

A photograph of two men in a workshop setting. The man on the left has a beard, wears a striped beanie, safety glasses, and a black t-shirt with 'Walker Welding' printed on it. He has tattoos on his left arm and is wearing a brown leather welding glove. The man on the right is older, wears glasses, and a blue denim shirt. He is also wearing a yellow welding glove and is focused on a task on a workbench. The background is a blurred industrial environment.

APPRENTICESHIP ENGAGEMENT STRATEGY: APPRENTICESHIPUSA GRANT

TN

Department of
Economic &
Community Development

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Executive Summary

Workforce continues to remain a top priority for all businesses across Tennessee. This challenge is felt locally, nationally, and globally as the skill gap continues to widen. Recruiting, training and retaining a high-quality workforce is becoming increasingly challenging due in part to low unemployment numbers, low labor force participation rates, automation, the retirement of the baby boomers, and a lack of alignment between classroom instruction and employer needs.

Soft skills, often called employability skills, are many times an equal or greater concern than hard skills. Companies across the state of Tennessee report issues around employee attendance, substance abuse, and lack of work ethic. To combat these issues, more companies are supporting programs such as high school work ethic certificates, co-op and internship opportunities, and work-based learning programs. Apprenticeship, a training strategy that has spanned centuries, is now commonly discussed as a new and viable opportunity.

On June 2, 2016, the Federal Department of Labor awarded \$10.4 million in Accelerator Grants to 51 states and local areas. The grant intended to explore the expansion of apprenticeship to new geographic areas, industries, and employers. The \$200,000 grants were awarded to 48 states, with Wyoming and Georgia not participating. Puerto Rico, Guam, and the District of Columbia were also provided funding for this work.

In February 2018, the Tennessee Department of Labor and Workforce Development transferred the ApprenticeshipUSA Accelerator Grant funds to the Tennessee Department of Economic and Community Development to perform the following activities prior to May 29, 2018:

- Develop an Apprenticeship Engagement Strategy
- Lead a Statewide Apprenticeship Listening Tour
- Work with local entities within each of the three grand divisions to develop strategies that engage employers and industry sector leaders. This work shall include convening meetings, promoting utilization of apprenticeship in Tennessee and developing new strategies for public/private partnerships that address in-demand occupations and needs.
- Coordinate a Statewide Apprenticeship Summit in May 2018

Key Findings

- Apprenticeship is a workforce strategy businesses across Tennessee are interested in developing and utilizing to combat low unemployment rates and the increased challenges in hiring and retaining a qualified workforce
- There is a demand for a statewide approach to apprenticeship
- Tennessee organizations lack a clear understanding of what constitutes an apprenticeship; many names are used interchangeably including co-op, internship, work-based learning
- Barriers to the development of apprenticeship programs in Tennessee include funding, awareness, knowledge of implementation, bandwidth, time, and connectivity between industry and education institutes
- Over 72% of the federally registered programs in Tennessee are vacant
- 8 occupations account for 78.69% of the registered programs in Tennessee in 2017
- Tennessee ranks in the bottom half of the nation for the percentage of active apprentices (32nd) and percentage of active apprenticeship programs (29th) in 2017
- Most states in the southeast that compete with Tennessee for economic growth implement statewide apprenticeship strategies and allocate resources accordingly
- Tennessee has an opportunity to collect and implement best practices in apprenticeship from across the state and nation to become a national leader of statewide efforts to promote and support apprenticeship

Key Recommendations

- Establish a Tennessee Apprenticeship Committee comprised of multiple state and local leaders to develop, implement, and fund a statewide approach to apprenticeship. This team should explore expanding the Office of Apprenticeship in the Tennessee Department of Labor and Workforce Development and identify opportunities for increased utilization of the services, including WIOA funding.
- Explore the opportunity to develop a state-sponsored apprenticeship program
- Create a Tennessee apprenticeship playbook with tools and an outward facing website to aid in the creation, implementation, and sustainability of apprenticeship programs, especially in small to mid-sized companies. Processes developed would include how to best connect employers and education institutes to form apprenticeship programs, as well as the role of economic development.
- Perform additional analysis to determine what occupations are most viable for apprenticeship opportunities and determine why 78.69% of federally registered apprenticeship programs in Tennessee are currently unoccupied.
- Explore the opportunity to create non-traditional apprenticeship programs within higher education, including accounting, finance, business, healthcare and technology occupations.
- Dedicate specific focus on individuals with disabilities, non-traditional and hard to serve populations.

