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SKILL, UPSKILL, AND RESKILL: ANALYZING NEW INVESTMENTS IN WORKFORCE DEVELOPMENT

HEARING

BEFORE THE

SUBCOMMITTEE ON INNOVATION, ENTREPRENEURSHIP, AND WORKFORCE DEVELOPMENT

OF THE

COMMITTEE ON SMALL BUSINESS
UNITED STATES
HOUSE OF REPRESENTATIVES

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SKILL, UPSKILL, AND RESKILL: ANALYZING NEW INVESTMENTS IN WORKFORCE DEVELOPMENT

THURSDAY, MARCH 31, 2022

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SMALL BUSINESS,
SUBCOMMITTEE ON INNOVATION, ENTREPRENEURSHIP,
AND WORKFORCE DEVELOPMENT,
Washington, DC.

The Subcommittee met, pursuant to call, at 10:04 a.m., in Room 2360, Rayburn House Office Building, Hon. Jason Crow [chairman of the Subcommittee] presiding.

Present: Representatives Crow, Davids, Houlahan, Phillips, Young Kim, Williams, Tenney, and Garbarino.

Chairman CROW. Good morning. I call this hearing to order.

Without objection, the Chair is authorized to declare a recess at any time.

I would like to begin by noting some important requirements. Standing House and Committee rules and practice will continue to apply during hybrid proceedings. All Members are reminded that they are expected to adhere to these rules, including decorum.

House regulations require Members to be visible through a video connection throughout the proceeding, so please keep your cameras on. Also, please remember to remain muted until you are recognized to minimize background noise.

In the event a Member encounters technical issues that prevent them from being recognized for their questioning, I will move to the next available Member of the same party and I will recognize that Member at the next appropriate time slot provided they have returned to the proceeding.

The onset of the COVID-19 pandemic created one of the most significant upheavals in the history of the American labor force. Between February and April of 2020, the U.S. economy shut 22 million jobs and the unemployment rate skyrocketed from 3.5 percent to 14.8 percent. Congress stepped in to pass the CARES Act, stopped the economy's freefall and provided support throughout the pandemic. This quick action, combined with the American Rescue Plan, paved the way for one of the fastest recoveries from a recession in our nation's history.

In 2021, the U.S. economy added 6.6 million jobs, the most on record. Considering the deep wounds of the pandemic, this is a monumental achievement. While we have recovered most of the jobs lost during the pandemic, our country is in the middle of an

ongoing labor shortage. This shortage is complex in its origin and we cannot attribute it to any one factor. The pandemic upended life as we know it. It slowed legal immigration, caused a wave of early retirements, and forced many to exit the job market out of concerns for their health or family obligations. All of these factors have contributed to the shortage we are seeing today.

The labor shortage impacts all businesses, but it particularly concerns our nation's entrepreneurs. But there is more to this than appear lack of workers. For many small firms, a general lack of applicants is not the problem. Instead, they are not finding qualified candidates, workers with the proper skills to do the job and do it well.

Guaranteeing an adequate number of skilled workers in the labor force could be the first step to smoothing out this rough labor market. Fortunately, we have many established tools at our disposal to accomplish this goal. For example, initiatives like workforce boards, apprenticeships, community college, and career and technical education can help us upskill the American labor force.

But as it stands, these initiatives are not getting the funding they need. Over the past decade alone, the workforce system has seen a nearly 20 percent decline in federal funding when adjusted for inflation. I think we are seeing the impacts of this underinvestment in today's economy.

Fortunately, the Biden administration has made a commitment to reversing this trend. Workforce development expansion, improvement in funding are prominent features of the bipartisan Infrastructure Investment and Jobs Act. The infrastructure law allows states to obligate funds from programs like the National Highway Performance Program toward workforce development activities. The law provides grants for programs that train and certify workers on the installation of energy-efficient technologies in partnership with labor unions and employers. The law also includes the Digital Equity Act of 2021, which creates two new grant programs that provide funds that develop digital equity plans and help get people the requisite skills to compete in today's economy.

Lastly, the overwhelming majority of funds in IIJA are subject to Davis-Bacon requirements to ensure workers are paid a fair wage. These are excellent developments but we must find more ways to modernize the American labor force.

So today, I hope we can take a close look at existing programs and discuss new initiatives to expand our country's pool of skilled workers. By investing in workforce development, we can help ease our current labor shortage and position American workers to thrive in the future.

I would now like yield to the Ranking Member, Ms. Young Kim, for her opening statement.

Ms. YOUNG KIM. Thank you, Chairman Crow. I want to thank you for holding this very important topical hearing, and I want to thank all of our witnesses joining us virtually today and testifying before us.

Our entrepreneurs are our nation's job creators. Their innovative products and services fuel our economies and communities. They take risks. They train employees. And they provide two-thirds of all jobs. The new jobs.

As a small business owner, I know the adversities and obstacles that small businesses must overcome to succeed. The hurdles small businesses are facing right now are high. Inflation is soaring, supply chains are in chaos, and regulations are mounting. Small businesses are also facing historic job openings and labor shortages. Recent job numbers show positive growth as we reopen from the pandemic and mandates come to an end. However, the current job market contains 1.14 million less employed workers than prior to the pandemic. And main street still struggles to find employees.

The most recent job openings and labor turnover summary reported 11.3 million job openings and recent surveys report over half of all small business owners are having trouble finding qualified people to hire compared to a year ago.

NFIB surveys also indicate historically large numbers of small businesses are struggling to increase their workforce despite almost half of all employers raising wages. Furthermore, 22 percent of small business owners reported labor costs as the top business problem, just two points below December's 48-year record high. These staffing shortages have a direct impact on our economy. Seventy-seven percent of small business owners reported that staffing shortages are resulting in significant to mild lost sales opportunities. Small businesses do not just need to fill open positions but they also need qualified and skilled workers. In February, 61 percent of small businesses reported hiring or trying to hire employees, and an astounding 93 percent of those small employers hiring or trying to hire reported few or no qualified applicants for those open positions. Inaction is not an option as small business place Help Wanted signs on their doors and innovation is stifled due to a lack of workers.

The Small Business Entrepreneurship Council found that just 5 percent of small business owners agree that Congress's policies are helping the economy and small business. Only 5 percent. We must change that and enact pro-growth policies that support small businesses in meeting their workforce needs and consumer demand.

Republican Members on this Committee have solutions. I am proud to have introduced the bipartisan H.R. 6450, the SCORE for Small Business Act of 2022. The SCORE program provides mentorship, education, and training opportunities for small businesses. Recently, SCORE has hosted webinars for small business owners on adapting to the trends transforming the workforce. By authorizing and modernizing this important program, we can ensure that SBA's resource partners are prepared to help entrepreneurs meet their business needs, including labor and workforce development.

Additionally, my colleague, Vice Ranking Member Williams, has bipartisan legislation to utilize the Small Business Development Centers and Women's Business Centers to assist small businesses in hiring career and technical education graduates.

There is no "one size fits all" solution to meet the diverse demands of our unique small business communities. However, I am confident that we can work together to empower small businesses with resources to address the skills gap, promote career and technical education opportunities, encourage apprenticeships, and restore the small business economy so our job creators can prosper.

I look forward to hearing from our witnesses today and I hope to work with my colleagues to find real solutions to support our small businesses in finding labor and closing the skills gap.

Thank you, Chairman. I yield back.

Chairman CROW. Thank you, Ms. Young Kim. The gentlelady yields back.

I would like to take a moment to explain how this hearing will proceed. Each witness will have 5 minutes to provide a statement and each Committee Member will have 5 minutes for questions. Please ensure that your microphone is on when you begin speaking and that you return to mute when finished.

With that, I would like to introduce our first witness.

Our first witness is Mr. Gerald Arnold. As the business manager since 2017 and a Member of the Joint Apprenticeship Training Committee since 2008, he has worked to enhance recruitment, training, and retention of union pipefitters. His leadership of educational efforts in the trade has earned him several appointments by state and city leaders, including a 3-year appointment by the governor of Colorado in 2019 to the Business Experiential Learning Commission in which he guides development of a youth apprenticeship program. Thank you, Mr. Arnold. I look forward to your testimony.

Our next witness is Dr. Mordecai Brownlee, the sixth president of the Community College of Aurora in my district. During his tenure, he has focused on creating initiatives that lift up lower-income members of our community and prepare them for careers. In 2020, Dr. Brownlee was featured by EdTech Magazine as one of the 30 Most Interesting Voices in Higher Education who are shaping the conversation around educational technology and information technology. In 2022, he was featured by Diverse Issues in Higher Education Magazine as a new school leader representing the next generation of college presidents. Thank you, Dr. Brownlee for being here today.

Our third witness is Mr. Joseph Kane, a fellow at the Brookings Institution. His work focuses on a wide array of infrastructure issues, including transportation and water infrastructure. Recently, his work has explored transportation and placemaking, climate investment and the challenges and opportunities facing the country's infrastructure workforce and its essential workforce more broadly. Prior to Brookings, Mr. Kane was an economist at the U.S. Bureau of Labor Statistics. Thank you, Mr. Kane. I look forward to your testimony.

And I will now yield to the Ranking Member to introduce our final witness.

Ms. YOUNG KIM. Thank you, Chairman.

Our fourth witness is Ms. Diane Benck, general operations manager and owner of West Side Tractor Sales Company who is testifying today on behalf of the Associated Equipment Distributors. West Side Tractor Sales Company, a John Deere construction equipment dealer, has been in business for an impressive 58 years and has 11 locations across Illinois and Indiana. West Side Tractor Sales Company is also a family-owned business. While Ms. Bank and her two brothers are the second generation of the family in the business, the third generation is already involved in the company.

I understand Ms. Benck takes pride in coaching and training the next generation to have the same success and growth as her and her brothers. She is also very active in a variety of industry-related associations. She served two terms on the Associated Equipment Distributors Board of Directors before becoming the first female volunteer leader of the association in 2018 when she was inaugurated as Chairwoman. She is currently on the AED Foundation's Board of Directors, which focuses on workforce development and attracting skilled workers to the industry. Ms. Benck has also twice served as president of the John Deere Construction Dealer Association. I know Ms. Benck's experience as a small business owner and vast knowledge on workforce development issues will be extremely beneficial to our hearing today.

So, Ms. Benck, I thank you for the time to join us today and for taking the time to testify. I yield back.

Chairman CROW. Thank you, Ms. Young Kim.

And I will remind the witness to keep to the 5 minutes. Ms. Young Kim and I run a tight ship on the Small Business Committee and we ask that people stay within their time. There is a clock on the screen to help you with that effort to prevent you from being gaveled out. So, with that I thank all the witness for being here today. And Mr. Arnold, you are recognized for 5 minutes.

STATEMENTS OF GERALD LEE ARNOLD, BUSINESS MANAGER & FINANCIAL SECRETARY TREASURER, DENVER PIPEFITTERS LOCAL #208; MORDECAI IAN BROWNLEE, ED.D., PRESIDENT, COMMUNITY COLLEGE OF AURORA; JOSEPH W. KANE, FELLOW, THE BROOKINGS INSTITUTION; DIANE BENCK, GENERAL OPERATIONS MANAGER AND OWNER, WEST SIDE TRACTOR SALES CO.

STATEMENT OF GERALD LEE ARNOLD

Mr. ARNOLD. Thank you, Chairman Crow, Ranking Member Young Kim, and Members of the Subcommittee. I appreciate the opportunity to testify in front of you this morning to talk about registered apprenticeship programs, and specifically our program that we operate here in Denver, Colorado.

During the introduction, it was noted that I currently serve as the business manager at Denver Pipefitters Local 208. I also have the pleasure of recently being elected as the district vice president for our International Union, the United Association of Pipefitters, Plumbers, HVAC Service Technicians, Sprinkler Fitters, and Pipeliners.

My experience has been one as an actual apprentice. So, I served my apprenticeship from 2003 until 2008 working for a contractor called Murphy Company during that entire 5 years and really just enjoyed every single second of the opportunity. I was extremely thankful for getting the chance to learn how to become a professional pipefitter and I wanted to give back as soon as I completed my apprenticeship program. I had the opportunity to become an instructor here in our program teaching mostly welding classes to 3rd, 4th, and 5th year apprentices. So, I basically took the summer off after I completed my apprenticeship program and came back the following school year. Instead of being a student, I became an in-

structor and really enjoyed the 7 years getting a chance to teach our apprentices.

After that, I had the opportunity to be hired and took the position of training director in charge of the day-to-day operations of our registered apprentice program, continuing education and certification programs that we do here as part of the training department.

