MEMORANDUM

TO: Small Business Committee
FROM: Committee on Small Business Democratic Staff
DATE: June 4, 2019
RE: Subcommittee on Innovation and Workforce hearing entitled, “Mind the (Skills) Gap: Apprenticeships and Training” on Wednesday, June 4, 2019 at 11:30 a.m. in Room 2360 of the Rayburn House Office Building

On Tuesday, June 4, 2019 at 11:30 a.m. in Room 2360 Rayburn the House Small Business Committee will hold a hearing entitled "Mind the 'Skills' Gap: Apprenticeships and Training." The hearing will focus on the challenges facing small firms as they create jobs and what efforts are being taken to address the skills gap.

Witnesses include:
- Mr. Joshua Broder, CEO, Tilson
- Mr. Tim Herbert, Vice President of Research, CompTIA
- Mr. Ronald Marlow, Vice President for Workforce Development, National Urban League
- Mr. Talbot Gee, CEO, HARDI

Background
Since the recession ended in 2009, recovery has been slow and steady.\(^1\) However, as we approach over a decade of economic expansion, with unemployment now at 3.6 percent,\(^2\) and wages beginning to rise,\(^3\) challenges remain. Employers, and often small employers, are having an increasingly difficult time finding qualified workers. In fact, for over a year, more jobs have been available in the economy than people actively seeking them out. This poses a challenge for small businesses because they cannot continue to grow without adequately filling their staff with qualified individuals. The difference between the skills workers possess and the ones employers seek out is called the “skills gap.”\(^4\) The hearing gives Members a chance to learn about

---

apprenticeship and job training programs that can close the skills gap and help solve the current skilled employee shortage.

The Changing Nature of Work
A major cause of the skills gap is the changing nature of work. Experts speculate that we are in an age of acceleration that comes with a more fluid employment relationship.\(^5\) As technology continues to disrupt markets at an increasing rate, employees with a steady career spanning several decades could be harder to find. A potential solution includes building broad skills from an early age that will produce a more dynamic and resilient workforce.

The relationship between education and employment has changed drastically in the past four decades. In 1973, workers with a post-secondary education only held 28 percent of jobs.\(^6\) This will increase to 65 percent by 2020.\(^7\) The most difficult positions to fill, for both small and large companies, are “middle skill jobs”\(^8\) and they represent more than half of job openings in the US.\(^9\) Middle skill jobs require some post-secondary training, but not a four-year degree.\(^10\) More vocational and community college programs dedicated to developing skills directly used in the workforce are needed to fill these positions.

Furthermore, education and worker training are lagging. A well-trained and well-educated workforce is essential for America’s private industry to perform as a dominant player in the global market. However, there is a shortage of high-skilled graduates even as demand for highly educated workers continues to climb.\(^11\) Finding qualified workers is critical for small firms who are looking to start, maintain and grow their business. However, small firms face unique challenges and must be particularly innovative in meeting their workforce needs.

Small Business Concerns
One of the most important resources for a small business is its employees. Small firms provide nearly 70 percent of American workers with their first job.\(^12\) Yet, many small business owners face difficulty in retaining the skilled, capable, and dependable workforce needed to keep their business operations up and running – making it all the more challenging for this important segment of the

---


\(^7\) Id.

\(^8\) _Bridge the Gap: Rebuilding America’s Middle Skills_, HARVARD BUSINESS SCHOOL, https://www.hbs.edu/competitiveness/Documents/bridge-the-gap.pdf.


\(^10\) Id.


economy to meet their growing labor needs. Small and medium-sized firms produced 64 percent of jobs created in the fifteen-year period prior to the recent economic downturn. Thus, providing skilled workers for these small businesses will be particularly important for America’s economic growth.

