

**Congress of the United States**  
**U.S. House of Representatives**  
**Committee on Small Business**  
2561 Rayburn House Office Building  
Washington, DC 20515-6515

**MEMORANDUM**

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TO: Members, Subcommittee on Innovation, Entrepreneurship, and Workforce Development  
FROM: Jason Crow, Chairman  
DATE: May 6, 2021  
RE: “Growing Jobs Through Infrastructure Investment”

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The Committee on Small Business Subcommittee on Innovation, Entrepreneurship, and Workforce Development will hold a hearing entitled, “Growing Jobs Through Infrastructure Investment.” **This hearing will begin at 1:00 P.M. on Thursday, May 6, 2021 via the Zoom platform (information to be provided).**

The national infrastructure has long deteriorated but strategic investments will create millions of good paying American jobs. However, it is not enough to create jobs, the country needs a pipeline of skilled workers to fill them. This hearing will discuss how small firms and the federal government can leverage workforce development programs to train and upskill the next generation of infrastructure workers. Members will hear from experts, industry leaders, and educational institutions about efforts to provide workforce training and investing in the nation’s infrastructure, through proposals like the American Jobs Plan will impact those efforts.

**Panel**

- Mr. Michael Tamasi, President and CEO, Accurounds, Avon, MA.
- Dr. Annette Parker, President, South Central College, Mankato, MN.
- Mr. Eddie Bustamante, Political and Legislative director, LiUNA Local 720, Denver, CO.
- Mr. Gus Bruner, President and Project Executive, Caliagua, Inc., Anaheim, CA.

**Background**

For decades, America’s infrastructure has been in a state of decline, dropping from 9<sup>th</sup> to 13<sup>th</sup> in ranking between 2018 and 2019, according to the World Economic Forum.<sup>1</sup> The infrastructure report card, created by the American Society of Civil Engineers, recently gave America a C- grade and has been consistently giving it low marks for years.<sup>2</sup> A large investment in infrastructure has long been a priority for leaders in both parties with a goal of creating jobs and opportunities for American workers.

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<sup>1</sup> Klaus Schwab, *The Global Competitiveness Report*, WORLD ECON. FORUM, 2019.

<sup>2</sup> *A Comprehensive Assessment of America’s Infrastructure*, AM. SOC’Y OF CIVIL ENGINEERS. 2021.

On April 7<sup>th</sup>, President Biden announced the American Jobs Plan, which would provide a framework for an investment in the national infrastructure. The plan would modernize 20,000 miles of highway and repair 10,000 bridges, eliminate all lead water pipes, provide high-speed broadband to all Americans, retrofit two million homes and commercial spaces, revitalize manufacturing to protect the national supply chain and strengthen the care economy by raising wages and providing paid family and medical leave.<sup>3</sup>

An investment in the national infrastructure will create millions of jobs and significantly boost economic growth. A Moody's analysis projects the American Jobs Plan will create 13.5 million jobs by 2024 and lift GDP growth to 3.8 percent, compared to 2.2 percent if the plan is not passed.<sup>4</sup> However, these jobs may be harder to fill absent a pipeline of skilled workers to fully implement the plan.

### **Small Businesses and Infrastructure**

Modern infrastructure plays a critical role in enabling small businesses to grow. These firms rely on newly constructed bridges, new electrical transmission lines, and accessible high-speed internet to ship their products, power their business, and market their brands. Investments in our infrastructure helps America's small businesses reach new domestic and international customers, tap new suppliers, and expand their business operations.