Introduction

Apprenticeship is a job that includes a flexible, customized training strategy to meet the needs of any employer. Apprentices can be new hires, or businesses can select current employees who need skill upgrades to join the apprenticeship program. For the purposes of this report, “apprenticeship” will refer to a federally registered apprenticeship program. The Federal Department of Labor, Office of Apprenticeship, provides a clear definition:

“Apprenticeship is a proven approach for preparing workers for jobs while meeting the needs of business for a highly-skilled workforce. It is an employer-driven, “learn-while-you-earn” model that combines on-the-job training, provided by the employer that hires the apprentice, with job-related instruction in curricula tied to the attainment of national skills standards. The model also involves progressive increases in an apprentice’s skills and wages.” (<https://www.dol.gov/apprenticeship/toolkit/toolkitfaq.htm#1a>)

There are five main components to a registered apprenticeship program:

1) *Business Involvement*

Employers are the foundation of every apprenticeship program. They play an active role in building the program and remain involved every step of the way. Employers frequently work together through apprenticeship councils, industry associations, or other partnerships to share the administrative tasks involved in maintaining apprenticeship programs.

2) *Structured On-the-Job Training*

Apprenticeships always include an on-the-job training component. Apprentices receive hands-on training from an experienced mentor at the job site. On-the-job training focuses on the skills and knowledge an apprentice must learn during the program to be fully proficient on the job. This training is based on national industry standards, customized to the needs of the particular employer.

3) *Related Instruction*

One of the unique aspects of apprenticeships is that they combine on-the-job learning with related instruction on the technical and academic competencies that apply to the job. Education partners collaborate with business to develop the curriculum, which often incorporates established national-level skill standards. Universities, community colleges, technical colleges, apprenticeship training schools, or the business itself can provide related instruction. The curriculum can be delivered at a school, online, or at the job site.

4) *Rewards for Skill Gains*

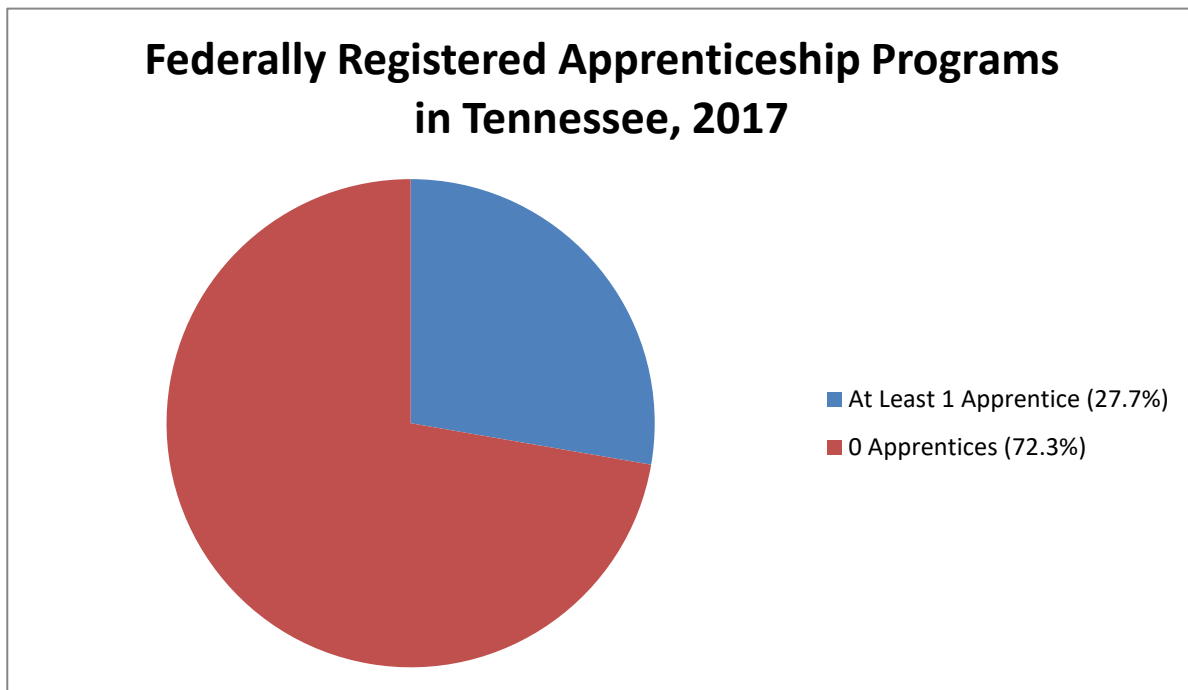
Apprentices receive wages when they begin work and receive pay increases as they meet benchmarks for skill attainment. This helps reward and motivates apprentices as they advance through their training.

