

**US House Subcommittee on Innovation, Entrepreneurship, and Workforce Development
Written Testimony of Gary Arnold on Registered Apprenticeship Programs
Business Manager of Denver Pipefitters UA Local #208**

Chairman Crow, Ranking Member Kim, and Members of the Subcommittee:

Thank you for the opportunity to testify on the importance of Registered Apprenticeship Programs and the role they play in workforce development.

I will begin by sharing my experience both completing a registered apprenticeship program and my professional career working as an Instructor, Training Director, and Trustee. I will then cover details on how our program operates, contractor/employer participation, industry and individual benefits, and financial benefits.

I began my career as a Pipe Tradesman, an entry-level position, in October 2002. In April 2003, I was fortunate to be accepted into the United Association of Union Plumbers and Pipefitters (UA) Denver Pipefitters Local 208 Joint Apprenticeship Training Committee's (JATC) 5-year registered apprenticeship program, as a Pipefitter Apprentice. The valuable career training I received through On-the-Job-Training (OJT) coupled with the related instruction received in the classroom/hands-on labs prepared me for a lifelong successful career.

During my 5-year apprenticeship I was humbly awarded the following: Top apprentice in my class for my 2nd, 3rd, 4th, and 5th years, Top Completion Score at the conclusion of my apprenticeship, and 1st place at the United Association's annual International Apprenticeship Contest (US & Canada), Welder Division, 2007. I successfully completed my apprenticeship in May 2008.

From September 2008 – May 2015, I had the pleasure of serving as an Instructor providing classroom and hands-on training to 3rd, 4th, and 5th year apprentices. In October 2008, I was appointed to serve as a Labor Trustee on our Joint Apprenticeship Training Committee (JATC). Our JATC is comprised of five (5) Management Trustees and five (5) Labor Trustees. Together the joint committee oversees both the operation of our registered apprenticeship program and our ERISA governed training trust fund.

In April of 2015, I was hired as the Head Training Director for Denver Pipefitters Local 208 JATC overseeing the day-to-day operations of our registered apprenticeship program along with our journey person continuing education and worker certification programs. I served in that role until I was elected Business Manager of Denver Pipefitters Local 208 in January 2017.

Registered Apprenticeship Programs

Registered Apprenticeship Programs, in the simplest terms, provide workers career development opportunities by pairing On-the-Job-Training with more traditional Classroom Related Instruction, guaranteeing apprentices possess the required skills and knowledge to be successful in a particular field. The On-the-Job-Training (OJT) is conducted by placing

apprentices under the direct supervision of a qualified journeyman that can not only demonstrate proper job tasks and duties, but also ensure that all job tasks are performed safely to protect against worker injuries. This allows apprentices to gain valuable firsthand experience safely performing the required tasks they will encounter in their chosen field.

The supplemental Related Instruction received in the classroom and hands-on labs allows apprentices an in-depth education on the various tasks they are required to perform on jobsites. For example, Pipefitters are often tasked with installing Steam Heating Systems. To ensure individuals are properly trained to correctly install steam piping they need to understand how the entire system functions including but not limited to how a properly operating boiler produces steam, how condensate traps function, and how condensate is returned to the boiler.

Another example would be the mathematical formulas used to calculate piping offsets. While the installation requires proper cutting and joining techniques relying on more physical skillsets, a Pipefitter must first understand how to determine proper piping dimensions using trigonometry formulas. The Related Instruction also allows apprentices a safe space to make mistakes without endangering the safety of other workers or equipment.

The average person learns a lot more from their mistakes than successes. Having qualified instructors coaching apprentices through their mistakes to learn proper techniques is extremely valuable. This model has the added benefit of matching a worker's skillset to their earning ability. Apprentices "earn while you learn" and are compensated a specific percentage of journeyman wages and receive increases as they complete requirements of the apprenticeship program. Both the individual and their employer are rewarded with either additional income or a more skilled employee.

Benefits to Contractors and Employers

The benefits of the multi-employer model that we utilize at Denver Pipefitters JATC are multifaceted and include the increased ability to support contractors and employers of all sizes. Because the multi-employer apprenticeship model is funded by a small hourly training contribution of \$0.80 per manhour, the financial burden individual contractors and employers are responsible for covering is in direct ratio to their size and the amount of work their employees are performing. This places the greatest contributions on contractors and employers that employ the largest number of workers with the greatest workload. Most importantly, by creating a funding source that considers the number of manhours a specific contractor is performing, it creates opportunities for the smallest of contractors and employers to have the same access to robust training programs as larger shops.