In 2017, I was elected by our membership to serve as their business manager and continued to play an integral role as the secretary of our Joint Apprentice Training Committee that oversees and guides the overall operations of the training program here at Local 208. We are excited because we have 230-plus apprentices currently in our program somewhere along the 5-year program and we continue to see those numbers increase. Apprentice programs, I think, are the most effective way for training construction professionals, specifically my experience being with pipefitters on both the construction and HVAC service side. And the reasons for that is being able to partner the on-the-job training with related instruction given in the classroom this allows those apprentices to have the full experience. We try to duplicate what they will encounter on a jobsite and out here in the classroom provide a safe space for apprentices to make mistakes. Most people learn much more from their mistakes than they do from their successes. Unfortunately, you cannot allow that to happen when you are on a customer's property as we are building their equipment or safety is a concern. So, we want to have properly-trained, qualified journeypersons overseeing that on-the-job portion but allow that safe space down here in the classroom to have folks make mistakes and learn from it. No matter how much you try, you cannot duplicate every possible scenario a construction pipefitter or an HVAC service technician would run into on a jobsite because not every building is the same. Each system is designed for that particular building the way it was engineered, the way the architecture was completed to make that kind of a special system. And while systems have similar faults and need similar types of repairs, having that on-the-job component partnered with the classroom training really does prepare them for any possible scenario they could run into as a qualified journeyperson as they continue their career.

The tremendous benefit that I think our model provides specifically to small businesses is our contractors of all sizes have the same access to the great training program and it is based off of an hourly training contribution. While we utilize the multi-employer, it is an 80 cents per manhour contribution into our ERISA-governed training trust fund. And so, while we have contractors that have hundreds of employees, the vast majority of our employers have 30 or less employees. They are small shops, and there is no way they would have the resources and the capital needed to undertake a large training effort like we have at our apprenticeship program here at Local 208.

So, I looked at our list. I actually printed out a report this morning, and I am pleased to say that we have 80 percent of our contractors, like I said, have less than 30 employees. So, Air Tech Mechanical for one was at the top of my report because it goes alphabetical order. They have 12 members working for them. And out of

those 12 members, two of them are apprentices and one of them is a pipe tradesman that is an entry level position really to get some experience and decide whether or not they want to pursue the whole career and apply for the apprenticeship program.

And so, we enjoy about a $1.8 million annual operating budget for the training program, and those contractors, like I said, have the same access that our large contractors with 400-plus members may be working for them right now.

Because it is directly related to the amount of employees they have and the amount of work that they are performing, it makes it an equitable access for not only our employers but also our apprentices. The apprentices do not have to face any kind of personal financial burden. They get compensated for on-the-job training——

Chairman CROW. Mr. Arnold, Mr. Arnold, you are over the 5 minute time so I am going to have to stop you here but we can finish up during the question and answer period as we dive into it with the members. Thank you very much.

Dr. Brownlee, you are now recognized for 5 minutes.

STATEMENT OF MORDECAI IAN BROWNLEE

Mr. BROWNLEE. Good morning. And thank you for this opportunity, Chairman Crow, Ranking Member Young Kim, and Members of the Subcommittee, my name is Mordecai Brownlee, and I am the proud president of the Community College of Aurora.

CCA is part of the Colorado Community College System and serves over 10,000 students annually. At the onset of the pandemic, our enrollment dropped 12 percent. However, I am proud to share that our college has rallied hard for our students, and to date have recaptured 7 percent of that loss and we won't stop until all students have been accounted for.

Uniquely, our institution serves in the most diverse region of the state and student demographics represent that reality accordingly. As a federally designated Hispanic Serving Institution and Minority Serving Institution, 64 percent of our students identify as students of color, 51 percent of our students are Pell grant eligible, and 50 percent of our students are first-generation college students. With five continents and over 90 countries represented at our institution, we are proud to serve a rich and diverse student body that includes the state's largest immigrant population.

It is also important to note that our small business owners within our area represent this rich diversity as well. Community colleges, like ours, stand on the front lines and in service to the most disadvantaged students and those hardest impacted due to the pandemic through our mission of open-access, affordable, high-quality postsecondary education, and workforce training. Through partnerships with community organizations, such as our Aurora Chamber of Commerce, Aurora Economic Development Council, Arapahoe/Douglas County Workforce Development Council, and the BuildStrong Academy, CCA is utilizing data and feedback provided by small businesses and large industries to re-envision and transform our student learning experiences. Intended to train displaced workers, nontraditional adult students, and first-time-in-college students, these efforts seek to upskill or reskill to obtain industry-recognized credentials that align in-demand, high-wage occupa-

tions. Currently, we are designing new programs in healthcare, renewable energy, and construction management, and offer hybrid, online, and in-person instruction outside the typical working hours to accommodate our students' varied schedules.

Our students are directly impacted by the various socioeconomic challenges that face other metropolitan communities around the nation. Lack of reliable transportation, childcare, broadband access, and a supportive network have historically created barriers to a quality education and the obtainment of their dreams. Listening to the voice of our students, CCA has worked in hand with our student body to eliminate barriers and provide resources to promote equitable access and opportunities for our students.

Take, for example, Victoria Browning. Prior to attending CCA, Victoria held a full-time job earning $14 an hour to support her two young children, while struggling to address thousands of dollars in student debt. Thanks to a grant created by the U.S. Department of Labor, the Strengthening Working Families Initiative at CCA offered students like Victoria childcare, college counseling, and career support. Or, take for example our Asegurando Learning Program. To address the equity gap in student achievement between students of color and their white peers, CCA was awarded a Title V grant from the U.S. Department of Education. From there, our Asegurando Learning Community was born. Recently, CCA established a new division within the college to focus strategically on the placement of students into career mentorships, internships, externships, and apprenticeships to level the playing field among those who have access to supportive networks and those who are not as privileged.

Supports at the federal level are critical for our continued success. Pell Grant financing for very short-term programs, and fund increases for TRIO, Minority Serving Institutions and the nation's Hispanic-Serving Institutions could dramatically transform institutions. Such transformation would provide the resources to create and sustain efforts aimed to retool and upskill the workforce necessary to power small businesses and industries while helping our most struggling students finance college.

Additionally, our workforce programs, while innovative and responsive, are expensive to operate. For example, programs in healthcare and advanced manufacturing are in great demand; but are also among the most expensive programs to offer. To maintain our roles as leading providers of workforce training and maintain affordability for students, it is critical that we make meaningful investments in career and technical education infrastructure at community colleges. Dedicated community college job-training programs, like those originally included in the Build Back Better Act, would fund these critical efforts.

In conclusion, in today's culture where the call for innovation and increased efficiencies are abundant, community colleges cannot afford to be viewed as inefficient and nonresponsive. Our community small businesses and industry partners are depending on us to be responsive to their needs. Our students are depending on us to create an environment where equitable student success is fostered and every barrier towards the fulfillment of that success is removed.

The Community College of Aurora stands ready to meet these needs for years to come.

Thank you and I look forward to answering any questions you may have.

Chairman CROW. Thank you, Dr. Brownlee.

Mr. Kane, you are recognized for 5 minutes.

STATEMENT OF JOSEPH W. KANE

Mr. KANE. Good morning, Members of the Committee. Thank you for this opportunity. My name is Joseph Kane, and I am a fellow at the Brookings Institution. The purpose of my remarks today is to frame specific challenges and opportunities facing the country's infrastructure workforce, includingthe potential to expand career pathways.

As you know, workers have faced an increasingly polarized labor market during the pandemic and over the last few decades. Middle-skill jobs, which typically require more than a high school diploma but less than a 4-year college degree have grown slowly. At the same time, the country's infrastructure, including transportation, water, energy, and broadband has increasingly faced gaps in investment. That is not only true when it comes to physical upgrades but also when it comes to preparing a skilled workforce to construct, operate, and maintain all these systems.

However, the Infrastructure Investment and Jobs Act offers an unprecedented opportunity to address these gaps and accelerate momentum around careers that pay higher wages, require shorter term credentials, and need a new generation of talent. To maximize this opportunity, federal, state, and local leaders cannot just create short-term jobs, mainly construction jobs, for the same people. They need to be ready to harness funding in ways that expand opportunities to more workers—women and men, the unemployed and underemployed, and younger students and adult learners across a broad range of positions in the skilled trades and other in-demand fields. They need to focus on creating an infrastructure talent pipeline that can offer more sustained opportunity to workers and provide greater certainty to employers, including small businesses.

The country's infrastructure workforce challenges primarily center around a lack of visibility and flexibility. Addressing these challenges begins with acknowledging the variety of infrastructure career pathways nationally. In 2019, before the pandemic hit, more than 17 million workers, or nearly 1 out of every 10 workers were employed in infrastructure across 91 different occupations. A basic challenge facing infrastructure employers, including utilities, transportation agencies, and engineering firms, is a lack of awareness among Americans that these careers even exist. This obscurity continues even as infrastructure jobs offer more competitive, equitable wages paying 30 percent more to workers at lower ends of the wage spectrum, in other words, workers with the least amount of experience who are just starting their careers.

Prospective workers may also lack awareness of and easy access to the training needed for these careers, which tend to emphasize work-based learning opportunities. As a result, there are training and retention gaps. Nearly a quarter of all infrastructure workers will need to be replaced over the next decade. But some occupa-

tions are expected to see 10 percent or more of their workers leave each year on average. That is especially the case for infrastructure jobs with older workers near retirement or they have the continued struggles reaching younger students, women, people of color, and other individuals.

Addressing these challenges hinges on proactive federal leadership to ensure greater visibility and flexibility. That does not mean filling one type of job in one place, but rather having multiple entry points available for more people in more places. This flexibility matters because many unemployed and low-wage workers in hospitality, retail, and other industries following the pandemic need to transition to better jobs, which will require many branching pathways.

Expanded financial and technical capacity around regional planning and employer engagement is a must, as is an expanded focus on future-looking skills development and flexible training opportunities.

For example, employers can partner directly with community colleges and other educational institutions to help students gain the necessary skills and qualifications to be hired. Federal leaders could support such collaborations and sector partnerships through expanded funding and technical assistance as part of competitive grants in the infrastructure law. Apprentice and pre-apprenticeship programs offer another earn and learn opportunity. Beyond additional federal funding for apprenticeships, expanding the Work Opportunity Tax Credit could further incentivize employers to test new approaches.

Above all, the ultimate reach and impact of any new federal funding must ensure there are flexible training opportunities.

Programs focused on younger workers, particularly those out of school, out of work, and facing other social and economic disadvantages, can grow the infrastructure workforce. Service-based learning opportunities and expanded Pell grant eligibility for short-term job training are two ways that federal leaders could address these youth workforce needs. Of course, many other nontraditional and underrepresented workers, including women, people of color, and middle-aged workers can realize greater opportunity in this sector. Enhancing existing federal efforts, such as the women in apprenticeship and nontraditional occupations grant program could help community-based organizations provide more accessible on ramps.

Members of the Committee, I believe there are enormous challenges facing our infrastructure workforce, but also enormous opportunities. Admittedly, the issues that I described today only scratch the surface of the issue. But as conversations evolve in the coming months, I want to emphasize the opportunity you and other leaders have to further refine and test potential applications of any new funding. To not simply reinforce existing and inequitable workforce gaps, but to create stronger pathways for all prospective workers. Thank you.

Chairman CROW. Thank you, Mr. Kane.

Ms. Benck, you are now recognized for 5 minutes.

STATEMENT OF DIANE BENCK

Ms. BENCK. Chairman Crow, Ranking Member Young Kim, and distinguished Members of the Subcommittee, my name is Diane Benck and it is my pleasure to appear before you today as a small business owner directly impacted by the skilled workforce shortage and on behalf of Associated Equipment Dealers (AED), the international trade association representing companies that sell, rent, service, manufacture construction, agricultural farm, mining, energy, material handling, and industrial equipment.

I am the general operations manager and co-owner of West Side Tractor, a full-service John Deere construction and forestry equipment dealer.

You know, I would like to say that my family story is really the story of the American dream. My father, who grew up with nothing, joined the Air Force during the Korean War. The Air Force gave him technical skills and education so that when his service was done, he went to work as a technician for a John Deere dealership. My parents dreamed of having their own business, so when a territory for John Deere opened, they put every penny they had and created something of their own.

If we fast-forward 60 years to today, we have 11 locations, approximately 35 employees, and my brothers and myself are working towards passing the business now to the third generation of family members.

As a small family-owned, capital-intensive business, we have a lot of challenges right now, from supply chain issues, inflation, and ever-changing regulatory and tax environment. But the greatest need is right where my father started his career in the technical trades. And whether you are Wagner Equipment in Aurora, Colorado, or BJF Corporation in Placentia, California, you cannot find skilled workers, particularly to serve as diesel service techs.