5) *Nationally-Recognized Credential*

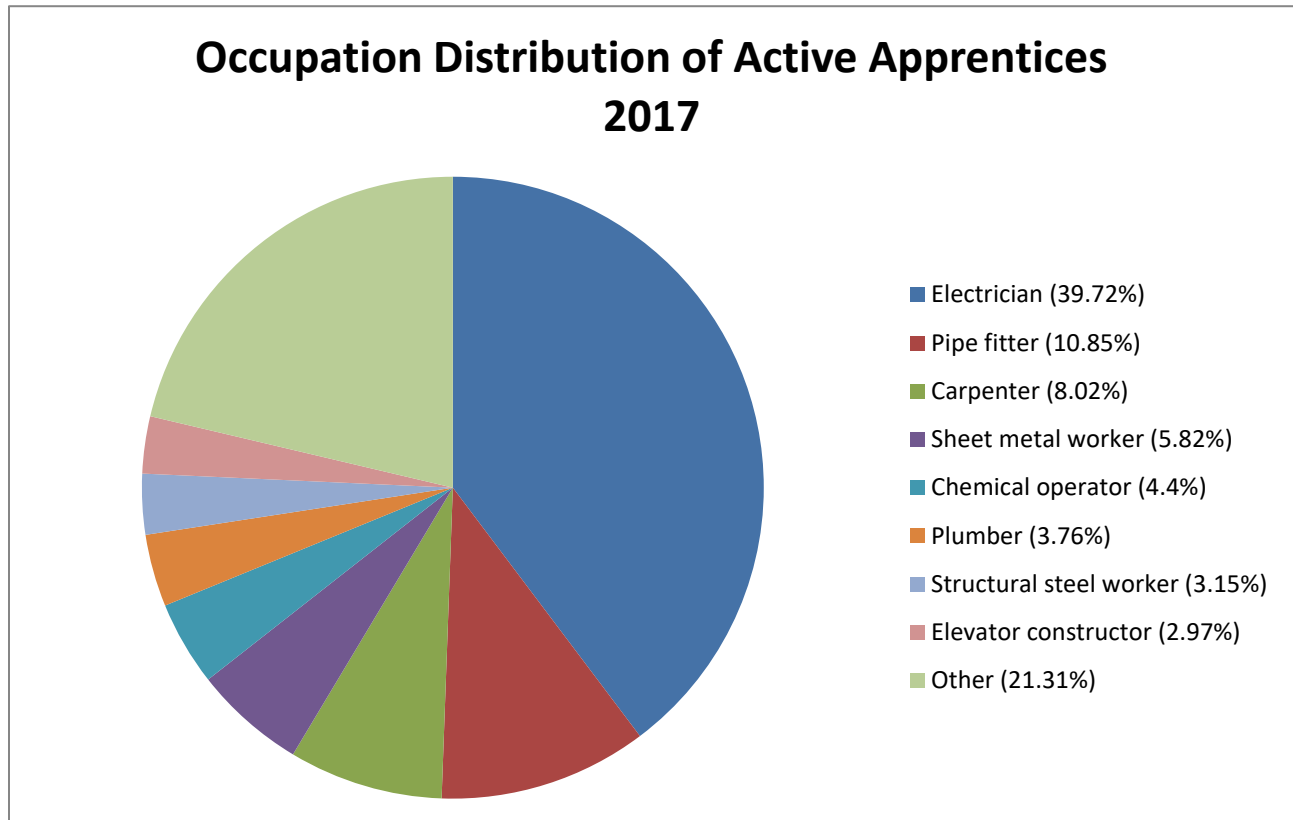
Every graduate of a federally registered apprenticeship program receives a nationally recognized credential. The portable credential signifies to employers that apprentices are fully qualified for the job.

How Does Tennessee Stack Up?

In 2017, Tennessee ranked in the bottom half of the nation for the percentage of active apprentices (32nd) and percentage of active apprenticeship programs (29th). According to the Federal Department of Labor, Office of Apprenticeship, Employment and Training Administration, Tennessee had 487 federally registered programs and 5,050 active apprentices in the calendar year. Tennessee had 764 completers, resulting in a **15.13% completion rate**. Of the 487 registered programs, 352 had 0 apprentices, concluding that **over 72% of the federally registered programs in Tennessee held 0 apprentices in 2017**. This also indicates an average of 37.4 apprentices are registered in each active program in Tennessee.



In regards to the diversity of occupations of federally registered apprenticeship programs, most programs are concentrated among a handful of traditional trades occupations. Highlighted in the chart below, only **8 occupations account for 78.69% of apprenticeship programs** in the state. This highlights a need for diversification in regards to the career pathway offerings, especially considering that sectors with the largest job growth from 2015 to 2025 in Tennessee are projected to be the professional & business services, education & health services, and natural resources, mining, & construction sectors.



