Alaska Broadband Office
Initial Proposal Volume 2
Broadband Workforce Development Plan
Interim Report – October 27, 2023

Contents

Introduction

Alaska has been allocated more than $1 billion under the 2021 federal Infrastructure Investment and Jobs Act (IIJA) to expand high-speed broadband internet to unserved and underserved communities in rural Alaska over the next few years. Known as the Broadband Equity, Access, and Deployment, or BEAD, program, it requires states to submit to the federal government their plans to carry out this internet expansion, including a specific broadband workforce development plan showing how the state will recruit, train, and employ a local, diverse, and inclusive workforce for construction, deployment, installation, and maintenance of the broadband expansion projects. The federal BEAD program is housed under the National Telecommunications and Information Administration (NTIA) in the US Department of Commerce; Alaska's BEAD program is managed by the Alaska Broadband Office (ABO) in the Alaska Department of Commerce, Community and Economic Development.

Alaska is experiencing unparalleled federal investment in broadband infrastructure. The US Department of Agriculture (USDA) has awarded several hundred million dollars in project funding in Rounds 1-4 of the ReConnect program. The State received nearly $111 million in its Coronavirus Capital Projects Fund allocation. The Enabling Middle Mile and Tribal Broadband Connectivity (TBCP) programs, also managed by the NTIA, have granted awards in the tens of millions in Alaska as well. Both USDA ReConnect and NTIA TBCP have additional funding rounds scheduled in 2024. This compilation of funding and projects required Alaska to develop an inclusive Broadband Workforce Development Plan, rather than a BEAD-only focused effort.

Partners and Planning Process

In the spring of 2023, the ABO contracted with Alaska Works Partnership (AWP) to develop the Alaska Broadband Workforce Development Plan to not only meet federal BEAD requirements, but to align with and complement existing Alaska workforce plans, such as those for oil and gas, maritime, construction,

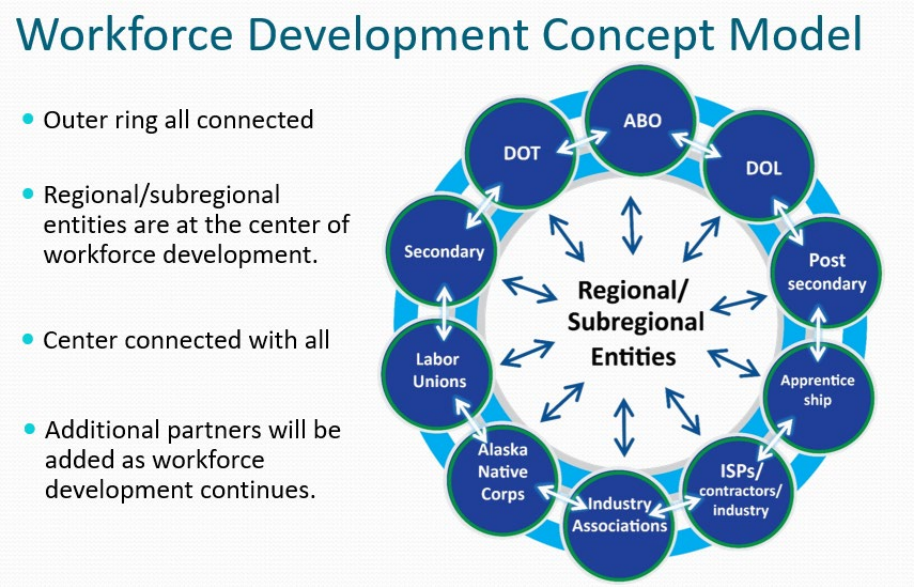
mining, and healthcare, and the Alaska Career & Technical Education (CTE) and Apprenticeship Plans[1], and with other concurrent statewide broadband planning efforts, including the Governor's Task Force on Broadband; Department of Transportation's IIJA Workforce Planning; and the Denali Commission Alaska Broadband Program grants.

