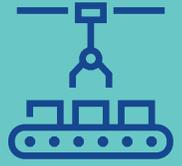


SKILLS FOR AN INCLUSIVE MANUFACTURING RECOVERY





The pandemic has impacted every industry differently and each industry's trajectory out of this recession will look different. The experience of certain workers and local firms within each industry will differ as well. National Skills Coalition (NSC) and Business Leaders United (BLU) convened a Manufacturing Industry Recovery Panel of leading experts working in local communities. We wanted to learn what an effective, equitable plan to revitalize American manufacturing needs to include. Panelists represent business, labor, education and training organizations, and others working in or with the manufacturing industry.

An innovative and growing manufacturing base is vital to providing good jobs and securing our economic future. While many of the manufacturing jobs lost in early 2020 have come back, the industry was still down over half a million jobs compared to pre-pandemic levels at year-end.

On March 31, President Biden put forward the American Jobs Plan (AJP). The plan included a proposed \$300 billion investment in manufacturing as well as \$180 billion for research and development to drive industry growth and innovation. The President also included a proposed \$100 billion investment in workforce development under AJP to support the manufacturing, infrastructure, and healthcare job creation investments under the proposal.

THE AMERICAN JOBS PLAN



¹ National Skills Coalition, *Manufacturing workers need investment in their digital skills*, April 2020.



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NSC and BLU interviewed individual panelists and convened the full Manufacturing Industry Recovery Panel for group discussions. Themes emerged about the pandemic's impact on the industry, as well as essential components of an inclusive manufacturing recovery.

According to panelists, labor shortages existed in the manufacturing sector prior to pandemic. These shortages worsened due to infections in the labor force, fear of exposure to the virus in an indoor setting, and school closures. Basic production technicians with a commitment to learning were in high demand. The expansion of \$15-an-hour warehouse/distribution jobs created competition for entry level workers. Many workers in "non-essential" industries faced layoffs. But manufacturing firms, deemed essential to the production of pandemic response equipment, confronted the absence of a mechanism to easily retrain laid-off workers into manufacturing jobs.

Many small manufacturers prefer to do their own occupation-specific training. But there is strong demand for short-term, industry-specific training that introduces people to manufacturing and basic safety practices. The pandemic accelerated a growing need for digital skills training, further challenging the 35 percent of manufacturing workers who need investments in their digital skills to harness new production technology.¹

Industry leaders are excited about much needed investments in American manufacturing expansion and workforce development in the President's American Jobs Plan. However, they caution that because previous stimulus efforts did not include major investments in workforce development, capacity at training centers has fallen dramatically and will take time to ramp back up. Industry leaders also indicate that work supports like child-care and transportation, access to training, and inclusive hiring and retention practices are essential to ensuring that workers hit hardest by the pandemic can access manufacturing jobs. Industry leaders continue to express concern about the need to market manufacturing careers, particularly to young people. They see local industry partnerships and greater collaboration across education and labor agencies as essential to addressing lack of awareness of manufacturing careers.



POLICY RECOMMENDATIONS

PRIORITIZE WORKFORCE INVESTMENTS AND EQUITY UNDER THE AMERICAN JOBS PLAN

Manufacturing industry stakeholders are resolute that the final version of the American Jobs Plan must include resources to train local workers for the jobs it creates. But they also identify a lack of affordable, accessible childcare and low-cost transportation as systemic impediments to diversifying and expanding the manufacturing workforce pipeline. Employer provided childcare is not viable for most manufacturers, many of which are small and mid-sized companies, unless the federal government can be a partner in cost sharing. Transportation is also essential as many manufacturing jobs sit in suburbs while potential workers live in urban centers.

Industry leaders also indicate that agency alignment is essential to the stated goal of equity in President Biden's plan. If the agencies administering the AJP's resources operate in silos, those silos will be recreated at the local level with workers and small businesses ultimately losing out. Finally, industry leaders argue that equity goals, like those laid out in the AJP, become meaningful only when outcomes are measured by race, ethnicity, and gender.

- ▶ **Invest in skills.** Congress must ensure that the \$100 billion for workforce training in President Biden's proposed American Jobs Plan (AJP) is fully authorized. Additional essential investments outside of AJP are outlined throughout this brief.
- ▶ **Invest in childcare, transportation assistance, and other essential supports.** The President's American

Families Plan (AFP) – a companion to AJP – includes expanded childcare and other essential work/training supports. Congress should make these investments. Congress should provide maximum local flexibility for use of these and other federal childcare dollars. Benefit eligibility cliffs make it difficult for parents to transition back to work, particularly into higher wage manufacturing jobs.