According to the A.D. Foundation Commission study, the equipment industry foregoes at least $2.4 billion in lost revenue annually due to the inability to find skilled service technicians. That is money that could be used to further expand our businesses and create more jobs and economic activity.

It is also important to understand that if equipment dealers do not have the skilled workforce needed to repair and maintain heavy equipment, construction projects are delayed costing our customers in lost time and money. It truly creates inefficiencies up and down the supply chain.

Most service technicians attend a 2-year technical college degree program that focuses on heavy equipment technology. Traditionally, the occupation was stereotyped as dirty. However, with recent innovations, today's heavy equipment is on the cutting edge of technology requiring technicians to work with computers to diagnose and fix problems.

In fact, when you include technical education with our manufacturer mandated and in-house training, a typical service technician logs similar classroom hours to someone with a bachelor's degree from a university without crippling student loan debt.

These are very well paid positions that are truly careers. At West Side Tractor, our apprentices start at more than $22 an hour and quickly escalate to $45 an hour within 4 years, not include com-

prehensive benefits and other incentives. We could easily increase our technician workforce by 20 percent if we could find qualified workers. A.D. is doing exceptional work accrediting heavy machinery technology programs at high schools and colleges, as well as educating parents, teachers, students, and guidance counselors about the well-paying, rewarding careers in the equipment industry. Yet, we continue to push our kids to pursue 4-year degrees when there are millions upon millions of jobs in the skilled trades open which require taking on minimal debt and an opportunity to work towards that American dream that has worked so well for my family.

The problem is not unique to equipment dealers. Our manufacturers do not have the workers to build the equipment and our customers do not have the skilled workforce to operate the equipment. Meanwhile, infrastructure projects await, particularly after passage of the bipartisan infrastructure bill.

To address this issue, the country must provide increased funding to career and technical education programs to build the pipeline of skilled workers and incentivize students to pursue alternatives to 4-year degrees. The skilled workforce shortage continues to be the equipment industry's greatest challenge. It hinders growth and economic opportunity, creates inefficiencies, and impacts the country's competitiveness. As a nation, it is imperative that we steer the next generation to careers in the skilled trades and align public policy and investments to growing this important workforce for our future.

Thank you for the honor for appearing before you today and I look forward to any questions you may have.

Chairman CROW. Thank you, Ms. Benck. I appreciate your testimony.

Thank you to all the witness for being here today.

I will begin by recognizing myself for 5 minutes.

Starting with Mr. Arnold, Mr. Arnold, I had a chance to recently visit with you all at Pipefitters Local 208 in Denver and we had a discussion about the United Associations of Veterans and Piping Program. I have been a long-time veterans advocate and one of the issues we have always struggled with is that gap between when someone takes off the uniform to when their veterans benefits start to flow and how we often lose so many veterans who fall through the cracks during that gap period. But your VIP program is extremely innovative in that it closes that gap and it starts the training while they are still in uniform so it is a seamless transition.

So, could you just tell a little bit about that program, what you have learned about it and how effective it has been in helping our veterans and helping the trades and the workforce?

Mr. ARNOLD. Thank you, Chairman Crow.

Yes, I ran out of time there but I do appreciate the question. Our Veterans in Piping Program really works well for everybody involved. So, the United Association started that program years ago. It is now operating on eight different bases across the country. And what it allows is while military personnel are still active duty, they are allowed to take 18 weeks of accelerated training in either welding, HVAC service, or sprinkler fitting. And the nice part is because that training takes place while they are still active duty,

they are still receiving their pay and benefits from their time in the service, and then they complete that training prior to mustering out of the service. And towards the end of the training, they are allowed to pick the location of their choice. And so whatever apprenticeship program that they want to enter in the United Association, they get to go back to the area of the country that they would like to live along with starting their career and they get what we call direct entry into the program of their choice. And so, because that is seamlessly happening, we are allowed to tell them exactly what the wage is going to be, provide employment verification letters so they have the documentation they need to apply for mortgages or if they are going to rent an apartment or a house, their family has some idea of what they are going to be looking at doing. They know they have full health insurance benefits. And so, it really makes it a nice transition. They receive 1 year's credit for the 18 weeks of accelerated training they received during their time in the military and then they are automatically qualified to start receiving their GI Bill benefits due to being accepted into the registered apprenticeship program. So those GI Bill benefits work based off their on-the-job training hours and they receive the highest amount at the very beginning where they are learning the lowest wage as a first-year apprentice obviously makes a percentage of a qualified journeyperson. And then that pay increases as their skill and knowledge increases. So, it really makes it a nice transition for the individual and it also helps us as an industry. The skillsets that they bring, their sense of responsibility and accountability. Everything really our employers are looking for. And so, it has been a great partnership.

Chairman CROW. Thank you, Mr. Arnold. Just an example of frankly how our labor unions are really leading the way. You know, it is a brotherhood and sisterhood, not just an organization, and I think that culture translates really well for a lot of our veterans and your ability to do that. And I would like to see these programs expand. I think the other trade unions are uniquely qualified to actually expand these into the service and help our veterans transition. And I appreciate your leadership in that regard.

Dr. Brownlee, in the minute that I have left I would like you to comment briefly on your community college's work with local business development centers and how we can expand those relationships and how they are doing.

Mr. BROWNLEE. Thank you so much for that question there, Chairman Crow. And what I would just say is, again, as you heard me talk about our various Chamber of Commerce, Arapahoe/Douglas Workforce Council, the work that we are doing with the various entities here, in our service area of the Community College of Aurora is just critical conversations that we are having to ensure that the workforce meets the various shortages that are being experienced. We certainly all heard about the great resignation or the great recalibration. Essentially, we are just having conversations about how to retool and upskill our community individuals, our adult learners, as well as our traditional age students to create new opportunities, new career pathways to ensure the growth and sustainability of our communities. I am excited about the conversations that we have been having with our industry partners to cre-

ate new pipelines of training, on job training and opportunities, and it just creates, again, as we think social and economic mobility, it certainly excites us here at the Community College of Aurora to be a part of this advancement of our communities. Thank you, sir.

Chairman CROW. Thank you so much, Dr. Brownlee.

My time has expired.

The Ranking Member, Ms. Young Kim, is now recognized for 5 minutes.

Ms. YOUNG KIM. Thank you, Chairman.

Ms. Benck, I am pleasantly delighted to hear that your father served in the Korean War. And so, please, offer my deepest appreciation for his service. As an immigrant from South Korea, obviously, I have a very soft spot when it comes to thanking, especially all the veterans, but especially Korean War veterans. So, my hat is off to you, your father. And your father has founded this family-owned business which you are now taking over and your family and your children are also taking over. So, it is really important because all of our witnesses are job creators in our nation. But most importantly, supporting our veteran-owned, women-owned, and also minority-owned businesses are something that Chairman Crow and I and Members of this Committee are passionately supportive of.

Ms. Benck, your testimony references the many challenges of being a small business owner, including inflation, supply chains, and ever-changing tax and regulatory environment. So, could you talk about how your business is managing with all of this economic headwinds?

Ms. BENCK. Well, I have to say that, you know, I have been in this business for 35 years and this has definitely been one of the most challenging in a good way. We have never produced more sales and our bottom line has never looked better. And it has never been more frustrating or difficult because we cannot price tractors next year. We do not know when we are going to get availability. So, I mean, I have never seen the supply chain as disrupted as it is. I mean, I hope as a country we can get this fixed. I know all the construction equipment manufacturers are working hard but it is super challenging to do business right now.

From a tax environment, you know, we always carry very large rental fleets so we always have changing rules on depreciation or like-kind exchange. And so, 1 minute, you know, we have these hundreds of millions of dollars of rental fleets and then the tax rules change and then we have to kind of regroup. The 100 percent depreciation did sort of negate the like-kind exchange program going away but, you know, we certainly have challenges for the next couple of years as those depreciation amounts start to phase out. But really, the biggest problem we have right now is this labor shortage as I have discussed. You know, our capacity to serve our customers is diminished because of not being able to hire anyone. And technicians are number one on the list. But we also have had a lot more struggles just hiring administrative people and salesmen. And we have had very low turnover rates compared to some of the other numbers that I have been reading about through this whole great resignation. But it is definite more challenges right now than I have ever seen in our history.

Ms. YOUNG KIM. I know I heard that from your testimony, too. I mean, the shortage of having the qualified technician workforce is critically the biggest challenge in your industry and as is in all industries because you mentioned the capacity to serve your customers is deeply affected because you do not have the qualified technicians. So, you testified that you could easily increase your technician workforce by 20 percent if only you could find qualified workers. So, talk more about how the current labor shortages have impacted your business operation and revenue, as well as those members of AED. I am sure you hear more and talk about this every single day.

Ms. BENCK. You look at we are putting up growth and sales numbers of 15-20 percent and our labor sales were only up 6 percent. That would have easily been up 15 percent if we had the number of people that we needed to have. And, you know, you hear stories around the country of you call for a service call and it is 2 weeks before a technician can get there. In the meantime, that tractor is sitting. And we are about ready to flood the entire industry with more money through the new infrastructure bill. So, you know, these challenges just become greater and greater and greater. And for us, we believe we really need to reach down into the high school level because we all have worked with all the technical programs that are out there but we need to get more kids interested in coming into the industry. And somehow, we have to get down to a lower level, whether it is junior high or high school and get the school administrators to really be focusing on letting students and parents know about the great careers that are available.

As I said, a lot of my very skilled technicians make six figures in the Chicago area. That is a really good wage for no college debt. And we are just not getting that message across in that lower levels of education to let people pursue those kind of careers.

We have a great recruiting for the military as well, kind of similar to what was just described. I think we have hired three or four technicians where they work for us for free and get skills and then they have been fantastic but there are not enough people coming out of the military to fuel our true needs. And it is not just construction equipment. It is automobile technicians, truck technicians and all the other skilled trades that are out there.

Ms. YOUNG KIM. Well, thank you so much.

My time is up. I yield back. Thank you.

Chairman CROW. Thank you. The gentlelady yields back.

The gentlelady from Kansas, Ms. Davids, who is the Chairwoman of the Subcommittee on Economic Growth, Tax, and Capital Access is now recognized for 5 minutes.

Ms. DAVIDS. Thank you, Chairman Crow and Ranking Member Young Kim for holding this hearing today.

As we have heard in this hearing today and for the last few years, our small businesses are facing serious challenges, including workforce challenges that have been brought on by this pandemic and, you know, what we are doing here is trying to focus on how we can help folks enter or re-enter the workforce and get these good-paying jobs we are hearing about. Community colleges are, of course, a major player in helping individuals skill and upskill and reskill, especially as it comes to these highly technical and long-

lasting careers. In fact, in the Kansas 3rd, where I represent, I like to say that we are kind of a hidden gem of a thriving community college environment. I mean, I am a little bit biased. I might be saying that because I am the product and proud alum of Johnson County Community College. And I have had the chance to work a lot with the Kansas City, Kansas Community College to secure funding for an automated robotics lab and program that they have so that students can train with like real life automation equipment that is currently being used in the industry. And I think this is especially relevant given the conversation that we have been having today.

I am curious, Dr. Brownlee, if you could share a bit about what successes or maybe even concerns, I am not sure, you have seen in developing some of the kind of custom curriculum for specific trades or jobs. And then also, if there is like, what the mix of the students that are looking at those various career choices or reskilling. I am just curious about that.

Mr. BROWNLEE. Thank you for the question, Representative Davids. And I will tell you, we are excited that you are a proud product of community colleges, especially as we enter April, Community College Month. That is a great excitement to us.

But to your question, as we think about essentially in our service area, our industry partners have been very responsive in wanting to be at the table. We include industry partners through advisory councils that help us to shape what are essentially the learning outcomes that are associated with these jobs. As you heard one of our fellow, the individuals giving the testimony talked about how there are technicians that are needed in these various industries. And so, we work with our partners to identify what are those learning outcomes. A bit of the challenge really becomes those very short-term programs. As we think about funding those programs is where the true to concern to your question of the challenge comes in is funding because depending upon the nature and the length of that academic program or that workforce-related program, we are talking about social and economic mobility, workforce-driven programs. So, 3, 4 week, 5 week programs, 9 week programs, this individual can now take on a new career and pathway and be able to provide for them and their families in a manner in which they would not have been able to do previously. However, the funding becomes a challenge. Based on the length of it, it may not be funded and carried by the Pell grant, and so that is where we really need the help and the challenge.