The ABO convened an advisory partner group to provide guidance and feedback to AWP in development of the Plan. Partners represent a variety of constituencies, including telecommunications and construction trade associations, public and private secondary and postsecondary education/training, Alaska Native organizations, regional training centers, unions, apprenticeship training programs, non-profits, and state agencies. Advisory group members are listed on the Alaska Broadband Workforce Development (ABWD) website at https://akbroadbandworkforce.org/development/web/node/127.

The Alaska Broadband Workforce Development Plan ("the Plan") is being informed through regular contact with the advisory group via email, virtual and in-person meetings, and online surveys and forums. To date, over 75 entities[2], representing more than 13,000 Alaskans, have been contacted directly via email, virtual or in-person meetings, online surveys, and conference presentations. These entities include public and private secondary and postsecondary training providers, Alaska Native organizations, Internet Service Providers (ISPs), construction contractors, unions, economic development groups, workforce intermediaries, industry consortia, non-profits, state agencies, broadband training vendors, and industry associations. The Plan includes economic and labor market information provided by several sources, including the Alaska Department of Labor and Workforce Development (DOLWD), the NTIA, Dun & Bradstreet, local ISPs, contractors, apprenticeship and other training programs, and regional planning groups.

Through our research, we found that many regional planning efforts are well underway. With that in mind, we have developed a concept model for overall broadband workforce development, which puts regional and subregional entities and planning efforts at the center, and other partners in an outer ring - with two-way communication among all entities, as shown in the graphic below.[3]

[1] Alaska Workforce Investment Board Plans, Policies and Initiatives, https://awib.alaska.gov/ppi.htm
[2] https://akbroadbandworkforce.org/bb_plan_attachments/ABWD_Outreach_10.19.23.xlsx
[3] DOT = Alaska Department of Transportation & Public Facilities; ABO = Alaska Broadband Office; DOL = Alaska Department of Labor and Workforce Development; ISP = Internet Service Providers.



Plan Overview

With a mission, vision, and goals in mind, the plan will provide an overview of Alaska's economic and labor market landscape, identify the priority occupations that will be needed for the state's broadband projects, and list the skills and training necessary for the occupations. The Plan will then identify workforce training needs and challenges along with strategies, action steps, and timelines to address the challenges and meet the goals. Finally, recommendations will be given for implementation and ongoing evaluation of the Plan's implementation. The vision, mission, goals, and strategies are summarized below, and other information gathered to date is summarized on the remaining pages.

Vision and Mission

Vision: Alaskans from every region of the state will have opportunities to learn about, train for, and fill broadband construction and deployment jobs to meet the labor supply needs of industry employers.

Mission: Alaska's Broadband Workforce Development Plan will support development of a diverse and inclusive skilled labor force to meet the needs of employers who build, operate, and maintain telecommunication infrastructure in every region of Alaska.

Goals

1. Increase the number of Alaskans qualified to fill broadband construction and operations occupations by recruiting and training 1,000 Alaskans[4] to fill industry jobs.
2. Employ members of the NTIA/BEAD targeted populations[5] in at least 50% of new broadband/telecommunication jobs to ensure a diverse and inclusive workforce.
3. Develop post-deployment capacity for local residents to learn about and navigate training and career opportunities, including self-employment, and other opportunities available using high-

[4] See Workforce Projections and Labor Gaps on page 6 of this document.

[5] Targeted populations for the Alaska Digital Equity Plan and Broadband Workforce Plan are: 1) Low-income individuals (at or below 150% of poverty level); 2) Individuals aged 60 or older; 3) Incarcerated individuals, other than in a Federal facility; 4) Veterans; 5) Individuals with disabilities; 6) Individuals with a language barrier; 7) Members of a racial or ethnic minority group; and 8) Rural Alaskans.

speed broadband access by supporting Digital Navigators[6] in 75% of communities that receive BEAD-funded expanded broadband access.

