



July 1, 2025

Secretary Lori Chavez-DeRemer
U.S. Department of Labor
200 Constitution Ave. NW
Washington, DC 20210

Re: Recommendation for Workforce Development

Dear Secretary Chavez-DeRemer:

The International Association of Sheet Metal, Air, Rail and Transportation Workers (SMART) and the Sheet Metal and Air Conditioning Contractors' National Association (SMACNA) appreciate the opportunity to share our recommendations as the Department of Labor collaborates with the Department of Education and the Department of Commerce in reviewing Federal workforce development programs and creating a report on strategies to help American workers.

SMART and SMACNA jointly sponsor a national training fund, the International Training Institute for the Sheet Metal and Air Conditioning Industry (ITI), which works in conjunction with our 148 local joint apprenticeship and training committees (JATCs) to provide high-quality training to apprentices throughout the country.¹ The vast majority of the 148 SMART-SMACNA JATCs were established in the early 1900s. Our JATCs have a proven track record of success sustained over more than 100 years of preparing sheet metal workers to meet the evolving demands for new skills in a changing economy. JATCs in the sheet metal industry train apprentices to perform a broad range of technology-dominated work functions that are in great demand in the modern American economy, such as:

- Maintaining and servicing data centers with cooling systems;
- “Building information modeling,” which is a computer software data model that creates a parametric digital representation of a facility, for custom fabrication of duct;
- Installation of duct and units on heating, ventilating, and air conditioning (HVAC) systems;
- Ventilation verification for indoor air quality;
- Installation and testing of fire and smoke control systems;
- Testing, adjusting, and balancing of HVAC equipment and duct work;

¹ The ITI serves many functions that assist local JATCs, including 50 years of curriculum development that anticipates the need for training and re-training as technology evolves.

- Architectural sheet metal work on energy-efficient and fire-resistant building envelopes;
- Construction of critical environment spaces in battery plants and semiconductor or “chips” plants; and
- Nuclear welding and fabrication

These JATCs prepare workers to meet all challenges faced on job sites, regardless of the complexity of the jobs, by providing training that replicates on-the-job experiences before apprentices are referred to a construction site.

Summary of Recommendations

- SMART and SMACNA encourage the DOL to refrain from undertaking regulatory changes that would threaten to “disrupt” or “displace” registered apprenticeship programs (RAPs) as suppliers for many generations of the vast majority of highly skilled workers in the construction industry. At least 74% of construction apprentices are trained in JATCs.
- SMART and SMACNA encourage the administration to support a definite pathway from pre-apprenticeship and career and technical education (CTE) programs to an identified RAP to ensure that classroom instruction and/or “work-based learning” lead to development of marketable skills in an occupation.
- SMART and SMACNA support inclusion of “qualified postsecondary credentialing” and apprenticeship expenses as “qualified education expenses” under section 529 in H. R. 1151, *Freedom to Invest in Tomorrow’s Workforce Act*, to aid the next generation of HVAC technicians to jumpstart their careers.

Recommendations

A. Registered Apprenticeship Programs with High Graduation Rates in the Construction Industry are the Gold Standard

SMART and SMACNA urge the DOL to avoid making regulatory changes that would “disrupt” or “displace” RAPs as suppliers of the vast majority of highly skilled workers in the construction industry. In the past, the DOL has recognized that RAPs are “more widespread and well-established in the construction sector than in any other sector” and that “there is no need to take the risk, whatever the magnitude, of disrupting or displacing registered construction programs.”² If the DOL finds that it is advisable to initiate regulatory changes to “expand

² Final Rule, Apprenticeship Programs, Labor Standards for Registration, Amendment of Regulations, 85 Fed.Reg. 14294, 14298 (March 11, 2020).

apprenticeships to *new* industry sectors and occupations,”³ we encourage the DOL to refrain from experimenting with regulation of construction RAPs, which are widely recognized as meeting the gold standard in registered apprenticeship.

JATCs in the construction sector have collectively invested billions of dollars in costly equipment and in construction and maintenance of state-of-the-art facilities and invest nearly \$2 billion annually to maintain, upgrade, and operate programs. For the sheet metal industry alone, in 2023, JATCs co-sponsored by SMACNA contractors and SMART, invested more than \$73 million combined dollars at the national and local level in sheet metal training programs. The start-up costs of RAPs in the construction sector are staggering. The state-of-the-art facilities that exist in SMART-SMACNA JATCs in the construction sector represent billions of dollars of investment since their inception generations ago.