In terms of those that we are seeing engage with these trainings, everything from the traditional age—I think about the work that we are doing out of Cherry Creek Schools, the great work they are doing out of the Cherry Creek Innovation Center where they are directly tying students into high-wage, in-demand pathways to work over here at Aurora Public Schools. So, there are strong partnerships with the traditional age.

The adult working populations are noncredit programs is where we continue to have opportunity, and to be very honest with you, it comes down to funding. We need to be able to fund the very short-term programs. Otherwise, these individuals are coming out of pocket and they may have the means or may not have the

means. And so hopefully, the conversations that now we are having and we are seeing some return on, and that is our industry partner saying, listen, let's sponsor some of these individuals, especially these adult working learners to be able to fund them in their education. Creative partnerships. However, we have to think about sustainability and the implications if we cannot find a sustainable result.

Ms. DAVIDS. Yeah. Thank you, Dr. Brownlee.

And also, just thank you to our other witnesses for your testimony.

Mr. Arnold, I am excited and impressed about the training program that you all have. And Ms. Benck, I really appreciated your comments about us looking into the younger populations.

Chairman, I will yield back now. Thank you.

Chairman CROW. Thank you. The gentlelady yields back.

I will now recognize the gentleman from Texas, Mr. Williams, also the Vice Ranking Member of the Committee.

Mr. WILLIAMS. Thank you, Mr. Chairman. And thank you, Ranking Member Young Kim. And I just want to say in full disclosure, and especially to Ms. Benck, I am an automobile dealer. I have been in the automobile business, Chevrolet, Dodge, Chrysler, Jeep, Ram for 51 years. My family is in it and my grandchildren are now in it. So, I really enjoyed your statements. And also, was glad that you mentioned about some of the Trump tax cuts that we had in 2016—they are still in force—that have helped make our business pretty good.

You talked about inventory. I normally have 800 units on the ground. This morning in my car dealerships I have 22. So, we know about what it has done to our industry. But thank you for bringing up about the importance of cutting taxes.

With all that being said, the Biden administration continues to show their lack of understanding for the real issues American small businesses are facing. Instead of creating opportunities for all businesses, President Biden is pushing government mandates that favor big labor and are both unfair and extremely costly to taxpayers. They just mean more money. And last month, Biden signed an executive officer mandating project labor agreements on federal construction contracts exceeding $35 million, which funnels these critical government contracts to unions and cuts out other private companies from being competitive.

A recent report by the Association of Builders and Contractors stated that 87.3 percent of the U.S. construction workforce does not—I repeat, does not belong to a union. These businesses should not be excluded from applying for government projects because they are not unionized with burdensome fees and failing pension plans. We should push back on the efforts to impose restrictive labor requirements on taxpayer funded construction projects and ensure open, fair, and competitive bidding for all Americans. And it saves us money by doing that.

So, my question to you, Ms. Benck, you represent the construction industry. I represent the car industry. Can you elaborate on how President Biden's executive order will affect your member companies?

Ms. BENCK. Well, honestly, I work in a very heavily unionized area. So, the Chicago area, you cannot function without being in a labor union. So, I do not know if it has much impact in Illinois. But I think in other parts of the country, just your 80 percent are not in labor unions, I think that there is—I do not know if that is the exact number, but I would not be surprised at that. So, I do think the important thing here that we get our infrastructure rebuilt and not focus so much on whether it goes through labor unions. And I am a supporter of labor unions. Like I said, I have two I am signatory to here in Chicago. It is just a reality of doing business up here. But to do things, to make that a requirement seems to kind of sabotage what we are trying to accomplish in terms of rebuilding this country's infrastructure for our future.

Mr. WILLIAMS. I agree with. Picking winners and losers is not good. Even competition does work.

I have been in the car business for over 50 years as I have stated and I know firsthand that we are always looking for more mechanics. We have talked about that. More mechanics, more technicians and other skilled workers. Our country is facing a growing skills gap from younger generations that are not joining the vocational workforce at high enough rates. So, business owners in all sectors of the economy are in critical need of workers, especially skilled workers. One way that we can work to address the skills gap is by informing and encouraging students to join career technical education programs. A traditional 4-year college degree is not for everyone and we found that to be true in this day and time. We need to ensure students know that there are other high-demand opportunities that will provide them with a good-paying job and successful career.

So again, Ms. Benck, you even stated that in your testimony that a service technician at an equipment dealership can easily make up to 6 figures, and that is true with my car dealerships. Providing that vocational program sets students up to learn a skill which they can master over the years and then hopefully turn into their own small business like your sone day. The return on investment for skilled workers is undeniable and it is critical that we continue to expand and encourage CTE opportunities.

So quickly, Mr. Arnold, given your background in apprentice programs, how can we better educate high schoolers who might be on the fence about paying for a 4-year degree that there are other opportunities out there and not as costly, and what are the best practices to recruit more students to put a vocational option for them in the future?

Mr. ARNOLD. Thank you for the question, Representative.

Very quickly, I think we just need to do a better job of explaining the benefits to both parents and students so everybody involved understands about the excellent opportunities. A lot of times, you know, folks were told they had to go the traditional career or traditional education path to be successful and I do not think we did a good enough job explaining the benefits, explaining the financial burdens. Best practices, what we have seen starting to work better, is actually utilizing our current apprentices. The folks in our program that can relate to the younger populations better than say myself or folks that have been in the industry for 30 or 40 years.

Getting their peers and letting them know exactly what they are experiencing right now as existing apprentices has seemed to make a big difference.

Mr. WILLIAMS. Thank you very much.

And Mr. Chairman, I yield my time back.

Chairman CROW. Thank you. The gentleman yields back.

I will now recognize the gentleman from Minnesota, Mr. Phillips, the Chairman of the Committee on Oversight, Investigations, and Regulations for 5 minutes.

Mr. PHILLIPS. Thank you, Mr. Chairman, and to all the witnesses today. I am grateful for your testimony.

Ms. Benck, I want to thank you for your wonderful remarks about your business and unions. I think that one can be both pro-business and pro-worker. And I think your remarks are wonderful and I encourage every business in this country to follow suit.

When I am back in the district, I have been doing a program called At Work with Dean where I spend about 3 hours, do a 3-hour shift at various small businesses in my district. And without exception, all are saying that business is improving, very strong in most cases. And all are also saying that the attraction and retention of employees is terribly difficult. So, I think we are all in agreement on that.

Starting with you, Ms. Benck, we hear a lot of reasons why people have left the workforce. I would love to hear from each of our witnesses about why you think that is the case. Starting with you, Ms. Benck. What is keeping people out of the workforce based on your experience?

Ms. BENCK. Well, I think maybe we are a little bit different than—first of all, we were essential workers so we never stopped working. We have had may be little higher attrition rates but not compared to other businesses. And part of it is because we are high paying wages here. We are not, you know, hospitality or people, you know, making $10-12 an hour where I think you are getting a lot more turnover. And I would say I think that what I have seen in our people is that they are just a little bit more sole searching. Do I really want to do this the rest of my life? Do I really want to be a technician? Do I want to live somewhere else in the country? Illinois has a lot of issues and we have had just two technicians resign in the last couple of weeks who want to move down to more southern states with lower tax rates. And lower real estate taxes. So, like I said, I do not think our resignation rates have been as significant as other industries but it is still certainly an issue for us.

Mr. PHILLIPS. And do you have any belief that perhaps childcare or immigration reform could provide a boost to the labor force?

Ms. BENCK. Oh, absolutely. I think we need more immigration, and if we could get young people who are coming into this country and start to get them trained as technicians, they do a great job. I know of some dealers who have flown to the Philippines and brought a whole plane full of technicians back. That was in Canada. I do not think we have that policy here in the United States to allow that to happen. But that is what this country is, is a whole bunch of immigrants. And I certainly would hope that we can bring

more people in that would help with the skills gap problem that we are having.

Mr. PHILLIPS. Thank you. I wholeheartedly agree.

Dr. Brownlee, any thoughts from your perspective about what is keeping people out of the workforce and how we might rectify it?

Mr. BROWNLEE. Thank you so much for that question, Representative Phillips. What I would say is that as we think about, again, the apprenticeships, the internships of small business owners, really looking to revolutionize what we have looked at in terms of opportunities previously and asking the question what brings about relevance and messaging and opportunity now for our students? And so, I think the creation of new opportunities. We were talking with industry partners just a few weeks ago. Relooking at these job descriptions. What can we do to create some transferrable skill opportunities where we can retool and upskill and create more? Certainly, there are challenges with transportation, childcare. You mentioned it, Representative, and thank you for acknowledging that. And just what have been challenges of the low socioeconomic communities continue. But we are committed, and we are grateful for the funding that we have been able to receive through the various grants, Department of Education, you name it. Even here in the State of Colorado through our CoC programs to create more opportunity and close gaps. What has been a challenge for folks in terms of funding their higher education.

Mr. PHILLIPS. Thank you, sir. I appreciate it.

Mr. Kane, your thoughts on what is keeping folks out of the workforce and what we might do to rectify it.

Mr. KANE. Thank you, Representative. Look, I think the challenge is some of these are new issues at play but also enduring issues. And so, there are significant replacement needs across, in particular, the infrastructure sector. There is a silver tsunami hitting a lot of these positions. That has been true for a very, very long time. And the sector is very traditional in good ways and bad where there is an overemphasis on service provision, and often an underemphasis on who are going to be those future workers that are going to take on these roles? Even in the capital planning process for these different agencies. You know, workers are kind of a second concern I would argue compared to some of the physical upgrades. And so, understanding that there needs to be more flexibility and visibility as I said before, and particularly for younger workers, younger students. I appreciate what was reflected in some of the other testimony on that. But there need to be mentorships, knowledge transfer as this older generation transitions out, that the younger generation actually can take on and understand what the nature of the work is and not just a simple credential in isolation but actually a pathway where they can grow and learn.

Mr. PHILLIPS. I see we are out of time, Mr. Kane. I was hoping to get to you, Mr. Arnold, but perhaps next time.

I yield back. Thanks.

Chairman CROW. The gentleman yields back.

I will now recognize the gentleman from Mr. New York, Mr. Garbarino, for 5 minutes.

Mr. GARBARINO. Thank you, Chairman. And thank you to the Ranking Member for hosting this hearing.

I have a question. I will start with Ms. Benck and maybe Mr. Arnold can add in to it. Ms. Benck, you run your own business. And something I heard from my electrical contractors, I had a meeting with them yesterday, and they talked about a lot of the women and minority-owned businesses. And they said that right now under the SBA—the federal government under the SBA size standards set forth in their regulations that they used a gross revenue standard when determining whether a woman or minority-owned business can participate in these SBA programs. And since it is gross, are you concerned that using that current standard and not updating it based on increased cost of goods, increased cost of doing business that certain businesses like yours or others might get knocked out of the program prematurely just because of the way inflation is?

Ms. BENCK. I do not know exactly what the SBA standards are. I certainly am very familiar with like the State of Illinois and City of Chicago, State of Indiana standards. I would think that they run pretty similar. But I think one of the really big problems of those programs is that you graduate too quickly. The reality is there is still a lack of MB, WB businesses out there to do construction work. And all the states are putting in higher and higher percentages that that work needs to be subcontracted. And there is just not enough skilled people out there. I would much prefer to see some more criteria put in as far as the number of minorities or women in the workforce working on a particular job to me would raise it better than selecting one specific customer or owner of a company would be more effective. And also, what we have seen over and over again is you get a very qualified minority contractor and then everybody floods to them because they do a good job. They get too big. They graduate out of the program.

Mr. GARBARINO. They hit a certain revenue standard and they get graduated out?

Ms. BENCK. Yep.

Mr. GARBARINO. And then you are all stuck in the same position as you just were.

Ms. BENCK. Yeah. And I know there has been discussion in the State of Illinois of even taking those standards completely off. Where that is right now I do not know but definitely for construction jobs I think, you know, a lot of times it is around $30 million is pretty darn small. I mean, it costs a lot to do any kind of road construction or trucking or whatever it is. That is pretty small.

Mr. GARBARINO. No, absolutely. I know the same thing in my state of New York. A lot of projects cost that much.

Mr. Arnold, I am not sure, have you heard anything similar in Colorado with some of your contractors? I know you probably work very closely with them since you have the program that you currently run.

Mr. ARNOLD. Thank you, Representative. My experience really has been more that the city and county of Denver has similar program requirements and there is a lot of work going on at Denver International Airport. It is a concern because it is based off gross revenue. The cost of materials has gone up significantly and I think labor costs will follow suit as you try to backfill the labor needs. And so, I think it is worth taking a hard look at it. It makes sense on the surface. You know, your gross revenue should be a re-

flect of what type of profit margin that you make at the end of the project. With the increase on the goods, if you look at a Chiller or whatever piece of equipment that you are buying, materials, because they have increased so much and we still want to serve our customers, I think the contractors are sharpening up the pencils. And so that might mean that those profit margins are a little bit thinner than they were in the past just to make sure that the project goes forward, everything stays on budget. And so, it is more of an examination and making sure that we are not graduating those women and minority-owned contractors too quickly because they need that support to really flourish long term.