Denver Pipefitters JATC enjoys an average annual operating budget of approximately \$1.8m to conduct apprenticeship and journeyman continuing education. This large operating budget allows for the best mechanical/pipefitting/HVAC training in Colorado to be provided with full access to contractors and employers with as few as 2 or 3 employees.

Denver Pipefitters Local 208 has approximately 80 signatory employers. Some are large as 500+ employees, but almost 80% of our employers have 30 or fewer employees. Multiple contractors even have fewer than 10 employees. Utilizing this model provides the best training with the most access. Included benefits of the multi-employer model are increased completion rates for individual workers due to the ability to shift their apprenticeship employment (OJT) from one contractor or employer to another based on their specific workload. Due to the somewhat cyclical nature of construction, contractors and employers have varied workforce needs depending on the number of projects they have secured. Using the multi-employer model allows individuals completing their apprenticeship the chance to continue their progress towards completion instead of interrupting or stopping due to a reduction in a single employer's workload.

Workforce shortages in the construction industry are well documented with markets already facing significant shortages of qualified workers. In a 2017 study by Colorado State University, the Colorado construction industry was forecasted to need an additional 56,000 workers by 2025. These are only new jobs, and do not account for retirees. Some economists believe that including job openings from existing worker retirement could add the need for another 40,000 workers.

I would also highlight that workforce shortages will hurt our small contractors and employers the most, as in most economic situations the large firms will have the resources available to offer the most lucrative compensation packages leaving small companies without the workers they need to succeed.

The recent passage of the bipartisan infrastructure law will, without a doubt, lead to a massive increase in the need for a qualified construction workforce. This presents an opportunity almost unimaginable for registered apprenticeship programs. If done properly, registered apprenticeship programs will not only provide thousands of great career pathways to American workers but position our country for generations of success.

Worker Benefits, Increased Accessibility, and Industry Driven Focus

Traditional education and career development is extremely valuable to many American workers, but it is not without flaws. The fact that registered apprenticeship programs eliminate student loan debt to the individual worker improves outcomes tremendously for both the worker and their employer. Regardless of an individual's background or personal financial hardship they are positioned to successfully complete the training needed for a successful lifelong career. Since apprentices receive the majority of their training on the job where they are compensated, they not only gain relief from tuition payments but also enjoy earning a wage directly from their industry of choice while they learn the skills necessary for a long and successful career.

As noted earlier, the Denver Pipefitters Local JATC is comprised of five (5) management representatives and five (5) labor representatives. It is worth noting that all members of the

Joint Apprenticeship Training Committee work directly in the construction field. Since program oversight and operational direction are designed and maintained by construction professionals on either the management or field labor side, Registered Apprenticeship Programs ensure that trainees are receiving exactly what the industry needs at any given time. This includes the benefit of being able to quickly adapt training curriculums for apprentices to capture any updates or changes in equipment, technologies, or standard practices.

In contrast, the typical educational pathway involves a training institution that provides training to workers, and then provides those qualified candidates to employers after program completion. Often, "Industry Advisory Boards" are created to inform the training institution. This naturally creates, at a minimum, a delay in responding to industry needs or in a worst-case scenario training taking place that is no longer needed. To remain as efficient as possible and to ensure individuals are not faced with unnecessary financial, time, and resource obligations, industry voices must remain at the forefront of curriculum development and implementation.

The bipartisan infrastructure law, which includes Prevailing Wage and Apprenticeship Utilization requirements, will make tremendous progress towards securing the needed workforce in all areas of our country. Using Registered Apprenticeship Programs to develop our future workers will not only help our county rebuild badly needed infrastructure projects, but also guarantee our many small businesses have access to the trained and qualified employees they need to succeed.

Thank you for your time and for allowing me to discuss the important role Registered Apprenticeship Programs play in workforce development. There are many benefits to using the registered apprenticeship training model for both American workers and companies, but we must continue to hold these programs to high standards. Registered Apprenticeship Programs are required to adhere to 29 CFR 29 & 30, which is critical to securing positive outcomes for both workers and employers. I believe the Department of Labor's Office of Apprenticeship Training does a great job educating program sponsors and enforcing these regulations. Without these high standards I can confidently say apprenticeship training models would not enjoy the many successful outcomes for thousands of middle-class Americans and their employers.