workers and broadening the potential employment base for trained workers.
	2.6.2 Specialty Skill Sets: Analyze demand of specialty skills training and strategically determine what training, if any, merits public investment and what training is to be assumed by industry.
<b>2.7 DELIVERY:</b> Apply innovative methods to deliver education and training targeted to emerging needs in high priority areas.	2.7.1 Accessibility: <ul style="list-style-type: none"> <li>• Increase availability of distant delivery and web based o/g/m training.</li> <li>• Increase support for operating rural training centers that provided o/g/m training.</li> </ul>
	2.7.2 Scheduling: <ul style="list-style-type: none"> <li>• Expand use of accelerated, fast-track job training programs when demand requires</li> <li>• Build in flexibility to accommodate incumbent workers (week on/off) and diverse student pools (rural hybrid of at home/on campus combination programs)</li> </ul>
	2.7.3 Articulation: <ul style="list-style-type: none"> <li>• Expand articulation between K12 and postsecondary (Tech Prep)</li> <li>• Expand articulation between training institutions (credit transferring)</li> </ul>
<b>2.8 ACCOUNTABILITY:</b> Training providers are producing completers that meet the needs of industry	2.8.1 Continuously improve return of workforce investment by: <ul style="list-style-type: none"> <li>• regular and periodic reporting requirements focused on industry defined targeted outcomes,</li> <li>• thorough analysis of reports including the “customer” satisfaction factor,</li> <li>• responsively adapting allocation of resources based on measurable outcomes, and</li> <li>• strong participation of o/g/m industry throughout the monitoring, evaluation and allocation processes.</li> </ul>
	2.8.2 Apply and, when needed, implement an evaluation process to measure outcomes, analyze return on investments and adjust the system for continuous improvement (PDCA).
	2.8.3 Utilize recognized standards to assure fiscal accountability
<b>2.9 FUNDING:</b> Support a sustainable o/g/m training system. (See #4 ADAPTIVELY SUSTAIN)	2.9.1 Allocate sufficient resources to train the needed o/g/m workforce.
	2.9.2 Encourage industry and other stakeholders to establish scholarships in priority areas.
	2.9.3 Invest public funds for individual student’s training in the high priority occupational areas with job potential while recognizing that students can pursue any kind of training they choose when self paying.

### 3. STRATEGY: EMPLOY

GOALS	TASKS/ACTIONS
<b>3.1 TIMING ALIGNMENT:</b> Achieve alignment between when trained o/g/m workers are available and when they are needed.	3.1.1 Industry work with state labor forecasting processes and include in their plan development a ten year or more timeline of need. (See 1.2.2) 3.1.2 Trainers apply scheduling strategies by: <ul style="list-style-type: none"> <li>• starting long term training (journeyman and engineers) early enough to produce completers when needed,</li> <li>• accelerating training schedules (e.g.: fast-track, full time) within reason as needed, and</li> <li>• re-directing training from areas of inactive need to areas of emerging and emergency need to deliver just-in-time workforce.</li> </ul>
<b>3.2 EMPLOYMENT &amp; RETENTION:</b> Place newly trained o/g/m workers in jobs.	3.2.1 Some industry may opt to partner with training resources to screen and select students/workers. (e.g. Pogo model) 3.2.2 Utilize web based tool to connect trained workers with industry and jobs. (See 3.3) 3.2.3 Industry and training resources partner in on-site job fairs and recruitment. 3.2.4 Promote expanded use of internship and apprenticeship models. 3.2.5 Establish strategies to increase retention of trained workers.
<b>3.3 WEB BASED TOOL:</b> Utilize the web to more efficiently connect job seekers and employers.	3.3.1 Research current web based systems, analyze effectiveness and gaps. 3.3.2 Determine if need to create an o/g/m web based hub or work with existing tools. If create a new hub, determine who will manage it (third party connecting entity). 3.3.3 Further develop web based tool (either new hub or existing sites) to more efficiently connect job seekers and employers (see monster.com for idea, consider eBay type quality control ratings). 3.3.4 Utilize web based tool to share best practice models (provide both structured practices as well as ability to query problems and receive responses). 3.3.5 Make AKCIS system more available to web based tool users.
<b>3.4 FUNDING:</b> Support sustainable employment strategies of o/g/m workforce. (See #4 ADAPTIVELY SUSTAIN)	3.4.1 Increase enrollment and completion in self supporting apprenticeships programs. 3.4.2 Support improvement and/or creation of web based tool(s) used in to connect job seekers with employers and that result in employment of o/g/m workforce.