Mr. GARBARINO. You touched a point that I was going to get to next. Can you talk about how much materials have gone up and what that is doing to the contractors that you work with?

Mr. ARNOLD. So right now we have not seen an effect on it as far as projects being delayed or canceled but the material costs have increased significantly. I attended strategic planning sessions with our contractors actually this week, Monday and Tuesday, and that was a large topic of discussion and whether or not they were seeing actual projects delayed or canceled. Things are long lead items right now and we have just seen huge increases on just the raw materials that it takes to build these kinds of projects out. I had a contractor tell me that they are looking at 60 weeks lead on some of the equipment that they need for projects. So, it is going to be a challenge I think coming up here in the near future.

Mr. GARBARINO. I appreciate the answer.

I am out of time so I yield back. Thank you, Mr. Chairman.

Chairman CROW. Thank you. The gentleman yields back.

I now recognize the gentlelady from New York, Ms. Tenney, for 5 minutes.

Ms. TENNEY. Thank you, Chairman Crow and Ranking Member Young Kim, for holding this hearing today.

We hear a lot about the labor shortage facing our economy. Businesses of all sizes, including my business which is less than 100 employees. But we have been around for 76 years and we are experiencing a real problem with getting workers. We are trying to advertise. We are doing extra incentives that we have not had to do in the past in order to deal with the labor shortage that we have. We are offering higher wages, expanded incentives as I said. And this is happening not in just the southern tier and Central New York, but it really happening all over our state as well. And probably all over the country.

As we know, this is a tight labor market. So, as the demand for goods and services increases, so does the price. And so now we are seeing higher prices and the cost of wages is rising. Americans are receiving more money for their work which is a good thing, but this creates this tension between the employers who obviously we like to see a labor market where we can get more employees at a lower rate, but at the same time, we love to pay our employees more because if we can charge more for our services, but with inflation affecting us this has been a problem.

But I think government can respond to this. And I think one of the things that we are seeing, and this is particularly true, is some de-industrialized areas, we are seeing just an influx of supply of a

cheap foreign labor that are often, especially in the tech industry, and they are getting some of the benefits here that a lot of our American companies are not. And I think this creates a disincentive for employers to really invest in their workers and invest in the technologies and the processes in the long-term growth that we need to bring American workers back into the workforce. And so, we have seen a lot of American workers kind of pushed to the sidelines, many of them with skills that could be trailed but moving unfortunately, maybe the lower skilled jobs are even choosing, unfortunately, not to do some of the jobs that we need them to do or we could train them to do if we had a focus on the American labor market. And also, on dealing with this issue.

And I think it is really important on the Small Business Committee that we are fighting for our small business community. And especially, the employees of the small business community because they are the heart of our businesses. They are the people that make us grow. And in my business they are part of our family. I mean, it is almost every year that we give out a 50-year pin to someone who has worked in our business way back when my grandfather hired them.

But to that, one of the things that I think has been really helpful for us, and this is why I want to direct a question to Ms. Benck and also to Mr. Brownlee from Aurora, we have wonderful community colleges in Upstate New York and they have been providing us with an opportunity to train a lot of our workforce. And this has been a great situation. But in terms of job training, increased wages and benefits and really focusing on a renewed commitment to America workers and our communities, I think that is what we need to start looking at.

And I wanted to again address my first question to Ms. Benck. You raised the unfortunate issue of stigmas against skilled trade in our country and this has been a barrier to entry particularly for young people into stable, well-paying, long-term jobs. How, in your opinion, does the frequent lack of career and technical training in America's secondary schools contribute to this phenomenon? If you could just give us a brief, kind of restating what you have said in the past.

Ms. BENCK. Well, I think it is a huge source of the problem. I mean, it used to be when I was in high school, you know, there was always a shop class; right? And those are gone out of most high schools. So that is where AEDs putting their efforts now into reaching back into those high schools that are still focusing on technical trades and we are out there certifying them and organizing all the dealers in that specific area to get involved and active so that we get those young people interested in our profession. And I think the high schools need to do a much better job. And it is not really just even the educational process. It is really the parents that are a big problem. We have this view in this country that everybody has got to go to college and if you do not send your kids to college you are doing them a disservice. And unfortunately, I think that has led to all of these very sometimes much higher paying jobs with no debt.

We have a little graph that we use at AED. It is based on averages. But it is literally like over $300,000 for the first 4 years of

a young person's life difference in cost of going to college and going into debt versus going into one of our technician programs where you get paid going along the way and you get out 2 years earlier earning in a job. Three hundred thousand dollars in the first 4 years of someone's life is absolutely enormous in terms of their total economic future.

Ms. TENNEY. We could do a month on school loans and debt. I hear about it a lot from students. But I urge them, as you said, you have got a lot of trucks in the background in your screen there and we are having a struggle getting a lot of people to become truckers which is a great, well-paying job that is so necessary. And we have had to employ some of our own people.

I just want to say, what do you think Congress——

Chairman CROW. The gentlelady's time has expired.

Ms. TENNEY. That went quick. Thanks so much. I appreciate it. I will catch up with you in the next round.

Chairman CROW. Thank you.

So, we will start, while we are waiting on Ms. Houlahan from Pennsylvania who is on her way to the hearing, I wanted to do a follow up with Mr. Brownlee, Dr. Brownlee.

A little bit more on the students that you serve in Aurora, some of those or many of those are underserved students. Can you touch briefly on the impacts of transportation challenges and childcare challenges that those students face when they are pursuing training, vocational, technical training at the Community College of Aurora?

Mr. BROWNLEE. Absolutely, Chair. Thank you, Chairman Crow for the opportunity.

So, yes, as I shared earlier, 51 percent of our students are Pell grant eligible and so as we think about low socioeconomic communities, over 90 countries represented here at the Community College of Aurora so as we think about childcare, just as, for example, 60 percent of our students are female, so we think about the amount of working mothers that we have here at the Community College of Aurora, it tends to be a bit of a challenge and a barrier for childcare, just available childcare. As we think about our service area and the various challenges there are in some cases a 1 to 2 year waiting list just for individuals to be able to secure childcare for themselves. And then that certainly becomes a barrier.

And so, as we think about transportation, broadband access, as we have been working through the pandemic, it is one thing to hand a student a laptop. It is a whole another thing to make an assumption that that student has a home to plug that laptop into, let alone has access, Internet access in their own private homes to do the work of online education. And so, we are seeking and have continued to find ways to have gap closures as we think about the digital divide and providing Wi-Fi access. We certainly increased our infrastructure here at the college at our locations. I have created Wi-Fi accessible parking lots to create more access opportunities for our students. But certainly, certainly, certainly it has been a challenge in our community to be able to meet the needs, create workforce opportunities, and you are having to deal with just basic food insecurities, housing insecurities, and the various challenges that come about with low socioeconomic communities.

I say that to all say, we also are grateful though for all the opportunities that have been provided from us from the U.S. Department of Education and the U.S. Department of Labor, and certainly here in the State of Colorado, to help us address these various challenges for our students.

Chairman CROW. Thank you, Dr. Brownlee.

I will now recognize the Ranking Member, Ms. Young Kim, for 5 minutes.

Ms. YOUNG KIM. Sure. Thank you, Chairman.

And to our witnesses, as we continue to discuss the shortage in skilled workforce and the need to bring in more qualified individuals to work, could you, specifically Mr. Arnold and Ms. Benck in your respective industries that you are in, can you talk about some of the technical skills and qualifications you are looking for in an employee and whether or not you anticipate those skills will be changing in the next 5 to 10 years?

Ms. BENCK. Well, I guess I will go first. Oh, my God, the skill levels that we are going to need in the future is a little bit frightening when we look out 5 years from today. I mean, we are on the verge of autonomous tractors. We have all the new fuel technologies that are coming, electrification, hydrogen, all kinds of things that the manufacturers are working on today. So, the skill level, like I said, right now our technicians really have a bachelor's degree in terms of the time that is put into their training, whether it be from that 2-year technical program, and then what we do as a dealership. But the skill levels and the different skills that are going to be needed in the future are a little bit frightening and will create a whole bunch of other challenges as we move into the future.

Ms. YOUNG KIM. Mr. Arnold? Mr. Arnold?

Mr. ARNOLD. Thank you, Ranking Member Young Kim.

The nice part I think right now is for somebody just looking to enter into the apprenticeship program, all we really need is somebody that has the good enough soft skills. A willingness to show up to work, to be there on time, to work throughout their entire shift, be productive, and learn from their mistakes. The training program really is designed and engineered to make sure that at the completion of the 5-year program obtain all the certifications required to be successful in the career. So, during that program they are going to obtain welding certifications. Up front it is a big focus on safety, so they are going to need OSHA 30-hour Safe Handling Refrigerants. And then all the various certifications that go along that is needed by the industry, by our employers that communicate that to us at our monthly JATC meetings.

I would agree with Ms. Benck that the future is going to involve some changes and we are going to need to train folks on newer technologies. Right now, we are focusing on making sure our members are trained on variable refrigerant flow, variable refrigerant volume systems which just were not all that common in the past. Typically, you saw large scale hydronic systems with traditional boilers and chillers. And so, some of that technology is already starting to show itself and we have already engaged in that training. But where does hydrogen lead for building heat and in-home heating? Geothermal is another viable technology that I could see

used in the future. And so, what we want to do is continue to maintain that constant communication with our employers so they can communicate exactly what our customers are looking for. What do building owners want in their new buildings? And that way we can adjust and be flexible to meet the industry needs.

Ms. YOUNG KIM. Thank you. It looks like Ms. Houlahan showed up so I will yield my time.

Chairman CROW. Thank you. The gentlelady yields back.

I will now recognize the gentlelady from Pennsylvania, Ms. Houlahan, for 5 minutes.

Ms. HOULAHAN. Thank you. And apologies for being so late.

I appreciate the time of all of you all, and I appreciate all of your testimonies today. And my questions are focusing on two areas. One is on workforce development in the STEM area. And I want to thank you as I mentioned for each of your testimonies in this area. We need to very much swiftly address the workforce issues that we are having, particularly in STEM and STEAM. I am an engineer and so, of course, particularly interested in these issues. And in specifically addressing the lack of gender diversity in these fields.

So, one particularly important consideration is that which women experience, and they experience significant challenges in returning to the workforce after major life events. So, one in four women tend to take a break in their career which is four times as many women as men, and many of those women drop out of the workforce as a result of that break in their career.

So, to Mr. Kane, in your testimony you emphasizer the need for federal leadership to ensure greater flexibility to fill careers. Would you be able to please elaborate on how providing funding for flexible workforce development opportunities, such as returnships that would be created by the STEM Restart Act would help address the workforce development and diversity challenges that our country faces?

Mr. KANE. Yeah, Representative. You know, look, I think the reality we are facing is startling where I think Mr. Brownlee said that 60 percent of the candidates I think in his program, are about 60 percent women. In our research, under 15 percent of infrastructure workers are women. And so, there are huge gaps here even for individuals who may get some of the credentials to actually holding on to and filling these positions over time. And so, to the extent that there is direct employer engagement, supportive services as has already been talked about in terms of childcare, travel assistance and so on, that is very important for women I would argue in particular here. But I think flexibility also to the understanding as it relates to the skills conversation, you know, we cannot just be looking at filling one type of job or one position but really revealing I think the pathways that can be quite nimble for prospective workers, whether you are a woman, a person of color, or so on. We need the 100 to 200 level skills here, too, that workers, particularly as it relates to STEM, we found in our past research that STEM skills are crucial, whether you are a water treatment operator, whether you are a technician, whether you are an electrician. These are common skills across so many of these different occupations. And yet, the employers often are planning an isola-

tion; right? They are often competing against each other. And from the worker's standpoint, they do not know, at least from the research I have done, they do not know where to turn other than that they are told to kind of train for one particular job with one employer. And that is just not the reality that is facing a lot of workers now. And so, understanding how more and different types of women, including women, can achieve those 100 to 200 level skills is crucial. We have seen some innovative efforts across the country that have tried to do this. The Infrastructure Academy concept is one idea that has emerged in D.C. and also in Los Angeles on this issue of creating a one-stop destination for workers, prospective workers, for the younger workers, to actually understand what the opportunities are and the skillsets that are needed, not just the individual credentials to fill these positions.