B. SMART and SMACNA Encourage the Administration to Support a Definite Pathway from Pre-Apprenticeship or CTE Programs to an Identified RAP to Ensure that Classroom Instruction Leads to Development of Marketable Skills in an Occupation

Paid on-the-job training (OJT) is the bedrock of registered apprenticeship. Under DOL standards, an occupation is not “apprenticeable” unless it “involve(s) skills that are customarily learned in a practical way through a structured, systematic program of on-the-job supervised learning.”⁴ There is, thus, no registered apprenticeship without employment relationships between apprentices and employers. Classroom training or “related instruction” is designed to supplement paid OJT, not to supplant it. As stated in the DOL’s definition of apprenticeable occupation, such occupations “require related instruction to supplement the on-the-job learning.”⁵

SMART and SMACNA recommend that CTE and pre-apprenticeship programs have a documented partnership with at least one RAP to ensure that high school and post-secondary students are offered the opportunity to develop marketable skills in the fields in which they receive related instructions. Unlike registered apprentices, participants in CTE and/or pre-apprenticeship programs typically lack the opportunity to establish employer-employee relationships with employers during their programs. Without the benefit of paid OJT from an employer participating in a RAP after completion of a pre-apprenticeship or CTE program, the vast majority of graduates of these programs will have no relevant work experience in their chosen field. A documented partnership between pre-apprenticeship or CTE programs and at least one RAP is indispensable to creating a viable pathway from classroom or “work based

³ *Id.*: emphasis in original.

⁴ 29 CFR 29.4(a)

⁵ 29 CFR 29.4(d)

learning” (which, as described below, may entail nothing more than job shadowing or simulations) for graduates of pre-apprenticeship or CTE programs.

1. “Work-Based Learning”(WBL) Provided by CTE Programs and “On-the-Job Training” are Entirely Different

WBL and OJT serve entirely different functions, with only the latter necessarily requiring payment of wages. Registered apprenticeship standards have always recognized OJT as paid employment, with progressive increases as the apprentice masters the trade or occupation. On the other hand, the definition of WBL in Carl D. Perkins Career and Technical Education Act, as amended by the Strengthening Career and Technical Education for the 21st Century Act,⁶ and its implementing regulations, broadly encompass activities such as simulations, for which no payment is contemplated.⁷

The term “work-based learning” means sustained interactions with industry or community professionals in real workplace settings, **to the extent practicable, or simulated environments** at an educational institution that fosters in-depth, firsthand engagement with the tasks required in a given career field, that are aligned to curriculum and instruction.

The definition fully recognizes that it may not be “practicable” to conduct WBL in “real workplace settings.” In practice, many school districts offer other “lighter-touch opportunities for student exposure to employers, jobs, and careers, such as: one-time job shadowing experiences; career fairs; project-based learning, in which students complete a short-term project for employers as part of independent study or schoolwork; or service-based learning, in which students volunteer for organizations, typically for only a set number of hours per week or per school semester.”⁸

2. There are Significant Barriers to Obtaining Even Minimal Amounts of Paid Work for High School Students in CTE Programs

There are significant barriers in CTE programs to obtaining even minimal amounts of paid work that will enable youth to form concrete ideas about future careers and gain marketable experience. These barriers are well-documented in a 2022 GAO report⁹ and in the 63 public comments submitted in response to a Department of Education Request for Information (RFI). The RFI asked stakeholders a series of questions, including: “What barriers have you seen in your State or community to helping 16- and 17-year-old students

⁶ 20 U.S.C. 2301 *et seq.*

⁷ 20 U.S.C. 2302(55)(emphasis added).

⁸ Comments of Jobs for the Future, Inc., ED-2020-OCTAE-0176-0038, in response to Department of Education, *Request for Information on Expanding Work-Based Learning Opportunities for Youth*, 85 Fed.Reg. 77,456 (Dec. 2, 2020).

⁹ GAO-22-104544, Career and Technical Education, Perspectives on Program Strategies and Challenges (March 2022).

gain a WBL experience?”¹⁰ Key impediments to employment, as stated in responses to the RFI, are:¹¹

- Employers believe that the services rendered by students would not be sufficiently valuable to be paid work;
- The insurance costs – including workers compensation insurance – are a deterrent;
- Students lack transportation to travel to WBL; and
- Lack of certified work-based learning coordinators.¹²

Regarding lack of interest on the part of potential employers, one commenter stated that a “critical barrier” for “states and communities we work with to helping 16 and 17-year-old students gain WBL experience is partnering with employers and convincing them to partner with educational institutions to engage in deeper WBL experiences such as career training (i.e., youth apprenticeships and paid internships) for youth under 18-year-old.”¹³ The commenter further stated that, “While employers are more willing to provide career awareness opportunities such as serving as guest speakers, job shadows, and providing industry tours, employers generally have more reservations in developing youth apprenticeships and paid internships for youth under 18. In these instances, employers often express concerns relating to liability and insurance for youth.”

3. Paid Work for 63% of CTE Students at the Post-Secondary Level is “Unrelated” to their Field of Study

¹⁰ RFI, 85 Fed.Reg. at 77458.

¹¹ Other impediments included in responses to the RFI are: employers are not knowledgeable about the work that minors are legally allowed to perform and do not want to risk liability for violations of restrictions on youth employment; and insufficient time during the students’ schedules. Minnesota Department of Education stated in its comments, ED-2020-OCTAE-0176-0027, that the “most common barrier identified by school districts is difficulty in finding time within students’ busy schedules to allow for work-based learning.” In the construction industry, another barrier to WBL is that the height of the construction season does not coincide with the academic year, particularly in areas of the country with cold climates from November through March.

