



The Wireless Infrastructure Association

Comments related to California Public Utilities Commission State of California's Broadband Equity, Access, and Deployment Initial Proposal Volume II

December 2, 2023

The Wireless Infrastructure Association (WIA)

WIA appreciates the opportunity to submit comments on the California Public Utilities Commission (CPUC) – Broadband Equity, Access, and Deployment (BEAD) Initial Proposal Volume II.

WIA represents the companies that make up the wireless broadband infrastructure ecosystem in the United States. Our members are the businesses that develop, build, own, and operate that nation's wireless broadband infrastructure. WIA member companies include wireless carriers, infrastructure providers, and professional services firms that collectively own and operate more than 135,000 telecommunications facilities around the globe.

WIA is offering its technical and industry expertise to states as they develop their broadband plan for the BEAD funding and its specific plans for broadband workforce training and education. The overriding vision of the WIA's broadband workforce initiative is to attract new students and workers to the broadband workforce, build a diverse and highly-skilled broadband workforce that encompasses the fundamental knowledge base applicable to a rapidly changing technology landscape, develop specific occupation credentials that are relevant to the changing job demands and criteria, and provide pre-apprentice and apprentice training that result in quality, sustainable broadband jobs as identified by industry demand.

WIA comments on Workforce Readiness (Requirement 12)

WIA agrees with the CPUC's statement in section 9.1

"California's success in executing broadband deployments under the Broadband Equity, Access, and Deployment (BEAD) Program will require unprecedented collaboration across the public, private, and nonprofit sectors, especially with regard to fostering a well-trained and diverse broadband construction workforce."

We note the data on page 67 highlighted that California lost 10,200 jobs in broadband-related industries over the past 5 years. According to the analysis, this is greater than the national average for the same period (6% vs 4%). Further stratification shows there have been even

more significant reductions in Wireless Telecom Carrier roles (-35% in Northern California, -12% in Central California, -25% in Southern California).

California is investing in workforce training, as evidenced by the state's annual spending on both public and private programs.

"Training for broadband deployment happens in many ways, with several partnership configurations and program structures. The State spends over \$6 billion annually on workforce training programs overall, and programs, both public and private, take many forms. The State wants to recognize that many successful programs have also been established in partnership with unions and employers, such as the partnership between the Communication Workers of America and Chabot-Las Positas Community College District to utilize a Fiber Technician Apprenticeship Program to increase their workforce. In addition, privately run programs such as the certified fiber optic training program at The Fiber School in San Francisco are also bolstering the State workforce. However, the demand for trained workers likely exceeds what any one sector could meet on their own, and developing a diverse and highly skilled workforce to meet the needs above requires a coordinated effort across the public and private sector."

WIA also believes that demand for trained workers will likely exceed what any one sector could meet on their own. We have a comprehensive set of programs with solid performance results that can augment the work California is already doing to build its workforce. Together with WIA, California can prepare for the successful deployment of its BEAD program.

WIA supports establishing a statewide broadband ecosystem as the best means for addressing the skills gap and meeting the broadband industry's immediate and long-term workforce needs. WIA can support California's workforce development strategy to ensure a ready, highly skilled, and diverse workforce as follows:

WIA Offers to Complement California's Broadband Workforce Strategy

WIA offers technical and industry expertise to the states and U.S. Territories as they develop their overall broadband plan for the BEAD funding, including specific plans for broadband workforce training and education. The overriding vision of the WIA's broadband workforce initiative is to attract new students and workers to the broadband workforce, build a diverse and highly-skilled broadband workforce that encompasses the fundamental knowledge base applicable to a rapidly changing technology landscape, develop specific occupation credentials that are relevant to the changing job demands and criteria, and provide pre-apprentice and apprentice training that result in quality, sustainable broadband jobs that support reliable, robust, and resilient broadband networks.

Establishment of Broadband Sector Partnerships

WIA is the **U.S. Department of Labor's National Telecommunications Industry Intermediary contractor** and can partner with California to build a statewide broadband workforce ecosystem that includes the critical connection between employers, academia, and government. In this role, WIA can offer California its expertise and experience in forming such a central convening entity that allows regional partnerships to be forged while eliminating duplicate efforts. Doing so will enable regions to complement strengths and mitigate weaknesses, share assets and burdens, and distribute best practices to stakeholders throughout the state.

The Role of the Industry Intermediary (WIA)

As the National Telecommunications Industry Intermediary, WIA brings vast expertise and experience to carry out primary functions:

- The Intermediary will work to identify the workforce required to meet the deployment needs.
- The Intermediary would design and implement outreach initiatives to raise awareness of the industry and career opportunities.
- The Intermediary will work to identify the skills gaps needed to meet the deployment needs.
- The Intermediary will align high-quality work-based learning (WBL) programs with state education-to-occupation pathway priorities.
- The Intermediary will translate the industry demand for skilled workforce and competencies and map that to existing and new educational degree and non-degree programs.
- The Intermediary will bring key industry influencers and employers to the schools and colleges to establish educational programs that meet the industry's need for classroom and hands-on training.
- The Intermediary will address diversity needs head-on through careful attention to each step of the pipeline from community to advancing in good-paying job and career pathway for growth opportunities.
- The Intermediary will be convener and work with different stakeholder groups – students, teachers, unions, employers, and government agencies that need to be connected and work together with shared responsibilities.

To solve workforce gaps, California must deliver the right talent at the right capacity and at the right time. The creation of a Broadband and 5G Sector Partnership can accomplish this objective. This proposed Sector Partnership would be led by an industry intermediary that understands the industry, education, and government – and the mandate to remain technology-neutral.