Ms. HOULAHAN. Thank you. And I look forward to following up with you on Infrastructure Academy. The Infrastructure Academy conversation because my follow-on question was going to be what can we be doing to be more helpful, and what can the SBA be doing as well?

With what remains of my time, I want to transition over to stakeholder capitalism. I Co-Chair the Stakeholder Capitalism Caucus with my friend and Representative Dean Phillips. And we are trying to understand how businesses can better impact policies to foster inclusion and generate longer lasting growth that benefits all stakeholders rather than just exclusively the shareholders. We believe that smarter business practices, such as providing workforce development and career advancement, will be able to grow businesses as well as grow people.

So, to all of you with the 47 seconds I have left, can any of you speak to the importance of providing workforce development opportunities not only for the benefits of the individual but for the benefit of the businesses at large?

Perhaps Mr. Brownlee.

Mr. BROWNLEE. Thank you very much, Representative.

I would say that stackable credentials now more than ever are critical as we think about the advancements in workforce development and training, we want to create very short-term programs that can meet the needs of small businesses as quickly as possible and create what can be a career growth trajectory for those individuals towards increased opportunities for economic mobility for them and their families. So, I would say stackable credentials, very short-term credentials, and including very dynamic programs that infuse industry experiences working with the likes of Mr. Arnold and Ms. Benck to create these real-life experiences for students in the classroom is critical.

Ms. HOULAHAN. I appreciate you all. It appears as though I have run out of time and I yield back.

Chairman CROW. Thank you. The gentlelady yields back.

I want to thank all of our witnesses again for being here today. The current labor shortage is a top concern for American small businesses. A business cannot thrive without properly skilled workers. A drag on small businesses hinders our entire economy. Workforce development can expand the pool of qualified candidates, helping small firms fill their openings and grow their businesses.

In turn, we can supply workers with the tools they need to get good paying jobs and help them support their families. So, by prioritizing workforce development, we can bolster small businesses, help American workers, and support communities.

And I also just wanted to make an additional comment on the discussion that we had with Dr. Brownlee and the impact of affordable quality childcare on our workforce. One of the largest periods of economic expansion in our nation's history was after World War II is large numbers of new workers entered our workforce. They were largely women. Right now, we have millions of American workers who cannot enter the workforce or cannot enter the workforce at the right level because they cannot afford to or they just cannot because they do not have childcare for their children. And the bottom line is this actually disproportionately impacts women. That is what the data show.

So, if we want to unleash vast swaths of economic activity and grow our economy and help our businesses we will pass legislation that will provide quality, affordable childcare to American families. That is good for our economy. It is good for our families.

So, without objection, Members have 5 legislative days to submit statements and supporting materials for the record.

And if there is no further business to come before the Committee, without objection, we are adjourned.

[Whereupon, at 11:29 a.m., the subcommittee was adjourned.]

APPENDIX

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 journeyperson 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 journeyperson that can not only demonstrate proper job tasks and duties, but also ensure that all job tasks are preformed safely to protect against worker injuries. This allows apprentices to gain valuable firsthand experience safely preforming 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 journeyperson 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 preforming. 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 preforming, 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 journeyperson 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.

Testimony to the U.S. House Small Business Subcommittee on Innovation, Entrepreneurship, and Workforce Development

Dr. Mordecai Ian Brownlee, Community College of Aurora President

Introduction

Good morning and thank you for this opportunity. Chairman Crow, Ranking Member Young Kim, and members of the subcommittee, my name is Mordecai Brownlee, and I am the proud president of the Community College of Aurora (CCA).

CCA is part of the Colorado Community College System and serves over 10,000 students annually. At the onset of the pandemic, our enrollment dropped twelve percent. However, I am proud to share that our college has rallied hard for our students, and to date have recaptured seven percent of that loss and we won't stop until all our students have been accounted for. Uniquely, our institution serves in the most diverse region of the state and our student demographics represent that reality accordingly. As a federally designated Hispanic Serving Institution (HSI) and Minority Serving Institution (MSI), sixty-four percent of our students identify as a student of color, fifty-one percent of our students are Pell grant eligible, and fifty percent of our students are first-generation college students. With five continents and over ninety countries represented at our institution, we are proud to serve a rich and diverse student body that includes the state's largest immigrant population. It is also important to note that our small business owners within our service area represent this rich diversity as well.

Community colleges, like ours, stand on the front lines and in service to the most disadvantaged students and those hardest impacted due to the pandemic through our

mission of open-access, affordable, high-quality postsecondary education and workforce training.

Through partnerships with community organizations such as our Aurora Chamber of Commerce, Aurora Economic Development Council, and the Arapahoe/Douglas County Workforce Development Council, CCA is utilizing data and feedback provided by small business and large industries to re-envision and transform our student learning experiences and to develop new credit and non-credit opportunities. Intended to train displaced workers, non-traditional adult students, and first-time in college students, these efforts seek to upskill or reskill to obtain industry-recognized credentials that align in-demand, high-wage occupations. Thus, providing individuals, with varying levels of academic readiness, a pathway to economic mobility. CCA has been working to overhaul and adjust aging programs to meet the needs of Aurora's diverse community and workforce. Currently, we are designing new programs in healthcare, renewable energy, and construction management courses, and offer hybrid, online, and in-person instruction outside the typical working hours to accommodate our students' varied schedules.

As an open access institution, serving in the most diverse communities, our students are directly impacted by the various socio-economic challenges that face other metropolitan communities around the nation. Lack of reliable transportation, childcare, broadband access, and a supportive network have historically created barriers to a quality education and the obtainment of their dreams. Listening to the voice of our students, CCA has worked in hand with our student body to eliminate barriers and provide resources to promote equitable access and opportunity for our students.

Take for example, Victoria Browning. Prior to attending CCA, Victoria held a full-time job earning $14 an hour to support her two young children, while struggling to address thousands of dollars in student debt. Thanks to a grant created by the U.S. Department of Labor, the Strengthening Working Families Initiative at CCA offered students like Victoria childcare, college counseling, and career support. Ultimately, Victoria's dream of social and economic mobility was realized and so were the dreams of many others.

Or, take for example our Asegurando Learning Community. To address the equity gap in student achievement between students of color, specifically Black and Hispanic/Latinx students, and their white peers, CCA was awarded a Title V grant from the U.S. Department of Education. From there, the Asegurando Learning Community was born. In partnership with the faculty, instructors, and staff of the college, the learning community began the implementation of student learning intervention programs, curriculum redesign, and mentorships programs to better serve students. Data has shown significant student success rates of participants. In addition, our students agreed that as a result of course redesign, they were able to showcase their strengths, skills, and interests in a relevant way.

Recently, CCA has established a new division within the college to focus strategically on the placement of students into career mentorships, internships, externships, and apprenticeships to level the field among those who have access to supportive networks and those who are not as privileged. Each of these opportunities will provide valuable on-site training, industry exposure, and contextual learning to strengthen the in-class experience while accelerating career advancement.

Supporting Community Colleges

We pride ourselves in being resourceful, adaptive, and nimble in order to best serve our students and our local business and community needs and supports at the federal level are critical for our continued success. The continued preservation the Federal Pell Grant program and financial aid adaptations, like short-term Pell and tax-free Pell grants, could dramatically transform institutions. Such transformation would provide the resources to create and sustain efforts aimed to retool and upskill the workforce necessary to power small businesses and local industries while helping our most struggling students finance college.

Additionally, our workforce programs, while innovative and responsive, are expensive to develop, involve more expensive equipment, and require more highly paid instructors than traditional academic programs. For example, programs in healthcare and advanced manufacturing are in great demand, but are also among the most expensive programs to offer. In order to maintain our roles as leading providers of workforce training and maintain affordability for students, it is critical that we make meaningful investments in career and technical education infrastructure at community colleges. The establishment of dedicated community college job-training programs, like those originally included in the Build Back Better Act, would fund these workforce critical efforts.

Conclusion

In conclusion, in today's culture, where the call for innovation and increased efficiencies are abundant, community colleges cannot afford to be viewed as inefficient and non-

responsive intermediaries. We are laser focused on redesigning our institution for industry and workforce relevance, and we understand that our sustainability depends on our ability to evolve and respond. Our communities are depending on us to provide an accessible, affordable, supportive, and transformative post-secondary and workforce education. Our community small businesses and industry partners are depending on us to be responsive to their needs. Our students are depending on us to create an environment where equitable student success is fostered and every barrier towards the fulfillment of that success is removed. The Community College of Aurora stands ready to meet these needs for years to come.

Thank you. I look forward to answering any questions that you may have.

BROOKINGS

QUALITY. INDEPENDENCE. IMPACT.

Expanding the Infrastructure Talent Pipeline and Boosting Economic Opportunity

Testimony submitted to the
Committee on Small Business
Subcommittee on Innovation, Entrepreneurship, and Workforce Development
United States House of Representatives

March 9, 2022

Joseph W. Kane*
Fellow, The Brookings Institution
Washington, DC

**The views expressed in these remarks are those of the author alone and do not necessarily represent those of the staff, officers, or trustees of The Brookings Institution*

Good morning, Chairwoman Velázquez, Ranking Member Kim, and members of the committee, thank you for the opportunity to offer testimony as you consider different innovations and investments in workforce development. My name is Joseph Kane, and I am a Fellow in the Metro Program at the Brookings Institution. The purpose of my remarks today is to frame specific challenges and opportunities facing the country's infrastructure workforce, including the potential to expand career pathways in the coming months and years.

As you know, workers have faced an increasingly polarized labor market during the COVID-19 pandemic and over the last few decades. Middle-skill jobs—which typically require more than a high school diploma but less than a four-year college degree—have grown much slower than other low-skill and high-skill jobs. The Great Recession amplified this trend, with the greatest job losses among workers with a high school diploma or less; 95% of jobs created during the subsequent recovery went to those with at least some college education. Even before the pandemic, 53 million American workers—or 44% of all workers—earned only about $10.22 per hour. Many of these lower-income workers—including a disproportionate number of women and people of color—have struggled to find long-term, better-paying jobs, and the pandemic has only heightened these difficulties.[1]

At the same time, the country's infrastructure—including transportation, water, energy, broadband, and other systems—has increasingly faced gaps in investment. That's not only true when it comes to needed physical upgrades and expansions, but also when it comes to hiring, training, and retaining a skilled workforce to construct, operate, and maintain all these various systems. Aging and inefficient designs; a more extreme climate; and rapidly-evolving technologies are pressuring transportation departments,

[1] Source (entire paragraph): Adie Tomer, Joseph W. Kane, and Caroline George, "Rebuild with purpose: An affirmative vision for 21st century American infrastructure," Brookings, 2021.

water utilities, and many infrastructure owners and operators to have a workforce ready to take on different projects. A lack of fiscal and technical capacity at a state and local level, in particular, has long stymied efforts to improve infrastructure and prioritize infrastructure workforce development. However, the recently-passed Infrastructure Investment and Jobs Act (IIJA) offers an unprecedented opportunity to address these gaps—and accelerate momentum around careers that pay higher wages, require shorter-term credentials, and need a new generation of talent.

To maximize this opportunity, federal, state, and local leaders can't just create short-term jobs—namely construction jobs—for the same people. They need to be ready to harness the IIJA funding and other potential federal funding in ways that expand opportunities to the full diversity of our workforce—women and men, the unemployed and underemployed, and younger students and adult learners—across a broad range of positions in the skilled trades and other in-demand fields.[2] They need to focus on creating an infrastructure talent pipeline that can offer more sustained opportunity to workers and provide greater certainty to infrastructure operators and other employers, including contractors and small businesses in this space.

Federal leaders have an integral role to play defining what an infrastructure job means for different workers and employers across the country—while boosting greater access to these careers. Without a consistent understanding of who can fill these positions, where they are located, and what types of skills and training are needed, the country risks missing the generational opportunity at hand. Much of my past and ongoing research has focused on defining these needs, which I will describe first before discussing potential solutions.

Defining the Infrastructure Workforce Challenge

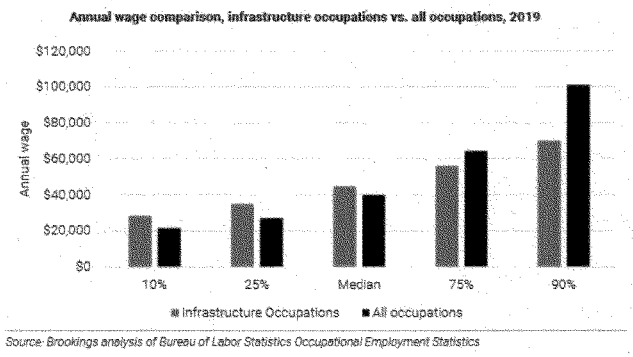
The country's infrastructure workforce challenges primarily center around a lack of visibility and flexibility.