¹² A further barrier to after-school, unpaid WBL is that “low-income families may rely on their high-school age children to contribute to their household income.” NAF’s comments, ED-2020-OCTAE-0176-0059. See NAF’s website for information about its mission: *****naf.org/about/our-approach

¹³ Comments of WestEd, ED-2020-OCTAE-0176-0035. See comments, ED-2020-OCTAE-0176-0039, of the Mississippi Department of Education, Office of Career and Technical Education (CTE) and Workforce Development: “Employer won’t hire students under the age of 18.” See also, comments of Project Lead the Way, ED-2020-OCTAE-0176-0034: “In working with schools and industry across the country, PLTW sees roadblocks for students under 18 years old seeking work-based learning opportunities. Many industry employers question younger students’ maturity to work in these positions, and insurance issues often arise or are perceived to arise when employing minors.”

According to a 2025 GAO report,¹⁴ about 63% of CTE students at the post-secondary level “worked in jobs **unrelated** to their field of study.” According to the report, “some college students receive subsidized wages through federal work study that help finance their education,” but contrary to Department of Education regulations, most work experience does not complement classroom study:

Education regulations state that federal work study should complement and reinforce the student’s educational or career goals to the maximum extent practicable. However, Education officials said that this requirement is very broad. For example, they said learning work habits such as timely arrival could meet the requirement.

In light of the difficulties in matching CTE students at the post-secondary level to paid employment related to their studies, it is unrealistic to expect that CTE programs who expose minors to skilled trades would have success in attracting employers to provide 16 and 17-year-olds with paid employment in their chosen fields.

C. SMART and SMACNA Support the Use of Section 529 Savings Accounts to Enable the Next Generation of Workers to Succeed in HVAC Careers

SMART and SMACNA support expansion of the definition of “qualified education expenses” in H. R. 1151, *Freedom to Invest in Tomorrow’s Workforce Act*, to include expenses for “qualified postsecondary credentialing” expenses, including expenses related to “postsecondary employment credentials.” By allowing these section 529 savings accounts to be used to earn employment credentials from RAPs and/or a program that is accredited¹⁵ by a nationally-recognized accrediting agency – the “Institute for Credentialing Excellence, the National Commission on Certifying Agencies, or the American National Standards Institute” – Congress would expand the universe of options available to families who are exploring alternatives to the traditional four-year college path.

In addition to creating diverse opportunities for new entrants to the workforce for training and credentialing, H.R. 1151 promotes the use of independent third-party accreditation as an accountability mechanism to ensure the quality and legitimacy of certifying bodies¹⁶ that offer

¹⁴ GAO-25-107040, Apprenticeship: Earn-And-Learn Opportunities Can Benefit Workers and Employers (published Apr 28, 2025).

¹⁵ Accreditation focuses upon the fairness, validity, and reliability of an examination; completion of the scientific analysis of valid competencies that are needed to be successful on a particular job; examiner qualifications; security measures in place to ensure the confidentiality of testing materials; the independence of the certification process; and recertification.

¹⁶ A certification body in the field of personnel certification receives accreditation from an accrediting agency; an accrediting agency evaluates personnel certification bodies to ensure that their processes meet the international standard, ISO/IEC 17024: *Conformity assessment-requirements for bodies operating certification of persons*.

personnel credentials to workers. Accreditation assures the consuming public and regulatory bodies that certified personnel are competent. The DOL has long recognized the great value of third-party certification by a nationally-recognized accrediting agency,¹⁷ in ensuring the legitimacy of credentials of individuals who complete training programs. Personnel certification indicates to a consumer of services, a building owner, or government agency that a worker has demonstrated to a third-party certifier that he or she possesses the skill and knowledge to perform an occupation safely and competently.

In the sheet metal industry, further expansion of third-party certifications by accredited certification bodies will ensure that the consuming public and governmental bodies can rely on the qualifications of certified HVAC technicians to promote indoor air quality, fire life safety, and infection control. The National Energy Management Institute Committee (NEMIC), which was jointly established in 1981 by SMART and SMACNA, has as its key mission, affording trainees – apprentices and journeypersons – the opportunity to obtain third-party certification of their skills through the International Certification Board/Testing, Adjusting and Balancing Bureau (ICB and TABB). The validity of credentials of technicians in the fields in which ICB/TABB offers certification is critical in light of the serious safety concerns presented by fire and smoke risks and poor indoor air quality to the consuming public. Without third-party accountability mechanisms, occupants of private and public buildings, including schools, hospitals, assisted living facilities, and housing, lack assurances that they are safe from inhalation of airborne contaminants and smoke.

Thank you for the opportunity to submit our recommendations. Our SMART, SMACNA, ITI, and NEMIC staff are available to meet with your office to further discuss apprenticeship, pre-apprenticeship, CTE, and credentialing.



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Respectfully submitted,



Aaron Hilger
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¹⁷ OSHA recognized the importance of obtaining accreditation from a “nationally recognized accrediting agency” in its adoption of the requirement that crane operators obtain certification from an accredited third-party certification body. Final Rule, Crane and Derricks, 75 Fed. Reg. 47906 (Aug. 9, 2010).