In multiple nationwide surveys of small businesses, over half of small business owners viewed infrastructure spending as an integral aspect to the success of their business.<sup>5</sup> In one survey, the majority of small business owners said that investments in high speed internet, better roads and bridges, and improved cell phone networks are important to the success of their business. And in a second survey, 73 percent of small businesses believe any national infrastructure spending proposal should include investments to expand broadband to rural areas.<sup>6</sup>

### **Clean Energy**

Modernizing our infrastructure will also speed up the development of the clean energy economy. Investments in smart grid technology and preparing grids for more locally generated renewable energy such as wind, solar, and biomass will not only save energy but create jobs by small businesses. Since 2010, the number of jobs in the solar industry has nearly tripled to more than 242,000 Americans across all 50 states.<sup>7</sup> While solar energy only represents 2.4 percent of the

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<sup>3</sup> *FACT SHEET: The American Jobs Plan*, THE WHITE HOUSE, March 31, 2021. <https://www.whitehouse.gov/american-jobs-plan/>

<sup>4</sup> Mark Zandi and Bernard Yaros, *The Macroeconomic Consequences of the American Jobs Plan*, MOODY'S, April 2021. <https://www.economy.com/getlocal?q=C228A0FF-2701-47B2-ADE0-D158B5866251&app=download>

<sup>5</sup> *Small Business Owners Say Infrastructure Investments Important to their Business, Favor Robust Federal Support*, SMALL BUS. MAJORITY (September 19, 2018) <https://smallbusinessmajority.org/our-research/infrastructure/small-business-owners-say-infrastructure-investments-important-their-business-favor-robust-federal-support>; *Small Business Index: The Voices of Small Business Owners*, METLIFE & U.S. CHAMBER OF COMMERCE (2019) [https://www.uschamber.com/sbindex/pdf/sbi\\_reports/SBI\\_2019\\_Q1.pdf](https://www.uschamber.com/sbindex/pdf/sbi_reports/SBI_2019_Q1.pdf).

<sup>6</sup> *Id.*

<sup>7</sup> THE SOLAR FOUND., NATIONAL SOLAR JOBS CENSUS (2018) <https://www.thesolarfoundation.org/national/>.

nation's energy generation, it employs twice as many people as the coal industry and five times as many as the nuclear power sector.<sup>8</sup>

### Broadband Deployment

Small firms are becoming increasingly dependent on reliable high-speed broadband services to operate and grow their businesses. Small firms that are digitally connected also earn twice as much revenue per employee, experience four times the revenue growth year over year, and are three times more likely to create jobs.<sup>9</sup> Building and upgrading the broadband infrastructure will make technology affordable in rural areas, which could facilitate more economic growth.

### Workforce Development and the American Jobs Plan

The American Jobs Plan invests \$100 billion in workforce development programs, specifically those targeted at underserved groups, including a \$40 billion investment in a new Dislocated workers program and sector-based training, and a \$48 billion investment in workforce development infrastructure and worker protection.<sup>10</sup> This includes registered apprenticeships and pre-apprenticeships and strengthening the pipeline for more women and people of color to access these programs.

### Why it is Necessary

These programs are needed for a number of reasons. First, the goal of a jobs program is to create new jobs – better jobs – than those lost in the pandemic. Many of the jobs that aren't returning come from low-income service and retail jobs, and those workers will need to be upskilled to fill many infrastructure jobs.<sup>11</sup> Second, the infrastructure workforce is already aging. There are currently 17.2 million infrastructure workers nationally, or about one in ten workers.<sup>12</sup> More than a quarter of all these workers are projected to retire or permanently leave their position over the next decade.<sup>13</sup> Businesses in some infrastructure industries are already facing a stark need for new workers, with as many as 50 percent of their workers eligible for retirement over the next 5 years.<sup>14</sup> Finally, industries like construction, which kept moving forward during the pandemic, are currently facing a labor shortage. The 2020 Construction Outlook Survey from the Associated General Contractors of America found that 81 percent of construction firms have trouble filling

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<sup>8</sup> *Id.*

<sup>9</sup> John O'Mahoney & Sara Ma, *Connecting Small Businesses in the U.S.*, DELOITTE, (2018), <https://www2.deloitte.com/content/dam/Deloitte/us/Documents/technology-media-telecommunications/us-tmt-connected-small-businesses-Jan2018.pdf>.

<sup>10</sup> *Supra* note 3.