Strategies

1. Build on existing construction industry training and workforce efforts.
2. Create a career and technical education, also known as vocational education, talent pipeline for telecommunications occupations and employment.
3. Increase education and training programs that prepare students and adults for apprenticeship and entry-level employment in telecommunications occupations.
4. Put in place recruitment, training, and employment efforts focused on targeted populations.
5. Ensure ongoing industry, education/training, labor and workforce partner involvement throughout the planning, implementation, assessment, and continuous improvement stages of the Alaska Broadband Workforce Development Plan.

Draft action steps for each strategy are provided on the ABWD Website[7]. The goals, strategies, and action steps will be further reviewed and may be revised somewhat for the final Plan, which will also include metrics for measuring success.

The Broadband Workforce Development Plan is more than a plan for broadband construction and telecommunications. Research involved in shaping this plan, along with the ABO's guidance, have led to a broader understanding of the state's overall workforce environment and the critical situation Alaska is in. Below are some key points that frame this plan related to construction, deployment, and maintenance of infrastructure.

1. Alaska has a shrinking population and an "every industry, every region" workforce supply deficit.
2. All occupations involved in broadband construction, deployment, and operations are common to or have transferable skills needed by other vital industries, also with significant labor shortages.
3. These labor shortages will result in competition for workforce among industry sectors, and among providers within the broadband industry.
4. Every tier of workforce development – K-16 education, registered apprenticeship, public and private sector training – needs new and significant investment to build regional and statewide capacity.
5. Once broadband projects are completed, local residents will need support to take advantage of the new opportunities available to them with high-speed Internet access.
6. The Broadband Workforce Development Plan can inform, support, and kick-start other workforce plans Alaska needs to build our future NOW.

The Broadband Industry

There are 53 Internet Service Providers (ISPs) in Alaska. In 2022, the primary ISPs employed 2,937 workers and generated gross revenues of $1,458,091,591[8]. The telecommunication industry already

[6] Individuals who address the entire digital inclusion process — home connectivity, devices, digital skills, and digital opportunities — with community members. Navigators may be paid staff or volunteers.

[7] Alaska Broadband Workforce Development Website, https://akbroadbandworkforce.org/development/web/node/6

[8] Buzzfile.com "Communications sector in Alaska," https://www.buzzfile.com/Search/Company/Results?parameter=SectorCode--48%2BStateId--2&searchType=4

needs over one hundred new workers right now[9] to fill advertised positions across the spectrum of telecommunication positions, not including broadband construction openings. A cursory review of the individual ISP websites indicates more than 150 open positions.

ISP broadband developers take a long view of what is needed to build and deploy large long-distance broadband systems. The industry is very competitive and relies on a short list of qualified maritime and terrestrial construction contractors. ISP developers are very concerned about the availability of contractors to build their projects and to secure materials and equipment for construction; labor shortages; and unpredictable costs for future labor, supplies, transportation, project support, and post-construction operations.

Broadband construction contractors are also concerned about the timing of broadband projects, labor and material shortages, and total project rising costs. Estimating construction and deployment costs today is difficult and risky. There are already long waiting periods for equipment and supplies, due to the global impact of the COVID pandemic and federal Buy America Act requirements. Industry contractors report they need more workers now to fill back and front office jobs and field positions. More engineers, project managers, job-site safety personnel, and permit officers, as well as skilled trades workers and technicians, are needed today – more will be needed tomorrow.

Contractors know that it takes time – several years – to train a skilled, productive, and safe worker. They do not want to rely on unskilled labor, and they are not confident that the anticipated hundreds of broadband construction workers and those in professional occupations will be ready in time to build funded projects already in the queue, in addition to BEAD projects. They want to know who is doing the training and how we can develop more "boots on the ground" training to get the workforce ready. They want more outreach and training for high school students and are supportive of a more inclusive and diverse workforce. They add that housing for rural and remote project workers is very scarce or sometimes just not available.[10]