However, small businesses face greater workforce development barriers than larger businesses. These fundamental barriers include limited financial resources and fewer human resource personnel to assist in filling vacancies, retaining employees, and developing advanced skills. Many employers requiring a skilled workforce find it increasingly difficult to compete for workers even with increasing worker benefits like higher pay, health care, and retirement packages. Furthermore, small firms may also lack the resources to find out about federal and state workforce development programs such as federal job training programs and apprenticeships that can assist them.

The skills gap also strains small business owners who cannot find qualified employees because they must attempt to adopt these skills while running their businesses. According to the US Chamber of Commerce, 81 percent of small business owners must work longer hours to take on the roles for which they would have additional staff. Because of this, small business owners are now working almost double the hours of the average American worker, up to 14 hours compared to the average of 7.8 hours per day.

Because education and training resources are limited in the United States, small businesses would benefit from the availability of high-skilled immigrant workers through the H-1B and H-2B visa program. In fact, 30 percent of small businesses sponsor between three and five H-1B visas. However, many small firms are unable to employ high-skilled immigrant workers because of the high risk of rejection. Others are incapable of providing the resources and funds necessary to complete the H-1B hiring process. Members will hear from a variety of witnesses about their struggles to find and retain skilled workers and learn how it will take a dedicated effort between the public and private sectors to address the skills gap.

Preparing Workers for the Future of Work

Apprenticeships
Apprenticeships consist of both on-the-job training and classroom experience to develop the skills of potential employees. Apprenticeships are particularly helpful for individuals who have not attended a 4-year college but are seeking a more technical job. Apprentices learn through a combination of structured practical training and classroom lectures, while earning a salary. These programs often last at least two years and give workers training in both hard and soft skills they need to do their job well. They provide the worker with specialized skills without the need to attend a 4-year school. Since 2011, there has been an expansion of apprenticeship programs from 358,000

15 Id.
17 Id.
apprentices to over 500,000 in 2017.\textsuperscript{18} This is likely due to the increased cost of higher education and the widening skills gap.\textsuperscript{19}

\textit{Department of Labor}

Since the National Apprenticeship Act of 1937, the U.S. government has supported these programs through the Department of Labor (DOL), or through a DOL-recognized state apprenticeship agency (SAA). Currently, 25 states operate an SAA and 25 register programs through the DOL.\textsuperscript{20} The DOL or SAA evaluate these apprenticeship programs to confirm that they follow federal regulations related to program design or worker protection.\textsuperscript{21}

Not all occupations, however, can register apprenticeship programs. Occupations that can be taught through an apprenticeship must involve skills that are customarily learned in a practical way through a structured, systematic program of on-the-job learning, be clearly recognized throughout an industry, involve progressive attainment of skills and knowledge, and require related classroom instruction.\textsuperscript{22} The DOL currently has a list of more than 1,300 occupations that are eligible for registered apprenticeships.\textsuperscript{23} From the DOL website, one can pick from advanced manufacturing, construction, energy, business, health care, hospitality, information technology, telecommunications, and transportation. Within each of those industries is a list of jobs that are in high demand that offer apprenticeships directly through the DOL.

\textit{Industry Based}

In 2017, President Trump signed an executive order that aimed to promote the development of apprenticeships by third parties, such as trade and industry groups, companies, non-profit organizations, unions, and joint labor-management organizations.\textsuperscript{24} Through the DOL, private industry and other stakeholders can register apprenticeships to take advantage of national accreditation, tax credits, and access to federal resources.\textsuperscript{25} The DOL has also invested an additional $30 million into its ApprenticeshipUSA initiative to encourage industry partnerships and enhance diversity.\textsuperscript{26} Through this funding, organizations like the National Urban League have developed registered apprenticeship programs and guidance to increase diversity in high-tech industries through on-the-job training and technical assistance to employer guidance on DOL Equal Employment Office (EEO) guidelines.\textsuperscript{27}

