EXECUTIVE SUMMARY

- President Trump recently signed an executive order expanding federally-registered apprenticeships in the United States.
- While worker training is both valuable and necessary, this analysis finds that current federal training programs do not effectively provide workers with the skills that employers require.
- To close the skills gap and help workers adjust to labor market shifts, federal training programs should be tailored to current and future economic demand.

INTRODUCTION

The White House recently launched an initiative aimed at expanding federally funded apprenticeship programs in the United States.[i] In an executive order, President Trump asserted “it is more important than ever to prepare workers to fill both existing and newly created jobs and to prepare workers for jobs of the future … apprenticeships provide paid, relevant workplace experiences and opportunities to develop skills that employers value.”

The president’s executive order seeks to address a current disconnect between American workers and employers. This disconnect is referred to as the skills gap: there are simultaneously 7 million unemployed workers and 6.2 million job openings in the United States.[ii][iii] The economy is expanding and businesses are hiring, but employers cannot locate workers with the appropriate skills.[iv] By equipping Americans with skills that employers demand, apprenticeship programs may help to close this gap.

Worker training is a valuable tool to expand both employment and economic growth. However, it is important to understand the types of federal job training programs that exist and how they can best serve American workers and the economy. The following paper surveys the current state of federal job training in the United States.

FEDERAL WORKER TRAINING
All federal worker training programs are administered through the Employment and Training Administration at the Department of Labor. The Workforce and Innovation Opportunity Act (WIOA), passed in 2014, authorizes federal funds to be invested in skill development, employment, and training services for adults, dislocated workers and youth. The program also provides funds for adult education, literacy, and vocational rehabilitation state grant programs.

**WIOA Youth Services**

WIOA’s youth program serves eligible young people facing barriers to education, training, and employment.\[v\] The majority (at least 75 percent) of program funding is targeted toward individuals between the ages of 16 and 24 who are not currently in school. This may include individuals who dropped out of school, are homeless or parenting, in foster care, or received a high school diploma but are considered basic-skills deficient (functioning at or below an eighth-grade level) and low-income. The remaining funding is allocated for low-income youth ages 14 to 21 who are in school but face similar hardships.

In addition to requirements related to eligibility, 20 percent of WIOA youth funding must be spent on programs that prioritize work experience in partnership with American Job Centers. These programs can include both paid and unpaid work experiences that provide academic and occupational education. Programs also offer skills testing, adult mentoring, career counseling, and other employment-related services. Other WIOA youth services focus on educational advancement including leadership development, tutoring, financial literacy, and entrepreneurial skills training.

**WIOA Adult Services**

WIOA adult services prioritize individuals facing barriers to employment. Like youth programs, this includes low-income individuals, individuals with disabilities, homeless individuals, and ex-offenders. It also includes individuals who have been unemployed for at least 27 consecutive weeks, are skills deficient, and have low levels of literacy or are English language learners.\[vi\]

There are three types of career services provided to adults through American Job Centers: basic career services, individualized career services, and follow-up services. Basic services are available to anyone; they include things like skill assessments, eligibility determinations, and program referrals. Individualized career services are provided at the discretion of American Job Center staff. They involve specialized assessments, counseling, and individual employment plans. Follow-up services, which can include workplace counseling, are provided to individuals placed in unsubsidized employment for up to 12 months. Nearly 2,500 American Job Centers offer these services together with partner programs nationwide.\[vii\]

In addition to career services, WIOA also provides training services for adults in need. Examples include registered apprenticeships, on-the-job-training, skills upgrading and retraining, and adult education and literacy training. The president specifically targeted registered apprenticeships for expansion in his executive order.

**National Dislocated Worker Grants**
National Dislocated Worker Grants (DWGs) were established by WIOA to ease the harm caused by large, unexpected layoffs. These grants provide temporary employment and training assistance to dislocated workers in an effort to enhance their employability and increase their earnings.

There are four main types of dislocated worker grants. Disaster DWGs create temporary employment opportunities in places where FEMA or another federal agency has designated a disaster area. Grants can also be awarded when 50 or more individuals have relocated to a different area following a disaster designation. Another type of grant, called a layoff DWG, aids workers displaced by company– or industry-wide layoff events impacting 50 or more workers. DWGs are additionally available to communities experiencing higher-than-average demand for employment services catered to veterans transitioning to civilian life. Finally, workers displaced by international trade may also be eligible for DWGs in cases where employment services cannot be sufficiently provided through the Trade Adjustment Assistance (TAA) Program.