Alaska's Workforce Landscape, Needs, Challenges

Alaska has a shrinking workforce, growing job demand, and a significant labor supply gap. Every industry in Alaska needs more workers right now. Our workforce is shrinking in size and getting older. According to the Alaska Department of Labor and Workforce Development's Research and Analysis (R&A) Section, the percentages of those aged 18 and under and those aged 65 and over are equal. During 2012-2022, the number of residents 18-64 declined by 30,000, from 479,000 to 449,000. Research shows more than 50% of high school students leave Alaska after graduation – and more than half do not return. Alaska out-migration has exceeded in-migration for 10 straight years. Only West Virginia and Wyoming lost a larger share of working-age populations over that same decade.[11]

After almost a decade of economic decline due to the drop in oil prices (now rebounding) and the COVID pandemic, our economy is growing again. The state is projected to fill 5,300 more jobs in 2023 (some are to replace retiring workers) than in 2022, and an equal number in 2024. That sounds like good news, but right now, Alaska has a crucial worker shortage in *every* private and public sector industry in *every*

[9] AlaskaJobs Labor Exchange System Advertised Openings for Telecommunications Industry, October 26, 2023: https://alaskajobs.alaska.gov/vosnet/lmi/profiles/profileDetails.aspx?enc=mLzjSNmrac3CLiUnnSSBIqYSj51xdeJFtfF2BYwhs7lQf7yQX9DJD5QtvsSLRdQoeAzNIMBF4kmRQygSmC2oTIsFcczwW5I0JoqbZ+jMcd4=

[10] ISP and contractor needs and challenges are summarized here from interviews and surveys.

[11] Alaska Economic Trends Magazine, March 2023. https://live.laborstats.alaska.gov/trends-magazine/2023/March/the-decline-in-working-age-alaskans

region, and our labor supply gap is growing. In September 2023, there were more than 20,000 job openings and only about 14,000 applicants in AlaskaJobs, the state's labor exchange system, which matches employer-listed jobs with unemployed and registered job seekers. This equates to about 0.67 applicants for each opening.[12]

A recent report by the DOLWD R&A Section[13] points to job retention as a key issue faced by employers in this era of critical labor shortages. Turnover and retention rates are affected by low unemployment rates, lack of childcare, wages, work culture, and other factors.

Over the past decade, there have been significant reductions in public education and workforce training programs, which have stunted workforce development capacity for construction and other industries across the secondary, postsecondary, adult job training, and registered apprenticeship platforms. Trainer capacity problems include a shortage of education and training programs, instructors, and training space in every region. Access to drivers' education, Commercial Driver's License (CDL) training, reliable transportation, and affordable and accessible childcare are among the top barriers for trainees. These and other barriers to recruitment, training, and employment for individuals, training providers, and employers are being identified and will be provided in more detail in the final Plan.

Alaska's immense size, geography, climate, and distances, along with inflation, continue to drive training costs up. While IIJA and NTIA encourage using federal Workforce Innovation and Opportunity Act (WIOA) funds to help with training and support costs, Alaska's WIOA allocation is not large and has been reduced by 10 % each year for the past three years, while the US Department of Labor has placed more restrictions on the use of those funds. The lack of high-speed or any internet in rural Alaska and the corresponding challenges to development of employability and digital skills pose additional obstacles.

Workforce Projections and Labor Gaps

A conservative estimate is more than $5 billion will be spent on new infrastructure, broadband, oil and gas, mining, maritime and utility / power transmission projects by 2030.[14] A rough estimate of other potential projects, including new Department of Defense and military base upgrades, annual budgets to maintain and upgrade existing oil and gas infrastructure, possible development of the Willow and Pika oilfields, increased development of minerals, and private development have some predicting over $20 billion could be invested in construction during the IIJA timeframe.