\begin{itemize}
\item\textsuperscript{19} Benjamin Collins, R45171, Cong. Research Serv., \textit{Registered Apprenticeship: Federal Role and Recent Federal Efforts} (2019) [hereinafter CRS R45171].
\item\textsuperscript{20} Id.
\item\textsuperscript{21} Id.
\item\textsuperscript{22} Id.
\item\textsuperscript{23} Id.
\item\textsuperscript{24} Executive Order No. 3245, (2017).
\item\textsuperscript{25} CRS R45171, supra note 19.
\item\textsuperscript{26} Fact Sheet: Investing $90 Million Through ApprenticeshipsUSA to Expand Proven Pathways into the Middle Class, U.S. DEPARTMENT OF LABOR, Jan. 20, 2017, https://www.dol.gov/newsroom/releases/osec/osec20160421 (last visited May 29, 2019).
\end{itemize}
• Telecommunications is essential to the twenty-first century economy and jobs in this field can be highly technical. The specialized and technical nature of that work requires that the workforce is highly trained and educated in the field, which is why the Telecommunications Industry Registered Apprenticeship Program (TIRAP) was created. TIRAP is a partnership between several telecommunications companies, industry associations, and DOL. In this program, industry stakeholders develop credentialed apprenticeship programs available to qualified employers for career development of the telecommunications workforce. As the industry expands, TIRAP will promote safety, enhance quality, enable education, and advance opportunities in the telecommunications workforce.

• Industry stakeholders have also developed boot camp style training programs and job matching platforms. CompTIA’s IT Futures Foundation encourages underutilized communities like women, minorities, and veterans to seek careers in IT and cybersecurity through intensive boot camp style certificate programs. They also connect certificate holders with jobs in IT and cybersecurity through their CyberSeek jobs heat map.

These are just a few examples of the many programs industry stakeholders are utilizing to enhance skills and strengthen the workforce now and for the future. Some are taking a two-pronged approach by creating programs to quickly fill open positions while also collaborating with local communities and schools to educate youth about the opportunities available in the industry. Doing so could ensure a steady labor force to meet future workforce demands.

**Federal Training Programs**

Federally funded employment and training programs serve an important role in our society by helping job seekers enhance their job skills and obtain employment. Many of these programs directly or indirectly assist and benefit small businesses.

• **One-Stop Career Centers:** Under the Workforce Investment Act (WIA), the One-Stop Delivery System provides employment services and training through regional career centers. These centers serve youth, adults, and dislocated workers, many of whom are small business owners. Through One-Stop Career Centers, small business employers are provided with assistance during the entire hiring process.

• **Trade Adjustment Assistance:** The Trade Adjustment Assistance (TAA) program provides aid to those business owners and workers who have lost their jobs, or have seen diminished hours, wages, or work due to increased imports or shifts in production. Eligible workers

---

29 Id.
33 Id.
34 Benjamin Collins, R44153, Cong. Research Serv., Trade Adjustment Assistance for Workers (2018) [hereinafter CRS R44153].
are offered an array of benefits and employment services through TAA including income support through Trade Readjustment Allowance (TRA), case management and career services.\textsuperscript{35}

- \textit{Job Corps}: Job Corps is a national vocational and employment training program overseen by the DOL that provides disadvantaged youth between the ages of 16 to 24 with the education and support they need to secure long-term employment.\textsuperscript{36} Small businesses supply the majority of American’s with their first job and Job Corps seeks to match small business owners with the well-trained, entry-level employees needed to fill their workforce needs.

