JUNE 2017

Building America's Infrastructure Workforce

Partnering with Industry to Meet the Demand for Skilled Workers

Our nation's transportation systems and other physical infrastructure are in critical need of an upgrade. The American Society of Civil Engineers recently graded U.S. infrastructure a D+ based on the system's capacity, condition, funding, future need, operation and maintenance, public safety, resilience, and innovation.[1] And there is growing bipartisan support for tackling this challenge: both President Trump and Congressional Democrats have proposed investing or incentivizing up to $1 trillion to rebuild U.S. infrastructure over the next decade.

Investing in infrastructure at this scale could potentially not only strengthen our economic competitiveness and enhance public safety, it could also provide millions of new jobs for Americans who are currently out of work, underemployed, or seeking higher wages. This would be particularly important in communities—both rural and urban—that continue to struggle with high unemployment and limited job opportunities.

Investing in infrastructure at this scale could potentially not only strengthen our economic competitiveness and enhance public safety, it could also provide millions of new jobs for Americans who are currently out of work, underemployed, or seeking higher wages.

But taking full advantage of this potential job creation will require not just investing in our physical capital, but also investing in our human capital—making sure workers have updated skills for these jobs. Businesses in construction, energy, manufacturing, and other infrastructure-related industries already struggle to fill available openings, and would face even greater challenges finding skilled workers to address millions of new openings. And workers cannot benefit from the new economic opportunities created through infrastructure investments if they cannot connect to training that allows them to get the updated skills and credentials businesses are looking for.

As policymakers begin to consider options for scaling up our nation's infrastructure investments, they should ensure that any legislation includes dedicated investments in proven workforce policies and strategies that connect employers with jobseekers with necessary skills, and that the broadest possible range of jobseekers are able to enter into and succeed in new job openings.

---

1 http://www.infrastructurereportcard.org

NATIONAL SKILLS COALITION
Every worker. Every industry. A strong economy.

Nearly half of those new jobs would require some form of education and training beyond the high school level, meaning community colleges, apprenticeship programs, and other training providers would have to significantly ramp up programs to meet demand.

Workforce opportunities and challenges with a new $1 trillion investment

A federal infrastructure package could stimulate significant new job creation. According to a 2017 report by Georgetown University's Center on Education and Workforce, President Trump's proposal for new infrastructure investments could create more than 11 million direct and indirect jobs for workers at every education level.[2]

Nearly half of those new jobs would require some form of education and training beyond the high school level, meaning community colleges, apprenticeship programs, and other training providers would have to significantly ramp up programs to meet demand. The report also warns that labor and skill shortages could slow an infrastructure program, highlighting projected slow labor force growth coupled with baby boomer retirements and no large pool of skilled, unemployed workers ready for new infrastructure jobs.

And there's evidence that we're already struggling to fill these gaps: a 2015 report commissioned by the U.S. Departments of Labor (DOL), Education (ED), and Transportation (DOT) examined workforce growth areas as well as future training needs in the trucking, transit, air, highway, rail, and maritime sectors.[3] The report found that these sectors

2 Georgetown Center on Education and the Workforce, Trillion Dollar Infrastructure Proposals Could Create Millions of Jobs (2017) https://cew.georgetown.edu/wp-content/uploads/TrumpInfrastructure.pdf

3 U.S. Department of Education, Office of Career, Technical and Adult Education, Strengthening Skills Training and Career Pathways across the Transportation Industry, http://cte.ed.gov/initiatives/advancing-cte-in-state-and-local-career-pathways-system (2015)

SECTOR PARTNERSHIPS AT A GLANCE

- Analyze an industry's current and future skill needs in the local area and identify occupations with skill gaps
- Develop a plan to close the skill gaps in the industry
- Assist in the implementation of the plan by carrying out activities such as:
  - Identifying common skill standards and promoting industry-recognized credentials
  - Building career pathways to skilled jobs in the industry
  - Creating or informing training programs and curricula

would need to hire up to a combined 4.6 million workers—1.2 times the current transportation workforce—over a ten-year period (2012-2022) due to the industry's employment needs that will result from growth, retirements, and turnover. At the same time, projected annual job openings are 68 percent larger than the number of students who are completing related educational programs annually across certain transportation occupational groups.