## 4. STRATEGY: ADAPTIVELY SUSTAIN

GOALS	TASKS/ACTIONS
<p><b>4.1 STABLE FUNDING:</b> Achieve sustainable, multi-year funding commitments to meet current and emerging core o/g/m workforce development needs and demand levels.</p>	<p>4.1.1 Public Education:</p> <ul style="list-style-type: none"> <li>• Industry, providers and unions implement an aggressive legislative education effort to increase state funding to Alaska education and training institutions.</li> <li>• Revisit formula funding and other strategies that might embed o/g/m education and training into core public funding procedures.</li> </ul> <p>4.1.2 Private Funding: Coalition invests in system from their broad funding base of member dues and contributions, funds generated through services, foundations, grant funding, etc. and contributions of instructors and materials.</p> <p>4.1.3 Public Funding: Stakeholders partner to leverage public and private matching to gain additional resource for the o/g/m workforce.</p>
<p><b>4.2 JUST IN TIME FUNDING:</b> Incorporate a system funding component for timely response to high return, but short term needs identified by industry. (e.g.: Drivers for the Gas Line)</p>	<p>4.2.1 Develop rapid response type multi-source funding strategy for o/g/m specialty training need.</p>

## APPENDIX

<b>COMMITTEES</b>	<p><b>Needs Assessment (NA)</b> – Dave Williams, ConocoPhillips</p> <p><b>Building Readiness (BR)</b> – Dave Rees, BP</p> <p><b>Standards, Curricula (SC)</b> <i>Standards, Curricula and Delivery Capability folded into one committee</i> – Dennis Steffy, MAPTS (assisted by Dave Spann) and Michelle Brunner, Northern Dynasty Mines Inc.</p> <p><b>Planning (PC)</b> <i>Resources/Funding and Communication folded into Planning Committee</i> – Rick Caulfield, Facilitated by Cólleen Ward</p>
<b>CHAMPIONS</b>	<p><b>AP:</b> Annual Plan as defined in 1.2.2</p> <p>Coalition: Industry Coalition as defined in 1.2.1</p> <p><b>DEED:</b> Department of Education and Early Development</p> <p><b>DOLWD:</b> Department of Labor and Workforce Development</p> <p><b>UA:</b> University of Alaska</p> <p><b>UAA:</b> University of Alaska Anchorage</p> <p><b>VTEP:</b> Vocational Technical Education Provider Working Group</p>
<b>GLOSSARY</b>	<p><b>Coalition:</b> An alliance of distinct parties for joint action. PARW context: Broad based alliance of various o/g/m industry and workforce development organizations or entities.</p> <p><b>Consortium:</b> Association, society, alliance (consort: associate, one who shares a common lot, to make harmony). [<i>pl. consortia</i>]. PARW context: Specifically focused, member driven association of o/g/m industry and workforce development individuals.</p> <p><b>Career Education:</b> Increasing participants’ awareness of career pathways and processes</p> <p><b>Vocational/Technical Education:</b> Education and training that prepares participants for careers or professions that directly relate to a trade, occupation or vocation.</p>
<b>ABBREVIATIONS</b>	<p><b>AKCIS:</b> Alaska Career Information System</p> <p><b>APICC:</b> Alaska Process Industry Careers Consortium</p> <p><b>AWIB:</b> Alaska Workforce Investment Board</p> <p><b>CTSO:</b> Career Student Technical Organizations</p> <p style="padding-left: 20px;">SkillsUSA – formerly Vocational Industrial Clubs of America (VICA)</p> <p style="padding-left: 20px;">FFA – formerly Future Farmers of America</p> <p style="padding-left: 20px;">BPA – Business Professionals of America</p> <p style="padding-left: 20px;">DECA – formerly Distributive Education Clubs of America</p> <p style="padding-left: 20px;">FCCLA – Family Consumer Community Leaders of America</p> <p><b>o/g/m:</b> Oil, Gas and Mining</p> <p><b>PDCA:</b> Plan – Do – Check - Act</p> <p><b>SI:</b> Service Industry</p> <p><b>SPOCs:</b> Single Points of Contact</p> <p><b>YES:</b> Youth Employability Skills</p>