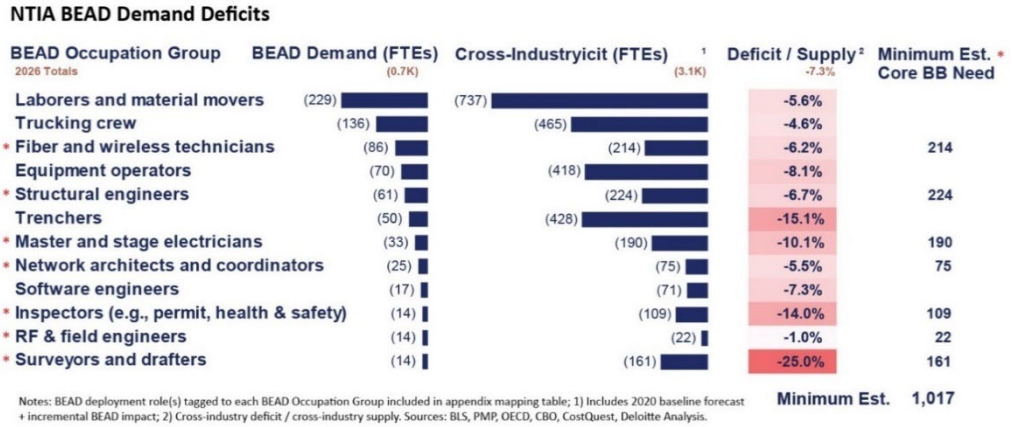
The broadband construction and telecommunication industry sectors need workers with skills common to other industry sectors -- cross-industry skills. Construction, oil, gas, mining, maritime, transportation, and parts of other industries employ workers with skills also needed in the broadband construction sector, including project managers, engineers, safety personnel, and a wide range of other occupations.

NTIA prepared a BEAD labor gap outlook for each state; the results for Alaska appear in the chart below, along with the minimum estimated labor gap of 1,017 workers in the core broadband occupations between now and 2026. NTIA estimated that worker shortages due to BEAD demand are 24% of Alaska's statewide total cross-industry deficit. These estimates are BEAD-specific and do not include the significant labor gaps in other Alaska industries such as oil, mining, and maritime estimated at 3,000

[12] Alaska Department of Labor and Workforce Development, Division of Employment and Training Services data.
[13] Alaska Economic Trends Magazine, October 2023, Alaska Department of Labor and Workforce Development, https://live.laborstats.alaska.gov/trends-magazine/2023/October/worker-shortage-raises-the-stakes-on-retention
[14] "Alaska's 2023 Construction Spending Forecast," Associated General Contractors, January 2023 https://www.agcak.org/assets/pdf/Construction+Forecast+Brochure_2023_WEB/

workers in the Workforce Landscape section of this Plan. Because these NTIA deficits are calculated for the entire state, they may not realistically address shortages within communities/locations where the broadband expansion will occur.

Chart 1: NTIA Alaska BEAD Demand Deficits



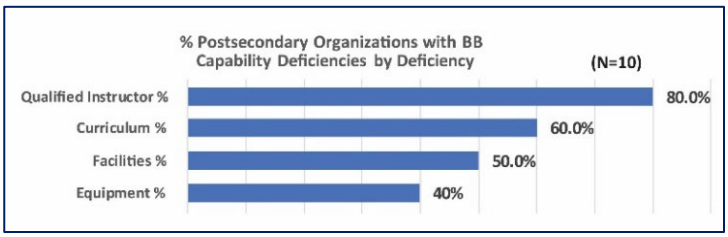
A preliminary estimate based on annual job growth models by DOLWD R&A for broadband essential occupations and cross-industry common occupations is that more than 20,000 new workers will be needed by 2030, as shown in Table 1 below, which shows projected employment and openings for 2020 – 2030 for some selected broadband construction and deployment occupations, most of which will also be needed by other industries during that same timeframe.

Table 1: Employment and Projections 2020 – 2030, DOLWD R&A

Occupation	2020 Employment	2020-2030 Forecast Openings	2020-2030 Projected Employment	Percent of 2020 Employment
Electrical Engineer	236	190	426	181%
Project Manager	309	540	849	275%
Civil Engineering Tech	415	600	1015	245%
Land Surveyor	454	350	804	177%
Pole Surveyor	454	230	684	151%
OSP (Outside Plant) Engineer	1232	750	1982	150%
Construction Manager	1450	830	2280	157%
Project Management Specialist	309	410	719	233%
1st Line Trades Supervisors	2624	720	3344	127%
Carpenter	4532	2,280	6812	150%
Operating Engineer (Heavy Eqp)	5464	3,230	8694	159%
Truck Drivers	4539	3,230	7769	171%
Maintenance Technician	5726	3,740	9466	165%
Laborer	8416	3,960	12376	147%
Fiber Optic Technician	951	910	1861	196%
Splicer Technician	360	280	647	180%
Maintenance Technician	5726	3,740	9466	165%
Safety Officers	492	380	872	177%
Occ. Safety & Health Specialists	285	120	405	142%