Adding to these challenges are demographic issues unique to the infrastructure sector. The transportation workforce is older than in many other fields. Impending retirements of nearly 50 percent of the current infrastructure workforce in the next ten years—double the retirement rate of the nation's entire workforce—will significantly increase demand for new workers.[4] And women and people of color have historically been underrepresented in the transportation, manufacturing, and construction sectors, in part due to limited access to training that would prepare them for good infrastructure jobs.[5]

Taken together, these factors mean that businesses today have access to fewer qualified workers than necessary to fill vacancies. This gap will be made worse if a significant federal infrastructure investment is made without corresponding investments to upskill the workforce to meet increased demand.

4 National Transportation Workforce Summit Summary of Results Framework for Action (2012) http://www.mwrtba.org/cutcworkforce/wp-content/uploads/2013/01/NTWS_Summary_of_Results1.pdf

5 Currently, women hold only 3 percent of construction jobs and 13 percent of those in transportation, distribution, and logistics. Fewer than 6 percent of workers in the construction industry are African American, as are only 12.7 percent of transportation equipment manufacturing workers.

Policy recommendations

While Congress has established programs at the Departments of Transportation, Energy, and other "demand" agencies that are administering federal infrastructure investments, these programs are not funded at levels that correspond with current needs or the significant workforce demands that would result from an additional $1 trillion infrastructure investment. Also, these programs can be better aligned with other education and workforce programs at the federal, state, and local levels, creating improved efficiencies in the design and delivery of quality training strategies.

To ensure that infrastructure investments benefit businesses, workers, and the economy as a whole, the U.S. must invest in the creation of a diverse pipeline of workers with the skills necessary to access in-demand opportunities. Strategies like apprenticeship, career pathways, integrated education and training, and sector partnerships can expand and diversify the pipeline of skilled workers, but significant gaps in training capacity threaten to undermine the full economic benefits of infrastructure investments.

The new investments being proposed by the administration and Congress go beyond transportation infrastructure and include energy facilities, broadband expansions, school construction, and veteran's hospitals. Given the diverse expertise and skills needed for these types of projects and the existence of a recently modernized workforce development system already in place, legislation investing in infrastructure should include dedicated funding administered by the DOL in coordination with the DOT and other impacted agencies. If just one-tenth of one percent of a prospective $1 trillion investment is

TRANSPORTATION SECTOR PARTNERSHIPS AT WORK

Seattle, Washington

Through an initiative called "Delivering the Transportation, Distribution and Logistics (TDL) Workforce," SkillUp Washington is leading a sector partnership in Seattle that is connecting business, post-secondary training, and low-income adults to support the regional economy. The partnership is focusing on strengthening and expanding TDL training programs, aligning these programs with business needs and standards, sustaining robust cross-sector partnerships, and connecting more people to TDL opportunities.

Through the collaboration of SkillUp, the Center of Excellence for Global Trade and Supply Chain Management, and the Seattle Jobs Initiative, the partnership is conducting labor market research and convening businesses. The goal is to regularly ensure that training programs target the most in-demand occupations and skills, helping to develop short- and long-term worker pipelines to support regional economic growth. To that end, the partnership is also leading the scaling and coordination of several local TDL training programs to meet the high workforce demand in numerous occupations at the Port of Seattle, including the Seattle-Tacoma International Airport, and throughout the region in heavy and tractor trailer truck driving.