<sup>11</sup> Heather Long, *Millions of Jobs Probably Aren't Coming Back, Even After the Pandemic Ends*, WASHINGTON POST, Feb. 17, 2021. <https://www.washingtonpost.com/road-to-recovery/2021/02/17/unemployed-workers-retraining/>

<sup>12</sup> Tomer, Kane, and George, *Rebuild with Purpose: An Affirmative Vision for 21st Century American Infrastructure*, BROOKINGS INST., April 2021. [https://www.brookings.edu/wp-content/uploads/2021/04/20210413\\_BrookingsMetro\\_American-Infrastructure-Vision\\_Report.pdf](https://www.brookings.edu/wp-content/uploads/2021/04/20210413_BrookingsMetro_American-Infrastructure-Vision_Report.pdf)

<sup>13</sup> *Id.*

<sup>14</sup> NAT'L SKILLS COAL., *Building a People-Centered Infrastructure Plan for the 21<sup>st</sup> Century*, 2021. <https://www.nationalskillscoalition.org/wp-content/uploads/2021/01/1102020-Building-a-People-Centered-Infrastructure-Plan-Memo-Public.pdf>

both salaried and hourly craft positions. 72 percent of these firms anticipate labor shortages to be the biggest hurdle in 2021.<sup>15</sup>

Moreover, much of the benefit returned to the economy by a large investment in the national infrastructure is not only the material returns like the goods produced or highways repaired, it is also the human capital generated by those working on such projects. Infrastructure jobs, while many are in the public sector, do produce workers with transferable skills and experience such as STEM knowledge.<sup>16</sup> This on-the-job training will in turn create a more competitive talent pool for small firms to draw from in the future.

### **Workforce Development Programs**

Alongside the investments made in the American Jobs Plan, the U.S. Government has a number of established programs and systems to train and develop the skills of American workers. These programs provide a combination of education and training programs to prepare individuals for work and improve their prospects in the labor market.

#### **Workforce Boards and One Stop Shops**

The Workforce Innovation and Opportunity Act (WIOA) was enacted in 2014 as the nation's primary workforce development law.<sup>17</sup> It establishes local workforce boards and one stop shops through formula grants given to states.<sup>18</sup> The local workforce boards coordinate between businesses, nonprofits, and educational institutions to determine the workforce needs of the communities and prepare potential workers for jobs in these areas. Workforce development services are provided through its system of about 3,000 One-Stop centers nationwide.<sup>19</sup> The worker training provided is targeted to be responsive to the labor demands of the local economy.

#### **Apprenticeships and Pre-Apprenticeships**

Apprenticeships are a workforce development strategy that aims to provide workers with both on-the-job training and related classroom instruction.<sup>20</sup> While apprenticeships have long been popular in places like Europe, particularly in skilled trades like construction, plumbing and pipefitting, and electrical work, they have been sparsely used in America. While recent interest has grown in creating more apprenticeships, such as through the recently passed National Apprenticeship Act reauthorization, or the Trump Administration's attempt to create an Industry Recognized

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<sup>15</sup> ASS'N GEN. CONTRACTORS OF AM., *2020 Construction Outlook Survey Results*, Jan. 2021.

<https://www.propelleraero.com/blog/how-to-adapt-to-the-skilled-labor-shortage-in-construction/>

<sup>16</sup> Joseph W. Kane, *Biden Needs to Create an Infrastructure Talent Pipeline, Not just More Jobs*, BROOKINGS INST., Jan. 29, 2021. <https://www.brookings.edu/blog/the-avenue/2021/01/29/biden-needs-to-create-an-infrastructure-talent-pipeline-not-just-more-jobs/>

<sup>17</sup> David H. Bradley, CONG. RESEARCH SERV., R44252, *The Workforce Innovation and Opportunity Act and the One-Stop Delivery System* (2021) <https://crsreports.congress.gov/product/pdf/R/R44252>

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> Benjamin Collins, CONG. RESEARCH SERV., R45171, *Registered Apprenticeship: Federal Role and Recent Federal Efforts* (2021) <https://crsreports.congress.gov/product/pdf/R/R45171>

Apprenticeship Program (IRAPs), only about 6 percent of the American workforce utilizes Apprenticeships.<sup>21</sup>