Addressing these challenges begins with acknowledging the variety and extent of infrastructure career pathways nationally, as past Brookings research has explored.[3] In 2019, before the pandemic hit, 17.2 million workers—or more than one of every 10 workers nationally—were employed in infrastructure, primarily concentrated in 91 different occupations. The largest positions include truck drivers, electricians, plumbers, and other skilled trades found in urban areas, rural areas, and every kind of place in between. But many workers are also involved in administrative, financial, and managerial roles at warehouses, utilities, and engineering firms. Operational jobs represent three-quarters of all infrastructure jobs.[4]

A basic challenge facing infrastructure employers—including utilities, transportation agencies, and engineering firms—is a lack of awareness among Americans that these careers even exist. Many infrastructure jobs (along with the relevant educational and training pathways to access them) lack visibility among students and prospective workers. This obscurity continues even as infrastructure jobs offer more competitive, equitable wages due to prevailing industry norms and greater labor protections,

[2] Joseph W. Kane and Jack Mills, "Harnessing the Infrastructure Investment and Jobs Act to train the next generation of workers," Brookings, 2022.
[3] Joseph W. Kane and Robert Puentes, "Beyond Shovel-Ready: The Extent and Impact of U.S. Infrastructure Jobs," Brookings, 2014.
[4] Joseph W. Kane, "Biden needs to create an infrastructure talent pipeline, not just more jobs," Brookings, 2021.

including higher levels of unionization. In particular, infrastructure jobs can pay 30% more to workers at lower ends of the wage spectrum, or at the 10th and 25th percentile—in other words, workers with the least amount of experience who are just starting their careers.[5]



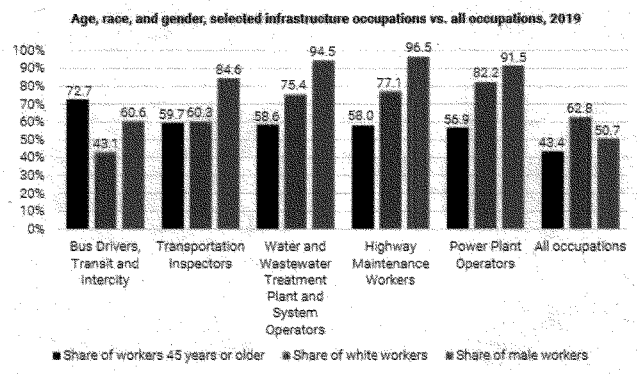
Prospective workers may also lack awareness around the exact types of skills and training needed for these careers, which tend to emphasize work-based learning opportunities, such as apprenticeships and internships. For example, around a half (53.4%) of infrastructure workers have a high school diploma or less, compared to around a third (31.7%) of all workers nationally.[6] Likewise, nearly all infrastructure workers have at least some level of on-the-job training.[7] Whether employed as technicians, operators, or engineers, these workers frequently demand higher levels of STEM knowledge and digital skills gained by on-the-job training. Yet, even if they have awareness of needed training or credentials, students and prospective workers may still struggle to gain knowledge and experience for a host of reasons: a lack of employer engagement, rigid licensing requirements, underfunded career and technical education (CTE) programs, and limited supportive and wrap-around services, such as childcare.

A lack of visibility combined with a growing need for related experience and skills has resulted in massive hiring, training, and retention gaps. While some infrastructure jobs are projected to grow in coming years, the replacement needs—filling positions left vacant by retired workers or those leaving the sector permanently—are even more dire. Nearly a quarter of all infrastructure workers will need to be replaced over the decade, but some occupations are expected to see 10% or more of their workers leave each year on average.[8] That's especially the case for infrastructure jobs with older workers nearing or eligible for retirement; 73% of bus drivers, for instance, are over the age of 45, and many are in their 50s. This "silver tsunami" across several occupations poses a short- and long-term threat to employee retention, knowledge transfers, and other operational needs in public and private employers alike.

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[5] Joseph W. Kane and Robert Puentes, "Expanding opportunity through infrastructure Jobs," Brookings, 2015.
[6] Joseph W. Kane, "Biden needs to create an infrastructure talent pipeline, not just more jobs," Brookings, 2021.
[7] Joseph W. Kane and Adie Tomer, "Infrastructure skills: Knowledge, tools, and training to expand opportunity," Brookings, 2016.
[8] Joseph W. Kane, "The future American workforce will have a lot of jobs to fill, particularly in infrastructure" Brookings, 2017.

In addition to a graying workforce, many infrastructure workers are predominantly white and male, signaling our inability to attract and hire a younger, more diverse generation of workers. In occupations such as power plant operators and highway maintenance workers, up to 82% of workers are white. Meanwhile, 82% of all infrastructure workers are male.[9] In individual infrastructure sectors such as water, these racial and gender gaps can be even more extreme: 99% of pipelayers are male, and Black and Asian American workers tend to be underrepresented overall, filling 12% of water jobs compared to 18% of all jobs nationally.[10]



Source: Brookings analysis of BLS Occupational Employment Statistics and EMSI data

Such imbalanced racial and gender statistics reveal underlying inequities in our workforce development practices. Demonstration projects, mentorships, and other early, repeated opportunities for career exploration can be lacking for students and prospective workers. Work-based learning and other bridge programs and internships may also be out of reach, despite being important tools to help disconnected youth gain skills and experience as they navigate the transition from school to work and foster positive relationships with adults along the way.[11] And beyond the young adults struggling to enter the workforce for the first time, older displaced workers in other economic sectors—including veterans and the formerly incarcerated—may also experience challenges. Adult and dislocated worker training programs are often underfunded, and the available transition pathways amid new technologies and the changing nature of work in energy and elsewhere lack flexibility.[12]

Seizing the Infrastructure Workforce Opportunity

Infrastructure jobs are varied and widespread, offer more competitive and equitable wages, do not demand as much formal education, and have immediate and long-term hiring needs. Seizing this

[9] Brookings analysis of BLS Occupational Employment Statistics.
[10] Joseph W. Kane and Adie Tomer, "Renewing the water workforce: Improving water infrastructure and creating a pipeline to opportunity," Brookings, 2018.
[11] Martha Ross, Richard Kazis, Nicole Bateman, and Laura Stateler, "Work-based learning can advance equity and opportunity for America's young people," Brookings, 2020.
[12] Annelies Goger, "Turning COVID-19's mass layoffs into opportunities for quality jobs," Brookings, 2020.

economic opportunity hinges on proactive federal leadership to ensure greater visibility and flexibility to fill careers. That doesn't mean filling one type of job in one place, but rather, having multiple entry points and pathways available for more people in more places. This flexibility matters because a diverse range of unemployed and low-wage workers in hospitality, retail, and other industries nationally following the pandemic need to transition to better jobs, which will require many branching pathways. That will also require an emphasis on supporting a robust talent pipeline—not just in the next five years of IIJA implementation, but for decades to come.

Expanded financial and technical capacity around regional planning and employer engagement is a must, as is an expanded focus on future-looking skills development and flexible training opportunities.

Visibility: Proactive regional planning and employer engagement

Work-based learning helps students and prospective workers develop and apply new skills, and provides them with the experience needed to qualify for entry-level opportunities across the infrastructure sector. Such programs can introduce younger students to these careers earlier and more often, while especially empowering disadvantaged or disconnected workers of all ages. However, supporting these programs depends on proactive regional planning and employer engagement, which often lack sustainable funding. Federal leaders could provide greater certainty for these efforts through expanded eligibilities in IIJA competitive grants, while providing greater technical assistance to individual regions that are testing new approaches.

For example, employers can partner directly with community colleges, technical schools, and similar educational institutions—along with other community-based organizations—to help students gain the necessary skills, knowledge, and qualifications to be hired. Federal leaders could support such collaborations and "sector partnerships" through expanded funding and technical assistance, as has already been elevated by the Department of Labor, Environmental Protection Agency, and other bodies.[13] Water utilities and other workforce groups in the San Francisco Bay Area, for instance, have banded together as part of a regional "BAYWORK" effort to hold workshops, meetings, and other events around the water workforce challenge; to clarify strategic priorities and measure hiring needs around mission-critical occupations; and to provide on-the-job training opportunities.[14] Similarly, in Washington, D.C., Mayor Muriel Bowser started a new "Infrastructure Academy" to serve as single, postsecondary educational institution and regional destination to help with workforce screening, training, and recruitment.[15]

Apprenticeships and pre-apprenticeship programs offer another earn-and-learn opportunity for workers entering the infrastructure workforce. These programs typically last several years and span the worksite and the classroom, and play a strong role in the construction and utility trades. Expanding apprenticeship opportunities to connect with more workers would provide yet another viable on-ramp to the infrastructure career pipeline. For example, the ICATT Apprenticeship Program, which is modelled

[13] For instance, sector strategies and initiatives are gaining greater visibility. See: United States Environmental Protection Agency, "EPA Announces Initiative to Recruit and Retain the 21st Century Water Workforce," 2020.
[14] Joseph W. Kane, "Investing in water infrastructure and workers: Examining the Bay Area's regional approach," Brookings, 2018.
[15] Joseph W. Kane and Lara Fishbane, "Can 'infrastructure academies' solve our most pressing workforce challenges?" Brookings, 2018.

after and benchmarked against the German dual education system, allows manufacturing employers to invest in a local talent pipeline and build a loyal workforce through extended earn-and-learn opportunities; federal leaders could expand the reach and application of such global models in different industry sectors, such as infrastructure. Beyond additional federal funding for apprenticeships, expanding the work opportunity tax credit (WOTC) could further incentivize employers to test these types of approaches, reach more workers, and facilitate access to on-the-job-training.

Flexibility: Skills development and more accessible training opportunities

Above all, the ultimate reach and impact of the IIJA funding and other potential federal funding must ensure there are flexible training opportunities in place to help more and different types of workers grow their knowledge and experience over time. This will be crucial as new technologies and the nature of work keeps changing across the infrastructure sector, which will demand ever-evolving skillsets and credentials to navigate the labor market.

Programs focused on younger workers—particularly those out of school, out of work, and facing other social and economic disadvantages—can grow and diversify the infrastructure workforce. Service-based learning opportunities and expanded Pell grant eligibility for short-term job training and CTE programs are two ways that federal leaders could address these youth workforce needs.[16] Even reaching younger students in middle school and high school should not be overlooked, as many infrastructure employers look for ways to be present in the classroom and communities through demonstration projects.[17] Funding eligibility and prioritization for such efforts in the IIJA competitive grant programs, including expanded local hiring of younger, disadvantaged workers, could offer light-touch ways to expose more people to infrastructure careers.

However, younger individuals are just one segment of the prospective infrastructure workforce. Many other nontraditional and underrepresented workers—including women, people of color, and middle-aged workers—can realize greater opportunity in this sector as well, especially following the COVID-19 pandemic. Enhancing existing federal efforts, such as the Women in Apprenticeship and Nontraditional Occupations (WANTO) Grants program, could help support community-based organizations provide more accessible on-ramps.[18] Helping unemployed and underemployed workers transition to careers in the infrastructure sector will be especially important in the coming months and years. Expanding supportive services and transition assistance will be essential, similar to how the Economic Development Administration, Appalachian Regional Commission, and other federal agencies have transitioned displaced fossil fuel workers into clean energy careers through the POWER Initiative and the Assistance to Coal Communities (ACC) program.

Conclusion

Chairwoman Velázquez, Ranking Member Kim, and members of the committee, I believe there are enormous challenges facing our infrastructure workforce, but also enormous opportunities. Admittedly, the issues I have described today only scratch the surface of what federal, state, and local leaders need

[16] Adie Tomer, Joseph W. Kane, and Lara Fishbane, "An infrastructure stimulus plan for the COVID-19 recession," Brookings, 2020.
[17] Joseph W. Kane, "Recognizing infrastructure's role as a local economic anchor," Brookings, 2018.
[18] Caroline George and Joseph W. Kane, "Reversing America's poor track record on inclusivity in infrastructure jobs," Brookings, 2021.

to do around infrastructure workforce development, particularly amid an influx of new IIJA funding. The infrastructure talent pipeline is increasingly empty, and the lack of skilled workers may pose difficulties to getting projects done and helping communities. But as conversations evolve in the coming months, I want to emphasize the opportunity you and other leaders have to further refine and test potential applications of any new funding—to not simply reinforce existing and inequitable workforce gaps, but to create stronger pathways for all prospective workers, including those underrepresented in infrastructure and infrastructure-adjacent occupations. Doing so has the potential to expand economic opportunity well beyond the IIJA's initial launch and into years to come.