ApprenticeshipUSA Accelerator Grant

To begin the work of the ApprenticeshipUSA Accelerator Grant, the Tennessee Department of Economic and Community Development welcomed Robert I. Lerman, an Institute Fellow at the Urban Institute, and Nicholas Wyman, CEO of Institute for Workplace Skills and Innovation, to assist in beginning the conversation of apprenticeship with a team comprised of state and local leaders. The meeting was held on March 7, 2018 and included the following attendees:

- Dr. Jeff McCord, Northeast State Community College
- Michael Needel, TN Department of Labor and Workforce Development
- Nakeisha Ricks, TN Department of Labor and Workforce Development
- Jessica Gibson, TN Higher Education Commission
- Curt Johnston, TN Higher Education Commission
- Ken Hanson, TN Higher Education Commission
- Deanna Morris-Stacey, TN Board of Regents
- Misty DePriest, UT Center for Industrial Services
- Pat Sheehy, TN Business Roundtable
- Cassie Lynn Foote, TN Business Roundtable
- Charlie Apigian, Middle TN State University
- Tim Waldo, UT Center for Industrial Services
- Lyle Ailshie, TN Department of Education
- Marla W Rye, Workforce Essentials
- Charlie Davis, TN Department of Human Services
- Jeremy Norden-Paul, TN Department of Intellectual and Developmental Disabilities
- Beth Duffield, Rutherford County Chamber of Commerce
- Ann Thompson, TN Department of Economic and Community Development

Agenda:

- 9:00 Opening and Introductions
- 9:20 Vision and Goals for Apprenticeship in TN
- 9:50 Where We Are/Best Practices
- 10:15 Break
- 10:30 Gaps and Challenges
- 11:30 Working Lunch: How do apprenticeships work for individuals with disabilities?
- 12:30 Resources and Opportunities/Areas of Concentration
- 2:30 Action Steps
- 4:00 Closing

The conversation was engaging and created a foundation to assist in next steps for a statewide apprenticeship committee. Below are the comments and highlights from that meeting. The notes include the vision and goals for apprenticeship in Tennessee, as well as what components are needed for success, and final thoughts.

Vision and Goals:

- Establish a state-wide, best-in-class, and coordinated apprenticeship program in Tennessee
 - Tennessee will carefully define and align the value of apprenticeships, measures of quality apprenticeships and basis for prioritizing its efforts BEFORE proceeding
 - By 2020, Tennessee will have a collaborative apprenticeship system which actively supports attainment of credentials with high workforce value in the skill sets of greatest demand in Tennessee's economy, both now and in the future
 - Apprenticeship is a viable opportunity for multiple industries and age groups. The strategy can be used to improve the quality of the state's workforce regardless of perceived barriers
 - Promote coordination between state and local-level partners
 - Create a seamless pipeline of talent with various entry/exit points
- Help employers better understand the benefits of an apprenticeship
 - Utilize the needs of employers as a cornerstone to train an effective workforce
 - Make it a goal to have 25% of small to mid-sized manufacturing companies launch and sustain apprenticeship programs; provide information to all companies about ROI of investing in employees
 - Simplify the process for employers to start apprenticeship programs
 - Leverage regional apprenticeship programs to solve business problems
- Partner with education institutions at all levels to offer employees an education that prepares them for the workforce
 - Utilize the post-secondary infrastructure to solve workforce development issues through apprenticeship
 - Adjust perspectives among post-secondary partners to align apprenticeships as a degree towards the Drive to 55 (Governor Haslam's initiative to have 55% of Tennesseans obtain a post-secondary credential by 2025)
 - Leverage opportunity for a youth apprenticeship in each career pathway, including technology-related careers, and aligning K-12 and post-secondary
- Provide every Tennessean with education and high quality job opportunities
 - For Tennessee to offer apprenticeships to increase education, learning, and employment opportunities for customers with disabilities and provide quality candidates for business
 - Provide adults with a direct pathway from training to apprenticeship/workforce
 - Create a process for developing local talent for the technology and healthcare industry

State Needs:

- Common vocabulary and definitions of apprenticeship, as well as a better understanding of Federal Apprenticeship Standards
- Benchmarks to determine success
- Database to inventory registered programs (including success and opportunities), as well as non-federally registered apprenticeship programs
- Defined ownership and accountability at the state level
- Increased buy-in with state/local officials including testimonies from companies that currently have successful apprenticeship programs
- Formulate outreach strategy to both employees and employers
- Coordination of resources and consistency with structured pathways