PROGRAM EFFECTIVENESS

Numerous studies have assessed the effectiveness of federal worker training programs, with mixed results. Some argue that they advance the salaries of participants over time, help participants to obtain necessary work experience and certificates with little-to-no debt, and help to fill current shortages of qualified U.S. workers.

Other studies determined the opposite. They suggest that current federal programs are unsuccessful at placing workers, an inefficient use of taxpayer funds, and ineffective at giving displaced workers salaries comparable to their previous jobs. They also contend that workers in need of training are unaware of these federal programs, and that many programs are repetitive and wasteful. With such low success rates, some argue that the cost of placing a single worker exceeds any benefit an employer would receive.

The effectiveness of federal job training is an important consideration. While many previous studies have examined placement rates and wage levels to gauge program effectiveness, this paper examines the training itself. Specifically, it investigates how well federal job training equips U.S. workers with the appropriate knowledge and skills to meet employer demand and contribute to the economy.

Registered Apprenticeships

The president’s executive order on job training specifically expands registered apprenticeships. These are employer-based programs in which businesses receive federal funding or tax credits to support their apprenticeship programs in exchange for meeting federal standards and regulations.

In fiscal year 2016, over 500,000 individuals were in active registered apprenticeship programs across the United States. The Department of Labor offers information on the industries of training for over 200,000 apprentices, not including apprentices in the United Services Military Apprenticeship Program. Of these, the vast majority (almost 150,000) were in construction.
To determine if federal apprenticeship programs are effectively training workers to meet economic demand, this paper compares the types of industries in which apprentices are trained to the types of jobs that will be created over the next ten years. Data on apprenticeships describes active apprenticeship programs in FY2016. Employment projections are taken from the Bureau of Labor Statistics (BLS) and project how many jobs will be created in each industry from 2014 to 2024. The following table displays the results.

Table 1: Active Apprentices vs Projected Job Creation by Industry

<table>
<thead>
<tr>
<th>Industry</th>
<th>Active Non-Military Apprentices</th>
<th>Percent of Total Projected Job Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goods-Producing, excluding agriculture</td>
<td>78.6%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Service-Providing</td>
<td>21.1%</td>
<td>94.6%</td>
</tr>
<tr>
<td>Agriculture, Forestry, Fishing, and Hunting</td>
<td>0.4%</td>
<td>-1.1%*</td>
</tr>
<tr>
<td>Nonagricultural Self-Employed Workers</td>
<td>0.0%</td>
<td>5.9%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

*Negative sign indicates employment decline

Table 1 reveals a significant mismatch between federal worker training programs and economic demand. Almost 80 percent of all federal apprenticeship programs train Americans to work in the goods-producing industry. This includes jobs in construction, manufacturing, mining, quarrying, and oil and gas extraction. However, the goods-producing industry will produce less than one percent of total job creation over the next ten years. Similarly, there are over 700 active apprentices in agriculture, forestry, fishing, and hunting, even though BLS projects employment in that industry will decline by over 100,000 jobs over the next decade.

Furthermore, the services industry currently comprises over 80 percent of total employment in the United States. This includes workers in fields such as wholesale and retail trade, health care and social assistance. Almost 95 percent of total job creation from now to 2024 will be in service-providing jobs. However, only 21 percent of federal apprenticeship programs equip workers with the skills to contribute to the services sector.

**Adult and Dislocated Worker Training**

Data on other adult and dislocated worker training programs can also be utilized to determine how effectively workers are being trained to match economic demand. As previously mentioned, these programs are targeted toward individuals facing barriers to employment and can include career counseling, on-the-job training, and job placement services. It also includes some apprenticeship programs that receive a separate source of funding than registered apprenticeships.

While limited data is available on youth programs, there is no publicly available information on the occupations of training for youth participants. Therefore, this report solely analyzes federal training programs for adults and
The following table examines the WIOA adult training program. It compares the occupations in which adults are trained to the occupations they obtain after leaving the program. Table 2 further contrasts occupational training data with projected job creation from 2014 to 2024. “Occupation of training” describes the types of training received by individuals who completed the program in WIOA’s 2015 Performance Year, and “occupation after exit” applies to adult trainees who completed the program in Q3 2015. Finally, information on both occupations of training and occupations after exit were taken directly from the Employment and Training Administration.