For example, the Airport University program run by Port Jobs at the Airport Jobs Center, through a partnership with Highline College and South Seattle College, has turned the Sea-Tac Airport into a college. In a work-based learning setting, the program offers participants a variety of for-credit short-term training programs that are aligned with career pathways and lead towards a Global Trade/Logistics certificate or Homeland Security certificate. Airport University not only helps workers perform more effectively and efficiently, it creates a pool of employees ready to move up and assume more responsibility on the job. So as a business expands, staff can grow right alongside it.[1]

And with demand for truck drivers at an all-time high, South Seattle College, in partnership with Seattle Goodwill, delivers an industrial vehicle program for trucking occupations. This program, which trains people to become Class A and B commercial drivers, also provides students technical and workplace skills while receiving on the job training to prepare them for permanent employment.

Additional partners include: Seattle College District; Pacific Associates; City of Seattle Office of Economic Development Pathways to Careers initiative; Workforce Development Council of Seattle-King County; Alaska Airlines; Boeing; National Fund for Workforce Solutions; and Jobs for the Future.

Central Iowa

Central Iowa serves as a truck, rail, and air hub, with 17 logistics and distribution centers in the region. The need for skilled workers in the region has been increasing, and Central Iowa Works, a regional sector partnership, has helped meet business demand by expanding the populations exposed to training opportunities. Through the implementation of innovative strategies, the program has benefitted 15 businesses to date and created new career paths for a range of individuals, including women.

Training is offered through the Central Iowa Works TDL Academy and includes digital literacy, workplace readiness, financial literacy, workplace simulation, and technical training. The 300-hour program provides four postsecondary credit hours and four industry-recognized certificates: Manufacturing Skills Standards Logistics Associate, Manufacturing Skill Standards Logistics Technician, OSHA 10, and Forklift Operator.

Five businesses, including Ruan Transportation and UPS, are program partners. The training program is delivered at the Evelyn K. Davis Center in Des Moines and at two correctional facilities near Des Moines: Iowa Correctional Center for Women and the Newton Correctional Release Center for men. Other partners include the Des Moines Area Community College and United Way of Central Iowa. Funding for the training comes through a grant from the Walmart Foundation and Jobs for the Future. In its two years of existence the TDL Academy has graduated 206 individuals and 39 percent of those graduates are women. Seventy of the graduates were trained while incarcerated. Seventy five percent of the individuals completing the program have obtained employment.

1 http://portjobs.org/our-programs/airport-university

Sector partnerships are a proven strategy for helping workers prepare for middle-skill jobs and helping businesses find skilled workers.

committed, it would provide $1 billion in funding to expand workforce training—supplementing the current underinvestment and ensuring that states and partnerships have capacity to keep up with demand. The funding should be focused on meeting business needs by investing in sector partnerships and supporting pre- and post-employment training that allows jobseekers to enter into and advance within infrastructure career pathways.

As Congress considers major investments in U.S. infrastructure, National Skills Coalition recommends:

Create and expand sector partnerships with infrastructure industry.

Sector partnerships are a proven strategy for helping workers prepare for middle-skill jobs and helping businesses find skilled workers. Sector partnerships operate at the local/regional level to bring together multiple firms within an industry to collaborate with colleges, labor unions, workforce agencies, and community stakeholders to better match training with the skills needed for that industry to grow and compete.

Under the bipartisan Workforce Innovation and Opportunity Act (WIOA), Congress required states and local communities to support the development and implementation of these critical strategies, but no dedicated funding has been provided for their support. Congress should build on these proven models as part of any infrastructure package by providing dedicated funding to DOL to support the creation and expansion of sector partnerships in targeted industries, and require the department to coordinate with DOT, Department of Energy, and other federal agencies overseeing infrastructure investments to ensure that partnerships are linked to projects on the ground.

Work-based learning (WBL) strategies, such as apprenticeship, are common pathways to a skilled career, particularly in the construction and manufacturing sectors.

Incentivizing business-created apprenticeship and work-based learning programs.