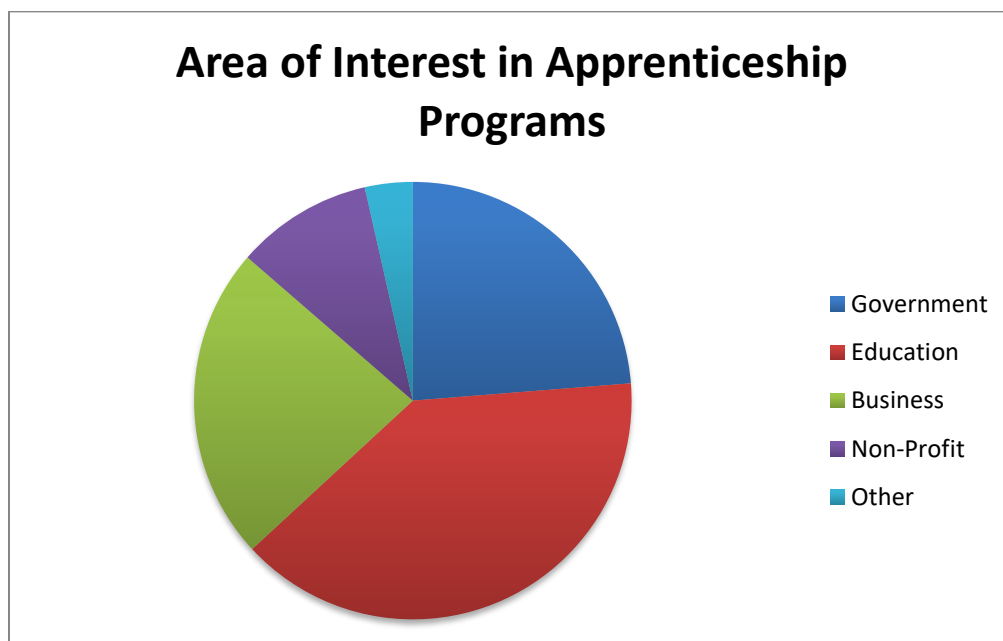
Final Thoughts:

- Local level representation from higher education needed
- Business representation is needed in these conversations
- Engage HR community in Tennessee and SHRM
- Helpful to create a value proposition for an employer and potential employee
- Documentation is critical during the process to ensure alignment of programs, results, research, projects, etc.
- A framework can be created by utilizing the supply/demand of occupations in Tennessee to determine the greatest impact
- Decisions that need to be made:
 - What accrediting system should Tennessee use? USDOL or create a state sponsored program?
 - Who fills the role of facilitator/connector? Is this a state employee, local contacts, a private contractor, or a collaborative group of defined roles?
 - What are the qualities and characteristics of the companies that are most likely to be successful in creating and sustaining apprenticeships? What defines a good partner?

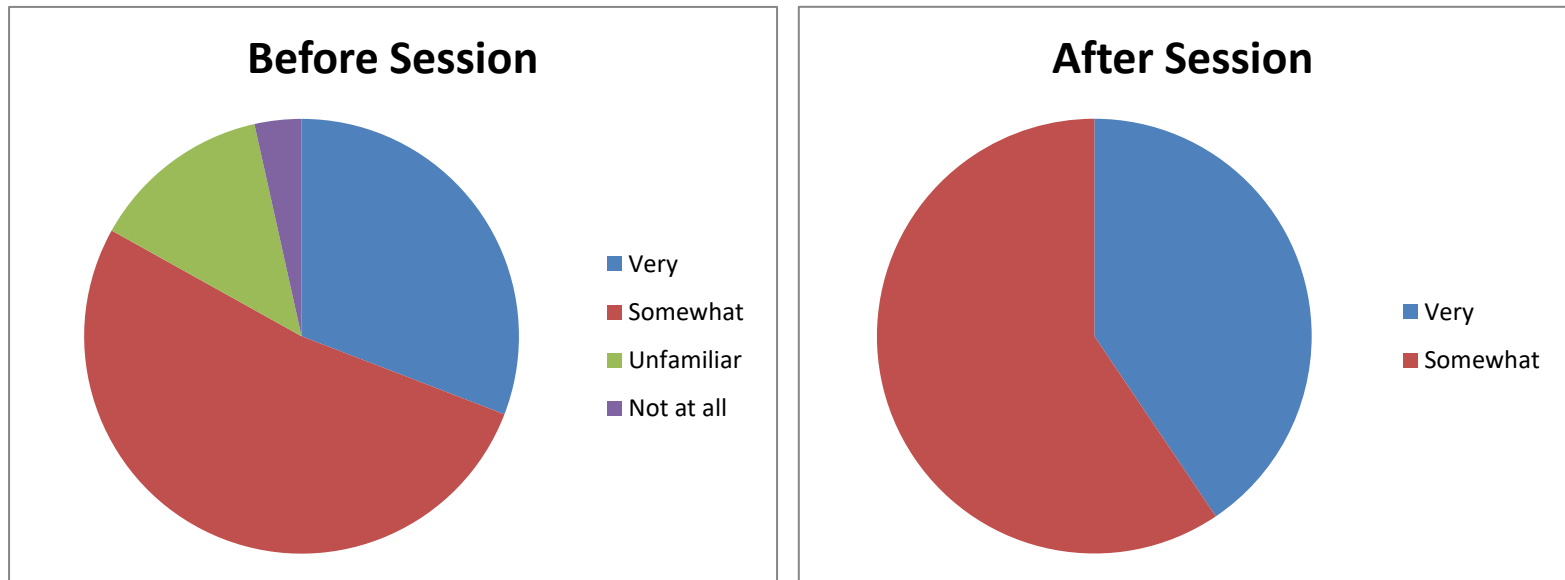
Statewide Apprenticeship Listening Tour

During the month of March, the State Apprenticeship team made 5 stops across Tennessee; Memphis, Jackson, Smyrna, Athens, and Kingsport. During these listening sessions, Jody Lentz and Ann Thompson collected feedback from over 300 individuals about the current state of apprenticeship in Tennessee, the obstacles faced in cultivating and developing apprenticeship programs, and the opportunities for expansion of apprenticeship. The feedback provided and information gathered is shown below and will be used by the state team to determine next steps.