- \textit{Manufacturing Extension Partnership}: Administered by the Department of Commerce, the Manufacturing Extension Partnership (MEP) works with small and mid-sized U.S. manufacturers to help them create and retain jobs, increase profits, and save time and money.\textsuperscript{37} The nationwide network provides a variety of services, from innovation strategies to process improvements to green manufacturing.\textsuperscript{38} MEP also works with partners at the state and federal levels on programs that put manufacturers in position to develop new customers, expand into new markets and create new products.\textsuperscript{39}

\textbf{Proposed Reforms}

\textit{Incentivize Training Through Federal Programs}

- \textit{Tax Preferred Training Expense Accounts}: The Lifelong Learning and Training Act, introduced by Sen. Mark Warner, establishes tax-preferred savings accounts that may be used to pay for training expenses and will be managed by state programs.\textsuperscript{40} This account could be used for training programs that result in a recognized postsecondary credential, such as an industry-recognized certificate or certification, a license recognized by the federal government or state, or an associate or baccalaureate degree.\textsuperscript{41}

- \textit{Expand Pell Grants for Skill Certifications and Credentials}: The JOBS Act, introduced by Sens. Tim Kaine and Rob Portman, seeks to expand Pell grants to skills certifications and credentials.\textsuperscript{42} Pell Grants are needs-based grants for low-income and working students and are now only applied to postsecondary education.\textsuperscript{43} Leveraging these federal grants beyond traditional four-year educational programs to apprenticeship programs and certificates programs could help close the skills gap.

- \textit{Trade Adjustment Assistance for Workers Displaced by Automation}: The Trade Adjustment Assistance Program is currently only available to employees negatively

\textsuperscript{35} Id.
\textsuperscript{36} Adrienne Fernandes-Alcantara, R40929, Cong. Research Serv., \textit{Vulnerable Youth: Employment and Job Training Programs} (2017).
\textsuperscript{38} Id.
\textsuperscript{39} Id.
\textsuperscript{40} Lifelong Learning and Training Act of 2018, S.539, 116\textsuperscript{th} Cong. (2018).
\textsuperscript{41} Id.
\textsuperscript{42} JOBS Act of 2019, S.839, 116\textsuperscript{th} Cong. (2018).
\textsuperscript{43} Id.
impacted by trade activity.\textsuperscript{44} Due to the burgeoning expansion of automated manufacturing, employees displaced by upgraded machines should also be able to benefit from these services.

- \textit{Expand and Incentivize the Role of Employers:} The most effective remedies to the skills gap include providing on-site training to employees through seminars and training programs, increasing compensation, and improving retention efforts for current employees.\textsuperscript{45}

- \textit{Incentivize Industry Based Training Solutions:} Both the public and private sector benefit when workers are well-trained and well paid. Small businesses often lack the financial resources, while government may lack the technical knowledge to assemble training programs. The federal government should incentivize further investment in the American workforce through reimbursements and tax incentives for training and certifications.

**Engage Americans at Every Stage of Education**

- \textit{Emphasize Technical Education and Vocational School:} For many years, emphasis has been placed on 4-year college degrees. To address the workforce shortage and the skills gap, more resources should be directed toward training young adults for technical jobs that are in high demand. Across the country, about 12.5 million students are enrolled in Career and Technical Education (CTE), where they will graduate prepared to become part of the workforce.\textsuperscript{46} The high school graduation rate for those enrolled in a CTE concentration is about 90\% -- 15 percentage points higher than the national average.\textsuperscript{47}

- \textit{Invest in Early Childhood Education:} To develop a well-rounded future workforce there must be greater investment in technical skills in early childhood education. Children that are equipped with critical thinking skills are better able to better adapt as they frequently change jobs throughout life.\textsuperscript{48} Basic critical thinking skills are essential for training across professions and industries.\textsuperscript{49} Making investments in STEM education and critical thinking skills must be a top priority.

**Conclusion**

The skills gap between what employers are seeking and what potential employees have can hinder economic growth. Given the workforce shortage and the lack of qualified workers available, small business owners are having trouble finding the necessary workers to grow their businesses. The primary way to close the gap is by upskilling workers through federal training programs,

\textsuperscript{44} CRS R44153, \textit{supra} note 34.
\textsuperscript{47} \textit{Id.}
\textsuperscript{49} \textit{Id.}
apprenticeships, career and technical education, and vocational school. The public and private sector must come together to improve the American workforce’s ability to meet the needs of U.S. businesses.