Infrastructure occupations boast competitive wages without necessarily requiring four year degrees. Plumbers, truck mechanics, and power line installers are among the numerous infrastructure occupations that fall into this category, which tend to emphasize on-the-job training rather than higher levels of formal education.[6]

Work-based learning (WBL) strategies, such as apprenticeship, are common pathways to a skilled career, particularly in the construction and manufacturing sectors. These strategies allow workers to support themselves and their families while earning a license or postsecondary credential. Many small- and medium-sized businesses shy away from developing high-quality WBL programs, however, because of real or perceived costs associated with the strategy.

As part of the infrastructure partnerships outlined above, Congress should support the development and implementation of apprenticeship and other WBL programs by providing direct subsidies or tax incentives to participating businesses to help offset the start-up costs of new work-based learning programs. These incentives should be flexible enough to ensure that businesses can design strategies that meet their specific workforce needs while ensuring that participating workers are getting wage increases based on skill or credential attainment and opportunities for advancement along defined career pathways. Tax incentives or subsidies should also be designed to ensure that all businesses, including those with limited tax liability, are able to benefit.

6 https://www.brookings.edu/wp-content/uploads/2016/05/metro_20160510_infrastructure_skills_report.pdf

Ensuring success for workers and businesses.

To ensure that individuals with barriers to employment are able to take advantage of WBL opportunities and to address challenges faced by businesses in running these programs, Congress should create a Work-Based Learning Support Fund. This proposed new funding stream, administered by DOL in coordination with DOT and other demand agencies, would bring together a range of services to ensure that apprentices and other work-based learning participants are fully work ready, that they are receiving the proper training to succeed on the job during their first months of employment, and that risks taken by the new employer are minimized in order to make it easier for businesses—particularly smaller firms—to give new workers access to middle-skill jobs.

The WBL Support Fund would provide pre-employment training grants to community-based organizations, labor-management partnerships or industry-based intermediaries to support traditional pre-apprenticeship services to aspiring apprentices for up to four months. Once a working learner is placed in a work-based learning or apprenticeship program, the fund would support ongoing case management and support services to the work-based learning participant— continuing many of the services the worker received during the pre-employment stage. The fund recipient would also provide continued training, in conjunction with the employer, and could serve as an apprentice's employer of record, providing publically subsidized wages and benefits for up to six months before transitioning the new apprentice to the employer's payroll. After the worker completes the six month transition to full employment, the employer would formally hire the worker at the legally required wage with full employee benefits, while the fund continued to support the WBL participant with retention supports and continued mentoring for up to 18 months after hiring.

This fund could offset recruitment, screening, and orientation costs for businesses, which have been cited by small- and medium-sized businesses as an effective way to address these initial barriers to starting WBL programs. The fund also addresses a main WBL challenge that many businesses have identified—that post-employment support services are critical. Dedicated third-party support for WBL participants made possible by the fund would reduce attrition and turnover for businesses while also helping individuals with barriers remain in high paying but often demanding jobs. By providing resources needed for WBL programs to run effectively, this fund would spur more hiring than tax credits alone, effectively addressing long-term costs incurred by running a WBL program.

The proposed WBL Support Fund should help ensure that businesses are making an effort to be inclusive and working to diversify the workforce pipeline. In addition, new workforce investments under an infrastructure package should encourage states and other stakeholders to leverage existing federal and state funding streams, such as Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP) Employment and Training, and WIOA, and ensure that participants in these programs are connected to new and emerging job opportunities created through federally-supported projects.

DOL and other federal agencies should also work with states and local areas to ensure all projects that receive new funding set targeted goals for WBL opportunities, particularly for underrepresented populations, and establish minimum expenditure requirements for training and support services. Grant recipients should also be required to track training expenditures, employment and wage outcomes, and diversity outcomes to measure the baseline and longer-term impact of these policies.

NATIONAL SKILLS COALITION
Every worker. Every industry. A strong economy.

1730 Rhode Island Avenue NW
Suite 712
Washington DC 20036
Phone: 202.223.8991
Fax: 202.223.8354
info@nationalskillscoalition.org

www.nationalskillscoalition.org