Training and Career Pipelines

One of the most significant barriers to large-scale broadband and 5G infrastructure deployment is the lack of labor, thus creating the need for education and training programs.

The primary focus of the partnership is to launch broadband workforce, education, training, and career pipeline programs to meet the state's broadband deployment needs universal service goals and to bridge the digital divide. WIA is uniquely suited to help California enhance its broadband education, training, and apprenticeship programs.

WIA is the leading developer of training and curriculum for the broadband industry, offering 40+ courses through its **Telecommunications Education Center (TEC)** tailored to the training, education, and professional development needs of the industry. Further, WIA's **Broadband & 5G Readiness Program** is a first-of-its-kind program that provides industry-approved curriculum on the design and deployment of 5G and broadband infrastructure. The fast-track training is

packaged for companies and education institutions to attract and train candidates for a career in Broadband.

WIA is also the recipient of a four-year grant from the U.S. Department of Labor's **Closing the Skills Gap program**. The project work places emphasis on building training programs with community colleges and placing graduates with apprenticeships with TIRAP participating employers.

Further, **WIA is the National Sponsor of the Telecommunications Industry Registered Apprenticeship Program (TIRAP)**, as awarded by the US Department of Labor. WIA can partner with Washington State to enhance its existing apprenticeship program. Since 2017, the TIRAP program has had more than 4,300 apprentices from more than 101 employers nationwide. The suite of occupations—currently numbering 15 and continuing to grow—focus on high-growth, high-demand occupations, including fiber optic technicians, broadband technicians, and small cell and in-building technicians that are crucial to broadband deployment. These are intended to meet employers' occupational, and skills development needs to create an in-demand workforce ready to support the design, build, and maintenance of telecommunications infrastructure. Re-skilling, upskilling through training, and TIRAP-defined career paths in a growing number of critical occupations enable accelerated local economic growth through good jobs for current and future employment opportunities for the unrepresented and underrepresented population.

The education, training, and apprenticeship programs are part of a professional pipeline that allows for continued employment and growth and to meet the broadband deployment needs.

Digital Equity, Diversity, and Inclusion

WIA has long been committed to promoting inclusion, diversity, and outreach to underserved and underrepresented populations including people of color, veterans, women, people with disabilities, and workers aged 50+. The funding provided by BEAD allows for an opportunity to maximize multiple access points to assessment, wraparound support for trainees/apprentices, preparation in pre-apprenticeship programs, and a broader array of apprenticeship occupations reflecting the breadth of the telecommunications industry.

WIA has developed effective outreach strategies for encouraging private and public sector initiatives to promote apprenticeship, including multiple MSI Apprenticeship Accelerators. WIA is currently working with MSIs and industry partners in Alabama, the District of Columbia, Florida, Georgia, Maryland, New Mexico, Ohio, Puerto Rico, Tennessee, and Virginia. WIA has developed relationships with senior leadership at 15 Historically Black Colleges and Universities (HBCUs) for developing apprenticeship programs. WIA has partnered with Virginia State University to create a consortium of HBCUs for this purpose. The same ideas can be extended to MSIs.

In addition, WIA's annual Supplier Diversity Summit (held during its annual convention) advocates and encourages the inclusion of veteran, women, and minority-owned businesses in the wireless broadband infrastructure industry. Procurement officers have an opportunity to participate in one-on-one matchmaking meetings with diverse suppliers. Each procurement professional will have 10+ meetings with potential suppliers – adding up to hundreds of meetings over the year.

WIA can offer California its expertise and experience in supporting digital equity, diversity, and inclusion throughout the telecommunications sector.

Model Program -- Ohio Broadband and 5G Sector Partnership

As a model reference, **WIA is leading the Broadband and 5G Sector Partnership in Ohio.** In March 2022, Ohio Lt. Governor Husted announced the establishment of the [Ohio Broadband & 5G Sector Partnership](#). The Sector Partnership is “housed” at The Ohio State University and is led by WIA as the industry intermediary. WIA provides insight into the telecommunications skills gap and industry needs and works with the state and academic community to align with local priorities. The Sector Partnership works to design and distribute broadband curricula and training programs across the state and promotes career awareness to supply the industry with a skilled workforce – utilizing WIA’s industry-approved broadband curriculum and TIRAP expertise.

Since the partnership was launched, Ohio has announced 11 new programs across the state. These programs are located at career centers, colleges, and universities, and will prepare participants for a variety of jobs in the telecommunications industry. The Sector Partnership will continue to lead the development and distribution of additional education and training programs across the state. Watch a brief video celebrating the 1-year anniversary of the [Ohio Broadband & 5G Sector Partnership](#) with WIA and Ohio State University. Ohio’s Broadband and 5G Workforce Strategy Report is also available: [Broadband & 5G Workforce Strategy Report](#).

NTIA Workforce Planning Guide for States

The NTIA BEAD guidelines for workforce development are based on years of successful workforce practice around the country. The NTIA handbook on workforce development plans includes, on page 47, a “[Best Practices Checklist for Telecommunications Training and Workforce Development Programs](#)” Guide. The top three priorities it lists are:

1. "Industry-led sector partnership"
2. "Employer-led curriculum development"
3. "Utilize proven earn-and-learn models like Registered Apprenticeships."

The workforce program WIA proposes is led by these three priorities referenced in the handbook and refined and improved from our experience in Ohio with its broadband/5G workforce program.

Thus, the CPUC can be reasonably confident that the implementation of such programs and strategies will be accepted and approved by the NTIA.

WIA Concluding Comments

WIA would like to commend the CPUC for completing their Initial Proposal Volume II submission. WIA stands ready to continue to partner and provide expertise in the areas we outlined. We appreciate the opportunity to submit these comments, and we appreciate your consideration.



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