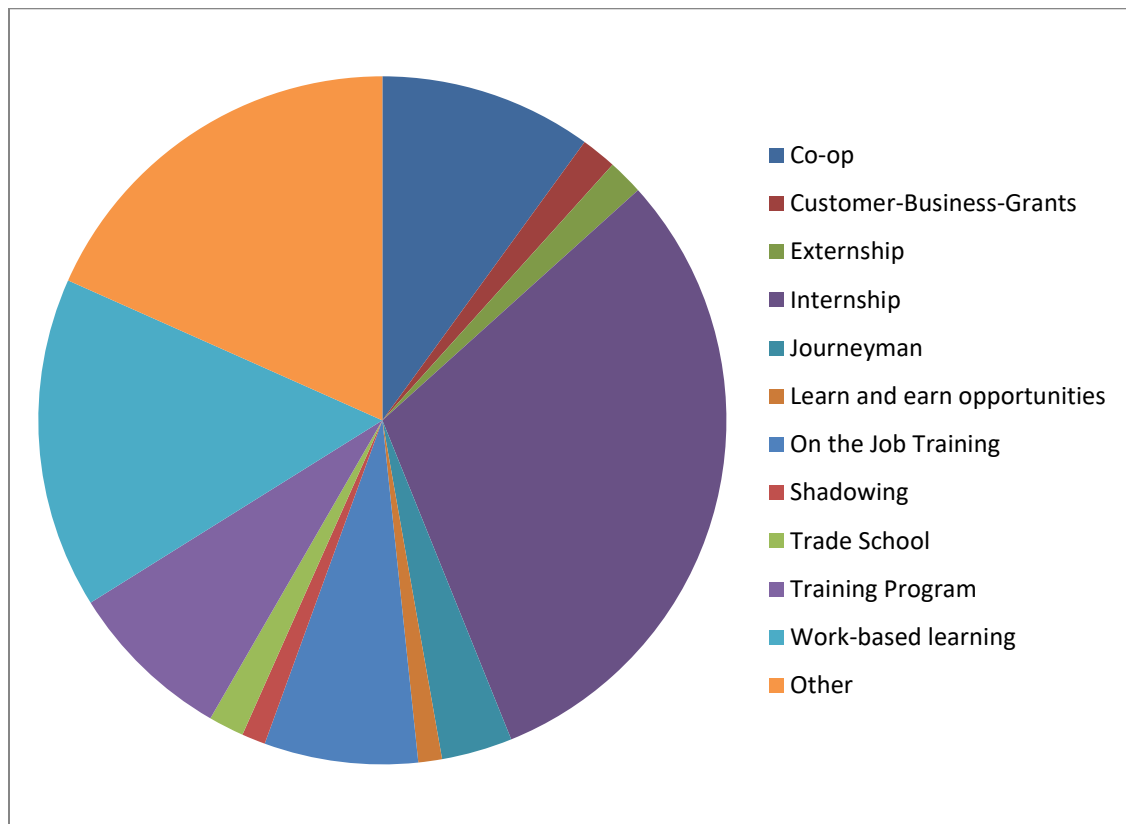
Attendee Sectors: A diverse group was interested in the apprenticeship conversation. The breakdown includes education, government, business, and non-profit sectors.



Familiarity: The attendees were asked about how familiar they are with apprenticeship programs before and after the session. The data shown below suggests the effectiveness of the sessions by introducing the attendees to apprenticeship programs.



Disparate Language: The attendees were surveyed on the different types of names that apprenticeships are called, revealing the inconsistent terminology used for apprenticeships.



Questions Asked During the Tour: The attendees provided multiple questions that should be addressed by the state apprenticeship team.

- What is the definition of an apprenticeship, and what are the relevant terms?
- What are the statistics regarding apprenticeship programs in Tennessee?
- What are some of the best practices from both Tennessee and from other states?
- How is the federal government involved in creating apprenticeship programs?
- Should Tennessee create a state-sponsored apprenticeship program?
- What is the process for creating and managing an apprenticeship program?
- What is the opportunity and how is the State Department of Education currently involved in apprenticeship work?