Skill, Upskill, and Reskill: Analyzing New Investments in Workforce Development

Statement of Diane Benck, General Operations Manager and Owner, West Side Tractor Sales Co.

On Behalf of Associated Equipment Distributors before the U.S. House of Representatives Small Business Committee's Innovation, Entrepreneurship and Workforce Development Subcommittee

March 31, 2022

Chairman Crow, Ranking Member Kim, and other distinguished members of this subcommittee, it is my pleasure to appear before you today both as an owner and executive of a construction equipment dealership directly impacted by the skilled workforce shortage and on behalf of Associated Equipment Distributors (AED).

I am the General Operations Manager and co-Owner of West Side Tractor Sales Co., a Lisle, Ill.-based company. West Side Tractor's story is truly one that could only happen in the United States of America. My parents established the company in 1962 with three employees and a pick-up truck full of parts. In 1987, my two brothers and I took over operations of West Side Tractor, and today with the third generation of family directly involved in the business, we employ 325 workers at 11 locations servicing Northern Illinois, Southern Michigan and Indiana. We are the authorized John Deere construction and forestry distributor for this territory.

I am currently a member of the Board of Directors for The AED Foundation. I also served as the first Chairwoman of AED in 2018, the association's top volunteer leadership position.

AED is the international trade association representing companies that sell, rent, service and manufacture construction, forestry, agriculture, energy, mining, material handling and industrial equipment and related supplies. Established in 1919, our nearly 800 members, including more than 440 equipment dealerships, generate $60 billion in revenue annually, employ 125,000 workers and operate more than 5,300 locations across North America. Most AED members are small, family-owned, multigenerational companies.

The AED Foundation (AEDF) is dedicated to addressing the equipment industry's workforce challenges by accrediting heavy equipment maintenance and technology programs, promoting careers at equipment dealerships and commissioning research reports to advance the importance of workforce development to policymakers, educators, the media, and other stakeholders.

I appreciate the opportunity to come before the subcommittee to discuss:

1) The impact of the shortage of skilled workers on the equipment industry and my company;
2) What AED and The AED Foundation are doing to close the industry's skills gap; and
3) Recommendations to address the workforce shortage.

The Impact of the Skilled Workforce Shortage

Operating a capital-intensive small business comes with many challenges, including dealing with inflation, supply chain issues and an everchanging tax and regulatory environment. However, the one consistent

obstacle, that has impacted every equipment dealer for decades, is the lack of skilled workers, particularly service technicians.

In 2016, the AED Foundation released a study by public policy researchers at the College of William & Mary quantifying the economic impact of the technician shortage. The report included a comprehensive AED member survey to gather industry-specific data, which found the technician shortage is costing AED members approximately $2.4 billion per year in lost revenue and economic opportunity. More than 50 percent of AED members said the skills gap had hindered dealership growth and increased costs and inefficiencies. But the technician shortage isn't just a problem for dealers, it's also a problem for all the economic sectors AED members serve: Almost 75 percent of survey respondents said the technician shortage made it difficult to meet customer demand.

Unfortunately, since the 2016 study, all indications are that the shortage has only gotten worse. A similar study by the College of William & Mary released in 2020, prior to the COVID-19 pandemic, found during the subsequent five years, AED members would need to fill 73,500 equipment technician vacancies.

The research reports affirmed what those of us in the equipment industry live with every day: The lack of qualified workers is costing our businesses revenue, which could be used to further expand and invest, and its causing inefficiencies for our customers, as equipment oftentimes can't be repaired or maintained as expeditiously as demanded.

A typical service technician at an equipment dealership can easily make six figures, depending on experience and location. At West Side Tractor, our Illinois-based apprentices start more than $22 an hour and quickly escalate to $45 within four years, not including comprehensive benefits and other incentives. At West Side Tractor, we could easily increase our technician workforce by 20 percent, if we could find qualified workers.

Most service technicians attend a two-year technical college degree program that focuses on heavy equipment technology. Traditionally, the occupation was stereotyped "dirty". However, with recent innovations, today's heavy equipment is on the cutting edge of technology, requiring technicians to work with computers to diagnose and fix problems. In fact, when you include technical education with our manufacturer-mandated and in-house training, a typical service technician logs similar classroom hours to someone with a baccalaureate degree from a university.

AED and the AED Foundation's Activities

There's no one-sized-fits all approach to tackling the equipment industry's workforce challenges. However, AED, primarily through The AED Foundation, is undertaking an ambitious initiative to create a strong and robust pipeline of skilled workers.

By 2025, the AED Foundation will have 100 accredited heavy equipment service technology programs across the country. These AED Foundation accredited programs are the industry gold-standard that having high-quality degree programs that provide effective and comprehensive instruction in safety/administration, electrical/electronic, hydraulics/hydrostatics, power trains, diesel engines and fuel systems, and heating/air-conditioning. Additionally, the AED Foundation will accredit 150 high school programs. The goal by 2025 is to have an additional 10,000 skilled technicians entering the workforce.

AED and The AED Foundation will also continue its leadership role in informing educators, students, parents, and the media about the enormous opportunities in the equipment industry. The Infrastructure Investment and Jobs Act (IIJA)/the bipartisan infrastructure law provides long-term investments in

infrastructure that will require construction equipment, and of course, the maintenance and repair of critical machinery. A career in the equipment industry has never looked brighter.

Finally, the AED Foundation will continue to produce research reports to ensure policymakers, the media and the general public understand the negative impact the workforce shortage is having on small, family-owned businesses.

Recommendations to Address the Workforce Shortage

First, and foremost, there remains a stigma in this country about the skilled trades. Parents encourage their children to go to four-year colleges and universities, and teachers and school counselors often reenforce the message. Students end up graduating with enormous debt and skills that don't match what employers demand. AED will continue to deliver the message—the skilled trades are a rewarding and lucrative career.

In Congress, lawmakers should pursue policies that invest in career and technical education programs and incentivize students to pursue vocational education. The Perkins Act is critical to the funding of technical education programs across the nation and developing the career and technical skills of secondary and postsecondary students. Unfortunately, Perkins Act funding hasn't kept pace with the demand or the nation's needs. Congress should consider increasing funding for the Perkins Act to help educate the next generation of skilled workers.

Currently, Federal Pell Grants are not available to postsecondary career and technology education students in short-term certificate programs that provide industry-based credentials and ultimately employment in high-wage, high-skill industry sectors or careers. As a result, many students across the country do not have access to high-quality, short-term career and technical education programs. The bipartisan Jumpstarting Our Businesses by Supporting Students Act (Jobs Act/H.R. 2037) would make high-quality programs that are at least 150 clock hours and eight weeks in length Pell-eligible, opening the door to career and technical education for many more students.

Finally, I think it's important to note that education is inherently a state, regional and local issue. What's good for Illinois isn't necessarily what's best for Colorado or California. Consequently, it's vital that industry work closely with local educators and policymakers to ensure resources are dedicated to educating students for in-demand careers.

Conclusion

The skilled workforce shortage continues to be the equipment industry's greatest challenge. It hinders growth and economic opportunity, creates inefficiencies, and impacts the country's competitiveness. As a nation, it's imperative that we steer the next generation to careers in the skilled trades. There's no one-sized-fits-all approach, but public policy, career and technical education investments, and reversing the mindset that everyone must pursue a bachelor's degree will help close the skills gap and expand the pool of skilled workers to fill in-demand jobs.

MATHEMATICA
Policy Research

InFOCUS

Dana Rotz, Nan Maxwell, and Adam Dunn

Social Enterprises, Economic Self-Sufficiency, and Life Stability

Social enterprises (SEs) are mission-driven businesses focused on hiring and assisting people who face barriers to work. In 2011, REDF funded organizations in California to expand and support SEs and commissioned an evaluation to assess this approach. This brief highlights key findings from an outcomes evaluation of 282 SE workers in seven REDF-supported organizations; an impact evaluation comparing outcomes for 154 SE workers and 37 work-eligible individuals not hired by the SE at one organization; and an accompanying cost-benefit analysis.

SOCIAL ENTERPRISES HELPED IMPROVE ECONOMIC SELF-SUFFICIENCY AND LIFE STABILITY OUTCOMES

Results from the outcomes analysis suggest that SEs may help workers gain employment and move toward economic self-sufficiency and life stability; however, the impact-study results are inconclusive, in part because of small samples. As Figure 1 shows, in the year after workers began their SE jobs:

The social enterprise experience is associated with a tripling of the employment rate.

- **Employment increased from 18 to 51 percent.** The impact study suggests these changes might represent some improvement in workers' employment status relative to a comparison group.
- **The percentage of total income from government transfers decreased from 71 to 24 percent.** Evidence from the outcomes study suggests that SE workers had higher income one year after their SE jobs began. Total monthly income increased by 91 percent, from $653 to $1,246. Most of this growth stemmed from increases in wage and salary income, but other sources of income also shifted during the period.
- **The share of SE workers living in stable housing increased from 15 to 53 percent.** However, in the impact study, the estimated change in housing stability was not greater for SE workers than for those who did not work in the SE, even though the change was statistically significant for SE workers.

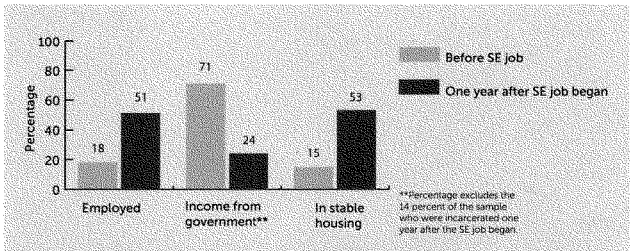


Figure 1. Self-sufficiency and life stability one year after the SE job began

SELF-SUFFICIENCY AND LIFE STABILITY INCREASED WITH SUPPORT RECEIVED AFTER LEAVING THE SOCIAL ENTERPRISE

About two-thirds of workers reported that they received supports *after* they left the SE, including continued access to case management and services to help with work and life stability barriers. Compared with workers who did not receive these additional services, workers who left the SE and received them reported a 21 percentage point increase in the likelihood of housing stability, a $428 increase in total monthly income, and a 0.68 standard deviation decrease in the depression index one year after the SE job began. Although results suggest a relationship between these supports and the life stability measures, we cannot conclude that these services caused the differences because they might be driven by factors that are not captured in the analysis (for example, motivation) that would affect both the SE experience and outcomes.

THE SOCIAL ENTERPRISE EXPERIENCE ADDS VALUE TO SOCIETY

The overall social return on investment in an SE was 123 percent, meaning each dollar the SE spent generated $2.23 of value for society as a whole.

The outcomes analysis suggests that SEs in REDF's portfolio provide a net benefit to society, as depicted in Figure 2. For every dollar the SE spent, the return on that investment was $2.23 for society as a whole. This includes benefits of $1.31 to taxpayers from reductions in government transfer payments and increases in revenues, in addition to benefits to the SE business. Workers, however, actually incur a small loss from SE employment. Although they gain in terms of economic self-sufficiency and life stability, their gains do not exceed losses associated with reduced government transfers and lower public subsidies for housing. The SEs, as business enterprises, roughly break even. Looking across SEs, we find substantial variation; the smaller and newer SEs that we studied do not yet appear to produce net benefits to society.

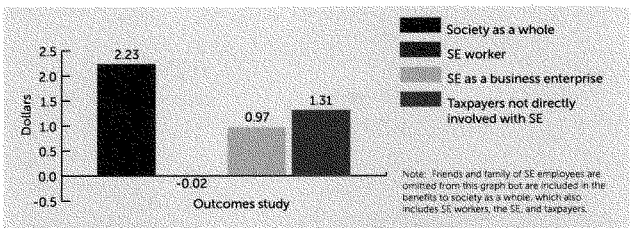


Figure 2. Social enterprise benefits per dollar spent by SEs

LOOKING AHEAD

This evaluation provided evidence that SEs can produce value to society and a net benefit to taxpayers. These benefits were greater among larger and older SEs and for individuals who continued to receive support after leaving the SE. Although we need stronger evidence grounded in a randomized controlled trial to provide more definitive conclusions, our results suggest that it may be beneficial for funders to support the growth and maturation of SEs, as well as SEs' provision of additional support to workers after they leave SE employment.

This research was conducted by Dana Rotz, Nan Maxwell, and Adam Dunn. The full report is available at www.redf.org/finalmjs.

This report is based upon work supported by the Social Innovation Fund (SIF), a program of the Corporation for National and Community Service (CNCS). The Social Innovation Fund combines public and private resources to grow the impact of innovative, community-based solutions that have compelling evidence of improving the lives of people in low-income communities throughout the United States.

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