Talent Pipelines and Capacity

There are two talent pipelines in broadband construction and deployment: traditional construction and telecommunications. Broadband construction is a strand of construction closely aligned with skills and tasks involved in constructing power transmission systems and power lines and deploying electrical power. Broadband construction involves terrestrial and marine applications. There is an existing broadband construction workforce and most new workers will be drawn from the existing and newly recruited construction workforce. Occupations in demand include surveyors, heavy equipment operators, technicians, and skilled laborers, along with project managers, engineers, safety personnel, and others. New workers without broadband experience and training will need cross training in broadband construction skills and may require additional occupational certifications.



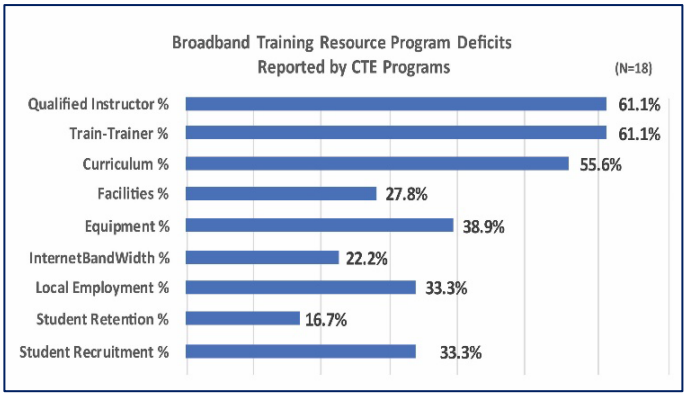
Alaska's Telecommunications / Broadband Industry has an "Identity" Challenge

Although most students, teachers, and potential workers use phones and the internet, there is little awareness about the broadband Industry. Only one high school, the King Tech High School in Anchorage, has a telecommunications CTE program. It is brand new and under development with a dedicated and industry-certified instructor, training space, and an industry advisory committee. The first students were enrolled in January 2023 and there are 27 students in the program now. Without a CTE pathway, there is no identified *starting point* for Alaska students to learn about the broadband industry and jobs. Industry and the Alaska Department of Education and Early Development should collaborate and create a CTE Program of Study that every school district can use to attract and prepare students for industry jobs and careers.

Our Public Vocational Education Training Challenge for Building the Talent Pipeline

The graphs below display deficiencies in broadband training resources reported in recent surveys completed by 18 CTE programs and 10 postsecondary providers, representing a combined 9,600 students. For example, 61.1% of CTE programs report deficiencies in *qualified instructors* and *train-the-trainer* access, and 80% of postsecondary providers report deficiencies in *qualified instructors*.

Alaska's entire public secondary and postsecondary vocational education system has significant challenges for creating new vocational programs or to increase training capacity for construction and telecommunications, especially to the scale needed to prepare thousands of new workers for broadband, construction, and cross-industry jobs. Our K-16 public education system has had reduced state support for a decade due to budget constraints and shrinking student populations. While there are more construction courses and training programs in place across the state than ever before, secondary, postsecondary, and university campuses report they have scant resources to maintain what they offer now or expand their programs. They need more qualified instructors, curriculum, and training space. They have the will but no wallet to prepare students and adults for the coming construction and telecommunications boom.