Obstacles: There were a substantial number of obstacles that were identified by the participants. Some of the top obstacles identified include:

- Lack of knowledge and awareness of what constitutes an apprenticeship program
- Unsure of the process for creating and sustaining a successful program
- Current lack of a state champion to spearhead the effort
- Current lack of connectivity between the employers and education
- Liability concerns for younger apprentices and pre-apprentices
- Combatting the challenge of parents and counselors in high schools pushing students to 4-year college
- Negative perceptions of advanced manufacturing occupations and work conditions
- Managing employer expectations
- Managing the cost of training and supplies
- The potential shortage of qualified applicants and instructors

Opportunities: In regards to the potential opportunities presented by apprenticeship programs, the attendees provided the following responses:

- Combine resources from various state and local agencies
- Develop a robust pipeline of skilled talent with an emphasis on technical occupations
- Create meaningful partnerships between education and industry
- Utilize statewide apprenticeship programs as a recruitment tool
- Reducing the shortage of qualified talent
- Providing training and education with reduced student debt
- Expand types of occupations that offer apprenticeships to non-traditional careers
- Educate middle and high schools about career pathways in apprenticeship
- Assisting manufacturers with workforce needs
- Opportunity to educate business leaders about workforce development as a long-term business strategy vs. a short-term quick fix

Closing questions: It was clear from the meetings that all individuals felt engaged, which was the goal of the listening tour. It was also clear that almost all the participants were requesting next steps. The questions that had the largest interest were:

- What is the plan for an apprenticeship program in Tennessee, and how will it be funded?
- What is the cost for these programs to a company and will there be assistance from the state?
- How does a company begin the process of starting a program?
- How does one best align apprenticeship with K-12 to include dual enrollment and pre-apprenticeship opportunity?
- What group will lead this charge from a state perspective?

Local Strategies Utilizing Higher Education

Tennessee partnered with Middle Tennessee State University, Roane State Community College, and the University of Memphis to develop an apprenticeship implementation strategy for creating, supporting and expanding apprenticeships. Each partner focused on a sector relevant to the geographic location of their school and will provide a detailed analysis of their work, which will be included in the Tennessee Engagement Strategy. The papers can be found behind this report.

Middle Tennessee State University: Charlie H. Apigian, PhD

There continues to be a growing skills gap for technology-related occupations in Tennessee. To address this divide, Middle Tennessee State University (MTSU) is developing strategic pathways for secondary students to access post-secondary and apprenticeship programs in technology-related fields. MTSU performed a comprehensive review of the Middle Tennessee region to identify key players in technology education and employment. Once identified, focus groups and workshops were held with each entity to evaluate and recognize the successes, challenges and opportunities for the development of tech apprenticeship pathways. The comprehensive report will include an in-depth analysis of the findings, recommendations of pathways from secondary to post-secondary to career, and a plan for full implementation of technology-based apprenticeship programs in Tennessee.

Roane State Community College: Teresa Duncan

The advanced manufacturing sector has numerous opportunities for apprenticeship programs for both youth and adults. After extensive work, Roane State Community College has confirmed there is an overwhelming interest in creating and implementing apprenticeship programs in companies located within their service area, yet few companies are currently operating standardized and federally approved programs. It has been discovered that many companies are not aware of how to set up a program or where to start. The recommendations from this work include the creation of a simple, visual process identified for “how to” develop an apprenticeship program, available funding streams to support the development and sustainability of the programs, and coordinated efforts to leverage resources and expertise across state and federal departments.

University of Memphis: Stephanie S. Ivey, PhD

The Southeast Transportation Workforce Center at the University of Memphis (UofM) is conducting research regarding strategies for accelerating apprenticeship adoption in the Transportation, Distribution, and Logistics (TDL) sector. This work includes holding stakeholder focus group meetings to engage industry, community, and academic partners, results of a stakeholder survey, and reports on national best practices. The resulting TDL Blueprint Report documents key accelerators, best practices, strategic partnerships, and communication approaches for increasing apprenticeship programs in Tennessee, with an emphasis on attracting nontraditional populations.

Apprenticeship Summit; May 22, 2018

To complete the grant, Tennessee Department of Economic and Community Development held an Apprenticeship Summit on May 22, 2018 at the Nelson Andrews Leadership Center in Antioch, Tennessee. The Summit sold out with 200 attendees, and the speakers were comprised of partners from state departments, apprenticeship experts, and businesses in Tennessee currently operating successful apprenticeship models.

CONNECTING APPRENTICESHIP TO K-12 –

Dr. Lyle Ailshie, Assistant Commissioner, TN Department of Education, spoke about the importance of developing policy and statewide cross-agency collaboration to focus on the K-12 core. Stating K-12 student curriculums and classroom experiences as central to developing robust labor pipelines, Ailshie emphasized the need for providing students with multiple pathways to the workforce through ISPO, dual enrollment and career and technical education courses. Dr. Ailshie stressed the need to provide secondary students with work-based learning opportunities with rigorous requirements to bolster and inform students' academic careers, as they get closer to joining the workforce.