However, with the rising cost of college tuition and the lack of guarantee that a college degree will lead to a middle-class lifestyle, apprenticeships are beginning to gain popularity. Unfortunately, there are also downsides to apprenticeship programs and their utilization. First, many apprenticeships are inaccessible to women and people of color. For instance, women only make up 6 percent of apprentices in the U.S.<sup>22</sup> To help close this gap, community-based organizations (CBOs) and other workforce intermediaries are providing pre-apprenticeship programs that provide remedial training and prepare individuals for Registered Apprenticeships.<sup>23</sup> These can be particularly useful in providing a pipeline for those transitioning from low-wage work in service or retail into the infrastructure jobs created by the American Jobs Plan.

Second, small firms tend to forgo apprenticeships, despite their demonstrated benefit, due to the long-term investment it requires. Apprenticeships are earn-as-you-learn programs that traditionally last multiple years. This means small firms would need to onboard a new worker with costly programs that keeps them there for an extended period of time. This can be perceived as a risky and long-term investment.

Historically, labor unions have played a role in funding, coordinating, and supporting apprenticeships. While unions do not have a monopoly on this form of training, it has been primarily used as a training method for crafts and tradespeople that are often associated with unions. Moreover, apprenticeships commonly require partnerships between firms and educational institutions that unions help facilitate.

### Community Colleges and Career & Technical Education

The more traditional classroom setting workforce development strategies are those of Community College or Career & Technical Education (CTE). Community colleges are often thought of as a stepping-stone to a four-year degree, however they provide more than just the coursework requirements for an associate degree. Often, they also offer professional credentials as well as the classroom portion of local apprenticeship programs. Moreover, community colleges are dispersed across the country and more easily accessible than a four-year program. They work with businesses and workforce boards to determine workforce needs and can even partner with businesses in curriculum development. Community colleges will play a critical role in the sector-based training proposed in the American Jobs Plan.<sup>24</sup>

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<sup>21</sup> <https://www.jamesgmartin.center/2018/01/arent-apprentices-america/>

<sup>22</sup> U.S. DOL, *Pre-Apprenticeship: Pathways for Women Into High-Wage Careers*, 2021. [https://www.dol.gov/sites/dolgov/files/ETA/apprenticeship/pdfs/pre\\_apprenticeship\\_guideforwomen.pdf](https://www.dol.gov/sites/dolgov/files/ETA/apprenticeship/pdfs/pre_apprenticeship_guideforwomen.pdf)

<sup>23</sup> *Id.*

<sup>24</sup> Harry J. Holzer, *Funding Workforce Development In the Infrastructure Bill*, SCHOLARS STRATEGY NETWORK, April 16, 2021. <https://scholars.org/contribution/funding-workforce-development-infrastructure>

CTE is funded by the Carl D. Perkins Career and Technical Education Act and is often targeted to high schoolers looking for a more practical, career centered education, rather than the college preparation material taught at most high schools.<sup>25</sup> This often means more focus on STEM curriculum, as well as hands-on learning to prepare students for a career and increase their engagement with schoolwork. It can also help younger students obtain industry recognized credentials without the need for post-secondary education. Some students are even given a pathway toward earn-as-you-learn programs before graduation. This can help prepare students with the skills necessary to be employed in the industries utilized by the American Jobs Plan and help fill the gaps in an aging workforce.

### **Conclusion**

A large investment in the national infrastructure is projected to create millions of jobs, both through small business contracting and through federally supported jobs. However, without a sufficient workforce, neither small firms nor the federal government will have access to the labor force to implement it. Investing in workforce development strategies alongside the national infrastructure can help broaden the skilled labor pool for small firms, rebuild America's crumbling infrastructure, expand opportunities for workers struggling with the fallout of the COVID-19 pandemic, and make America more competitive on the world stage.

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<sup>25</sup> Boris Granovskiy, CONG. RESEARCH SERV., R45446, *Reauthorization of the Perkins Act in the 115<sup>th</sup> Congress: The Strengthening Career and Technical Education for the 21<sup>st</sup> Century Act*, Dec. 2018.  
<https://crsreports.congress.gov/product/pdf/R/R45446>