- ▶ **Support local alignment through federal alignment.** Equity and alignment are inextricably linked. When investments are not aligned at the federal, state, and local level there is a direct impact on equitable access and outcomes. This is because the job of untangling systems falls on individual students and workers. A new White House Interagency Sub Taskforce on Skills for an Inclusive Economic Recovery could support alignment of federal skills investments. The Sub taskforce should include heads of key federal agencies. This includes the Departments of Labor, Education, and Health and Human Services as well as demand-side agencies engaged in job creation efforts like the Departments of Transportation, Energy, and Commerce.
- ▶ **Measure equitable outcomes.** Federal investments in manufacturing should require reporting on hires, wages and industry-connected advancement of all workers employed on federally funded projects. Reporting should include race, gender, and whether those hired previously worked in that industry. These outcomes should be measured over time.



INVEST IN EQUITABLE ON-RAMPS TO MANUFACTURING CAREER PATHWAYS

An equitable economic recovery and a more diverse manufacturing workforce are essential goals. Both require a broad and inclusive hiring pipeline that primes young people and adults for the industry. This in turn requires adequate resources for work readiness programs including integrated basic skills training, supportive services, and technical training. Equitable manufacturing career pathways also require dismantling biases and practices that have excluded women and people of color from manufacturing training and jobs.

Recommendations:

- ▶ **Pass the bipartisan SKILL UP Act.** Building equitable infrastructure career pathways requires employer investment in upskilling entry level workers. Congress should empower businesses to invest in skills training opportunities for workers who need it the most. The SKILL UP Act expands the Work Opportunity Tax Credit. It provides an increased credit for businesses that invest in work-based learning opportunities. SKILL UP supports hiring and upskilling workers who have historically been excluded from long-term, manufacturing careers.
- ▶ **Fund integrated education and training to build foundational skills.** Many individuals seeking manufacturing careers will need support to build basic academic skills. These include English language, math, and digital literacy skills. Under an integrated education and training model (IET), participants receive simultaneous instruction in basic skills as well as training for a specific occupation or industry. Congress should provide dedicated funding to support state or local implementation of IET through the Workforce Innovation and Opportunity Act and the Higher Education Act.
- ▶ **Support equity and inclusion for labor, business, and training providers.** Racial and gender bias within unions and businesses has excluded women and people of color from manufacturing careers. Building equitable manufacturing career pathways requires dismantling bias. Targeted support to local industry partnerships can help employers, unions, training providers and other stakeholders adopt and measure equitable and inclusive practices.

SUPPORT LOCAL SOLUTIONS THROUGH EXPANDED INDUSTRY PARTNERSHIPS

Industry leaders need local flexibility to craft solutions and target resources based on the needs of local workers and employers. This requires sustained support for local industry partnerships. Industry partnerships involve business, labor, colleges, community organizations and other key stakeholders. They have been essential to maintaining and expanding the manufacturing sector in local communities. Previous federal discretionary programs like the Trade Adjustment Assistance Community College and Career Training (TAACCCT) grants have built these partnerships. However, funding vulnerability from one administration to the next has created challenges in sustaining local workforce development ecosystems and responding to industry changes.

Recommendation:

- ▶ **Require and Leverage Multi-Stakeholder Industry Partnerships at the Local Level.** Include, as part of any federal job creation plan, support for expanded, sustainable industry partnerships. Industry partnerships can address specific challenges identified by industry stakeholders including marketing manufacturing careers to young people, updating curricula to ensure high schools and postsecondary providers are training to industry needs. Industry partnerships also help employers, workers, and training providers navigate and align federal, state, and local training and support service funding streams.

EXPAND SHORT-TERM TRAINING AND FLEXIBLE APPRENTICESHIP

Investments in manufacturing, research, and innovation will create demand for rapid, short-term training and upskilling. The industry needs policymakers to dramatically expand access to high-quality, short-term training in traditional training settings and at community colleges. This short-term training can lead to an immediate job or support a promotion. It can also help a person quickly develop baseline skills to enter longer-term apprenticeship.

Industry leaders also want to see apprenticeship expanded with a renewed focus on high-quality programs. This includes reinforcing the importance of Registered Apprenticeship and other work-based learning strategies, while reducing the administrative burdens of apprenticeship. Industry leaders also stress the importance of child-care, transportation, and other supports to apprenticeship expansion.