Building the Broadband Construction and Telecommunication Talent Pipeline from the Ground Up

Our schools, homeschools, and disconnected youth (not in school) represent the largest source of future workers. Schools are located in most Alaska communities. There are 54 school districts with about 40,000 high school students and approximately 10,000 graduates annually.[15] Alaska's schools and the construction industry and education have a long history of engagement. Forty-three school districts have construction career & technical education programs of study (CTEPS). A CTEPS gives students information about careers and offers a sequence of stackable courses along a path from high school to apprenticeship, postsecondary occupational training, other higher education, and employment. Adding a *broadband construction* component to construction CTE programs would not be difficult with adequate funding.

There are few established *vendor neutral* postsecondary level telecommunications education programs in Alaska except through the Alaska Joint Electrical Apprenticeship Training Trust (AJEATT) and a basic skills course offered by Alaska Works Partnership through the Alaska Construction Academies, which is taught by AJEATT instructors. While the Alaska Vocational Technical Center (AVTEC), University of Alaska campuses, Iḷisaġvik College, and Regional Training Centers offer a selection of construction trade and technician and other construction related courses, none currently offer telecom courses. They do offer Information Technology (IT), Cyber Security, pre-engineering, and engineering courses that have a telecom industry connection. There is interest in offering telecom/broadband industry training, but they need curriculum, instructors, and training space to do that.

The Telecommunication / Broadband Industry Trains Their Employees

Every telecommunication company and Internet Service Provider invests in training their workforce. Once a person is hired, they attend in-house training delivered by experienced and certified instructors or workshops and courses from qualified instructors provided by vendors using proprietary equipment, materials, and systems. Some companies utilize the Alaska Joint Electrical Apprenticeship Training Trust to provide training. Industry technology and regulations change on a regular basis and training employees is a constant endeavor. BEAD and other broadband expansion will likely add hundreds of new employees to telco and ISP companies, which will significantly increase future company training budgets. Some industry firms work with local schools to recruit student interns and, though the numbers today are small, perhaps two dozen, there is interest in expanding those programs. There is also increasing interest in visiting schools to talk about industry jobs and careers as well as offering externships so teachers can engage with employers to learn more about the industry.

Apprenticeship Leads the Way

Registered Apprenticeship training will be the primary way to meet the labor supply challenges industry faces to build IIJA projects in Alaska. Registered apprenticeship, the federally preferred IIJA and BEAD method for training and employing a new diverse and inclusive national and state workforce, will be the primary source for supplying the broadband industry with thousands of new high-skill workers through

[15] Alaska Department of Education and Early Development Statistics and Reports, https://education.alaska.gov/data-center#

this decade. Apprenticeship has long been the nucleus of construction industry workforce development, and Alaska has a very strong and expanding apprenticeship foundation. During the last construction boom, 2002-2014, industry doubled the number of apprentices working in construction to help meet labor shortages. There are more than 1,600 trade and telecommunication apprentices today[16], and union and non-union sponsors are on pace to enroll 600 or more annually over the next several years.[17] Expanding apprenticeship training and employment could add more than 3,000 new qualified high-skill workers by 2030. Union and non-union apprentice sponsors are adjusting their federal program standards so more Alaskans can be accepted into training and allowed to work on prevailing rate projects. Sponsors are looking at ways to reach, train, and employ more rural Alaskans closer to where they live to reduce hardships related to leaving home, and ways to accelerate apprenticeship training using skill competency assessments where possible versus the traditional method of advancing apprentices based upon how many hours they attend courses or work on the job.

The Alaska Apprenticeship Training Coordinators Association (AATCA) represents Alaska's Joint Administered Training Committees (JATCs) in Alaska. JATCs are led by union and employer trustees and together offer training in 20 different construction trades and crafts. AATCA members provide training for more than half of the apprentices involved in construction, broadband construction and telecommunications work in the state.

The Associated Building Contractors of Alaska (ABC) supports non-union contractors and offers multi-employer apprenticeship programs for most construction trades. The ABC sponsors several hundred construction apprentices and uses a different method for delivering course-related instruction required by the federal government. The ABC provides apprentices workbooks and on-line training that does not require them to attend training in a shop or classroom setting.