Table 2: Adult Training Programs vs Projected Job Creation by Major Occupational Group

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>Occupation of Training</th>
<th>Occupation After Exit</th>
<th>Percent of Total Projected Job Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial, Professional, and Technical</td>
<td>34.6%</td>
<td>29.5%</td>
<td>44.0%</td>
</tr>
<tr>
<td>Service Occupations</td>
<td>21.3%</td>
<td>21.4%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Sales and Clerical</td>
<td>9.7%</td>
<td>14.9%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Farming, Fishing, Forestry, Construction and Extraction</td>
<td>4.0%</td>
<td>3.9%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Installation, Repair, Production, Transportation, and Material Moving</td>
<td>30.3%</td>
<td>30.3%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Of the approximately 100,000 adults who completed federal training in Performance Year 2015, almost 35 percent of participants received training in managerial, professional, or technical occupations. This occupational group includes all managers and healthcare practitioners, as well as individuals in business, human resources, architecture, engineering. Meanwhile, fewer than 15 percent of adults were trained in sales and clerical occupations or farming, fishing, forestry, construction, and extraction.

Table 2 confirms that the types of training adults receive largely aligns with the jobs participants obtain after completing the program. However, there is a disconnect between occupational training and projected job growth. For instance, 30 percent of adults both received training and obtained jobs in installation, maintenance, repair, transportation, and machinery. Growth in this occupational group is projected to comprise less than 6 percent of total job growth from 2014 to 2024. Consequently, adults are being undertrained for every other occupational group.

A similar disconnect exists in WIOA training programs for dislocated workers. Table 3 (below) shows that dislocated workers, like adult participants, are disproportionally trained for installation, repair, production, transportation, and material moving occupations. This means they are undertrained for managerial occupations,
service occupations, and occupations in farming, fishing, forestry, construction, and extraction. Dislocated workers who receive training also disproportionally enter sales and clerical occupations, even though those occupations will only make up 13 percent of total job creation over the next decade.

**Table 3: Dislocated Worker Training Programs vs Projected Job Creation by Major Occupational Group**

<table>
<thead>
<tr>
<th>Occupational Group</th>
<th>Occupation of Training</th>
<th>Occupation After Exit</th>
<th>Percent of Total Projected Job Creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial, Professional, and Technical</td>
<td>39.1%</td>
<td>31.2%</td>
<td>44.0%</td>
</tr>
<tr>
<td>Service Occupations</td>
<td>12.3%</td>
<td>12.7%</td>
<td>31.5%</td>
</tr>
<tr>
<td>Sales and Clerical</td>
<td>13.1%</td>
<td>20.3%</td>
<td>12.7%</td>
</tr>
<tr>
<td>Farming, Fishing, Forestry, Construction and Extraction</td>
<td>3.0%</td>
<td>3.4%</td>
<td>6.1%</td>
</tr>
<tr>
<td>Installation, Repair, Production, Transportation, and Material Moving</td>
<td>32.5%</td>
<td>32.5%</td>
<td>5.6%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**IMPLICATIONS**

The president’s initiative to expand registered apprenticeships is valuable. It is in the government’s interest to promote a skilled U.S. workforce that is qualified to fill current and future labor shortages. For example, the United States lacks a sufficient supply of workers in Science, Technology, Engineering, and Math (STEM) occupations, and worker training can help to fill this demand. However, federal training will not be effective unless it specifically targets occupations that are growing or facing shortages.

Effective training programs can also help Americans respond to labor market shifts, which are a natural part of any dynamic and evolving economy. One way this can arise is from American innovation; thousands of workers are employed in tech-based jobs today that did not exist two decades ago. Additional jobs have been created in social media, app development, and sustainability. Matching training to emerging demand can both prepare workers to meet these new needs.

Labor market shifts can also be driven by increased competition. When U.S. workers and businesses are exposed to competition through international trade, specialization generates valuable productivity gains and economic growth. Similarly, immigration ensures a growing labor force and increases both demand and consumption, which fuels the economy. However, international competition also breeds temporary worker displacements. Effective worker training programs can aid displaced workers without sacrificing the valuable economic gains brought about by immigration and trade.
CONCLUSION

Worker training is essential to equip Americans with the necessary skills to succeed. However, in an economy where economic expansion sparks new and emerging sectors of the labor market, training should be tailored to meet current and future economic needs. This analysis finds that current federal training programs fall short. Shifting federal training resources toward growing industries and occupations, and away from those experiencing declining demand, may help to close the skills gap.


[vii] To learn more about American Job Centers, visit https://www.careeronestop.org/LocalHelp/local-help.aspx


The occupational data utilized to analyze adult and dislocated worker training programs is distinct from the industry data used in the analysis of registered apprenticeships.