Recommendations:

- ▶ **Pass the bipartisan JOBS Act to expand access to high-quality, short-term training.** Congress should expand federal financial aid to high-quality, short-term training programs that help workers rapidly reskill or upskill. The JOBS Act would expand access to Pell grants

to ensure more workers can access short-term programs. The JOBS Act includes strong quality assurance provisions. For example, training must be aligned with state or local employer requirements; an accrediting agency must evaluate programs for quality and student outcomes; and a program must satisfy any applicable prerequisites for professional licensure or certification. In addition, the JOBS Act excludes proprietary institutions.

- ▶ **Expand apprenticeship through the bipartisan BUILDS Act.** Congress should pass the BUILDS Act. The BUILDS Act supports employers, education and training providers, labor unions, and workforce boards working together to train workers. The bill funds pre-employment training, transportation, career counseling and other supports that help people succeed in apprenticeship and work-based learning programs. Industry partnerships supported under the BUILDS Act can support employers in registering apprenticeships. They can also help address misperceptions among employers that registering apprenticeships jeopardizes their ability to protect their training models as intellectual capital.

HELP THE MANUFACTURING WORKFORCE ADAPT TO NEW TECHNOLOGIES

The pandemic has accelerated the demand for digital skills, which were already important in the modern environments of advanced and precision manufacturing. Workers must be able to use tools such as 3D printers on the shop floor, monitor and interpret data from sensors throughout a facility, and even use “wearable tech” to receive in-the-moment training through virtual reality. New and incumbent manufacturing workers need access to foundational digital skills that serve as a baseline for adapting to ongoing technological change. They also need access to training that develops higher-level industry- and job-specific digital skills.

Recommendations:

- ▶ **Pass the bipartisan Digital Equity Act and Invest in new Digital Literacy Upskilling Grants.** Through the bipartisan Digital Equity Act, Congress should make a dedicated investment to help states pursue digital inclusion and skill building via \$1 billion in new funding. This should include formula funding for all states to support capacity-building and digital equity planning, and a competitive grant program to invest in best practices and spur innovation among states. Congress should also make a federal commitment to occupational digital literacy through a new national grant program. These new Digital Literacy Upskilling Grants would expand access to high quality digital skills instruction that meets industry and worker needs.
- ▶ **Develop a measurable national standard for industry-specific digital upskilling efforts.** Congress should define and embed occupational digital literacy in workforce and education policies like Workforce Innovation and

Opportunity Act (WIOA) Title I and II, backed by funding to support quality digital skills training through existing policies as well as new Digital Literacy Upskilling Grants.

INCORPORATE TALENT STRATEGIES INTO FEDERAL SUPPORT FOR MANUFACTURING ECOSYSTEMS

The era of Industry 4.0 and networked production existed well before the pandemic. But the recession has further demonstrated that the U.S. needs to invest in flexible and responsive regional manufacturing ecosystems. These ecosystems align cumulative networks of producers, supply chains, customers, and talent. This alignment makes it possible to re-tool for emergency purposes like the production of pandemic response equipment. It also helps the sector efficiently increase its competitiveness in the global marketplace.

In addition to helping local workers upskill to adapt to changing manufacturing systems, the Biden administration should help local firms adopt these new processes individually and collaboratively. Department of Commerce efforts to rebuild aging manufacturing communities and create new centers of manufacturing innovation should align with other workforce development investments made by the Departments of Labor and Education.

- ▶ **Expand Manufacturing Extension Partnerships.** The Secretary of Commerce should establish, within the National Institute of Science and Technology (NIST), an Advisory Board for Expansion of MEPS. This board should work with the Secretary to identify available funding within the Department to support expansion efforts, partner with Departments of Labor and Education to identify skill needs and develop a legislative proposal to statutorily embed this expansion in NIST’s responsibilities.
- ▶ **Establish a Supply Chain Resiliency Program.** The Department of Commerce should support a Supply Chain Resiliency Program to ensure that the United States can sustain critical industry production, supply chains, services, and access to critical goods and services during supply chain shocks of any kind. Under the program, the Department of Commerce could assess the resiliency and capacity of the manufacturing base, supply chains, and the manufacturing workforce to sustain the industry through supply chain shocks. It could identify policies that maximize job retention and creation, including workforce development programs, and expand capacity for alignment, at the local level, between economic development and workforce development entities.



This brief is written by National Skills Coalition and Business Leaders United with input from members of our Manufacturing Industry Recovery Panel. A list of panelists can be found at <https://www.nationalskillscoalition.org/industryrecoverypanels/>. We would like to thank the panelists for generously sharing their time, knowledge, and insight. The views expressed in this report are an aggregation of what we heard and do not necessarily reflect the views of each individual advisory panel member or the organizations they represent.

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