The third largest group of construction trade apprenticeship sponsors are single employers, mostly involved in residential and light construction, and usually employing fewer than five apprentices. AVTEC is a primary provider of course-related instruction with training delivered through workbooks and on-line courses.

Four Large Apprenticeship Programs That Train Workers for In-Demand Broadband Occupations

The Alaska Joint Electrical Apprenticeship Training Trust is the largest provider of registered apprenticeship training for the broadband construction and telecommunications industry sectors. There are more than 300 electrician and outside power line worker apprentices, and 102 in construction and telecommunications training. The trust has fully equipped training centers in Anchorage and Fairbanks. They teach occupational skills and safety, certified crane operator, and CDL license training.

The Operating Engineers Employer Training Trust has more than 400 apprentices in heavy equipment operator, heavy duty mechanics, equipment maintenance, and surveyor training. The Trust has a fully equipped training center in Palmer and Fairbanks. They teach occupational skills and safety, certified crane operator, CDL license training, and pipeline construction.

[16] Alaska Apprenticeships, August 2023, Alaska Department of Labor and Workforce Development, https://akbroadbandworkforce.org/bb_plan_attachments/2023_Final_Apprenticeship_Report.pdf

[17] Based on research, surveys, and interviews with apprenticeship sponsors.

The Alaska Laborers Trust has more than 300 apprentices in training, learning a variety of skilled labor skills needed for civil, general, and pipeline construction. They have fully equipped training centers in Chugiak and Fairbanks. They teach a variety of occupational skills and safety certificate courses.

Alaska Teamsters Employer Training Trust has more than 100 apprentices in two separate occupational training programs, surveying, and construction truck driver. They teach occupational skill and safety courses, truck and bus driver training, CDL license training, ice road and pipeline construction.

Two Companies that Provide Statewide Industry Job Training for Hundreds of Students and Adults
Alaska's largest private for-profit industrial training company is Northern Industrial Training (NIT). NIT offers a wide range of construction-related training courses such as welding, mechanics, heavy equipment operator, carpentry, electrical, and construction management. NIT specializes in commercial truck driver courses and CDL training. NIT also assists companies and students with obtaining grants and tuition vouchers to attend courses and works closely with the Alaska military and transitioning soldiers and Veterans. NIT has training locations in Palmer, Anchorage, Kenai, and Fairbanks, and they deliver mobile training in rural communities to support community hire on local construction projects.

Alaska Works Partnership, Inc. (AWP) is the largest nonprofit construction industry pre-apprentice trainer in Alaska and offers a wide range of entry level and basic skills construction and broadband construction through unique long running programs. AWP has training centers in Anchorage, Palmer, and Fairbanks. Their instructors travel to rural locations to provide training to build community workforce skills. AWP offers free training through Alaska Construction Academy courses, Helmets to Hardhats courses for Veterans and Transitioning Service Members, and for girls and women through their Women in the Trades program. Individuals who complete AWP course are eligible to apply for and enter registered apprenticeship programs.

Summary
The Plan goal of training 1,000 individuals for broadband construction, deployment, and operations -in light of a 3,000 worker need for broadband and other cross-industry jobs - is challenging but achievable. NTIA "Internet for All" guidance has helped the Alaska Broadband Office and planning associates focus on creating a new industry sector talent pipeline built upon Alaska's long-established and productive private and public sector construction workforce development system. Plugging into this existing and scalable construction system gives the telecommunications industry a conduit to connect with Alaska's existing outreach, education, training, and support assets in one concerted effort aimed at filling projected labor gaps. Alaska understands that workforce development does not happen automatically but requires planning and implementation of specific actions and methods. NTIA's directives to build a more diverse, inclusive, equitable, and qualified labor force through BEAD-funded projects gives Alaska the opportunity to tap into a rich vein of underrepresented talent including women, graduating students, rural Alaskans, individuals with disabilities, those in the criminal justice system, unemployed and underemployed workers, as well as workers seeking better jobs. Plan strategies and action steps will draw them into the talent pipeline and equip them with the tools they need to fill industry jobs and give them skills that last a lifetime.