THE FUTURE OF APPRENTICESHIP-

Burns Phillips, Commissioner of the Tennessee Department of Labor and Workforce Development, discussed the economic and labor disruption caused by automation. Commissioner Phillips noted the importance of agility and emphasized the importance of creating life-long learners in Tennessee who can react to changing trends in job skills and labor needs across all trades.

FROM THE PLAYERS' PERSPECTIVE –

Bob Rolfe, Commissioner of the Tennessee Department of Economic and Community Development, led a panel discussion with Larry Dickens, Training Manager of North American Stamping Group, L.L.C. (NASG), Zachary Johns, apprentice, NASG, and Jesus Espinosa, Vehicle Test Specialist, Volkswagen Group of America (VW). Dickens and Johns emphasized the importance of NASG participating in a USDOL-certified apprenticeship program and the efforts the auto parts supplier manufacturer made in creating a dedicated space for apprenticeships in their corporate structure to address this ongoing "It" topic of workforce development. Espinosa spoke about the partnership of VW and Chattanooga State Community College in Hamilton County. VW provides apprentices with 2 mechatronics certificate programs, on-going education, job training, and debt-free education. The apprenticeship program curriculum at VW is comprised of 70% hands-on training and 30% classroom training, providing apprentices with the opportunity to apply the knowledge gained through the program in real-time.

APPRENTICESHIP ALABAMA –

Frank Chestnut, Director of Apprenticeship Alabama, shared information about how the Alabama Department of Commerce is leading the charge to expand the number of registered apprenticeships in the state by focusing on target sectors, marketing apprenticeship to industry partners and companies directly, and most importantly, by making apprenticeship a legislative priority. In 2017, Apprenticeship Alabama

approved a \$1,000 tax credit (up to \$5,000 annually) for companies that host apprentices in registered programs.

APPRENTICESHIP MAKES CENTS... AND DOLLARS –

Rick Heath of Massey Electrical (ME) discussed the value of apprenticeship as the backbone of ME's hiring and retention strategy. Heath noted the keys to the successful ME apprenticeship model are quality instructors, providing apprenticeships with compensation and benefits, developing an embracing corporate culture, and learning to adjust the program to meet current needs of both the company and the apprentice. ME currently has around 80 apprentices in the 4-year development program. Heath highlighted the importance of the safety and quality of the apprenticeship program and discussed the monetary benefit of the program, citing if one apprentice works 2-3 small jobs a year, it will offset the entire annual cost of the program.

HOW TO MAKE IT WORK –

Dr. Jeff McCord, vice president for Economic and Workforce Development at Northeast State Community College (NESCC), and Jeff Frazier and Laurey Conway of Eastman explained the successful apprenticeship model they have created in Kingsport, Tennessee through local partnership and leveraging of resources. The Regional Center for Advanced Manufacturing (RCAM) is an exceptional resource utilized by NESCC, making them the only community college in the state of Tennessee to act as the sponsor for apprenticeship programs. Businesses in the area are able to plug in a small number of employees into this program without having to develop an entire program within their business.

BUILDING THE TECH COMMUNITY –

Jeff Mazur, Executive Director at LaunchCode, described the model for taking a non-traditional approach to information technology apprenticeship programs. LaunchCode is building a skilled workforce by creating pathways for driven people seeking careers in technology. They are helping job-seekers enter the tech field by providing accessible education, training and paid apprenticeship job placement.

WHERE ARE THE PEOPLE? –

Dr. Amy Lloyd, Associate Vice President of Jobs For the Future (JFF) Building Educational Pathways for Youth division, and Lewis Brown, Director of Client Relations at Council for Adult and Experiential Learning (CAEL), discussed the need for apprenticeship programs fill the workforce gap facing America today. One important message provided is that the opportunities must be accessible and engaging to attract youth and adults into apprenticeship pipelines.

BRINGING IT HOME –

Dr. Kenyatta Lovett, Executive Director of Complete Tennessee, discussed the value of utilizing apprenticeship as a workforce strategy to increase completion and post-secondary attainment.

POSITIONING TENNESSEE FOR SUCCESS –

Ann Thompson, the Director of Workforce Development with the TN Department of Economic and Community Development, wrapped up the Summit. She commented that this is not the end of the work, but rather the beginning of the work to make Tennessee a leader in Apprenticeship opportunities.

Conclusion

The work of the ApprenticeshipUSA Accelerator grant was highly successful because it engaged stakeholders across Tennessee to determine the interest, challenges, opportunities and next steps for apprenticeship in Tennessee. This report is meant to be a guide for those next steps and document the activities performed. The meetings, statewide listening tour, higher-education pilot projects, and Apprenticeship Summit all support the following conclusions:

- Tennessee businesses, educators, and citizens want to embrace apprenticeship programs as a viable workforce strategy
- There is substantial confusion around the goals, process, and funding of apprenticeship programs
- Tennessee requires a statewide apprenticeship strategy to remain competitive in this space
- Tennessee can lead in apprenticeship

Addendum: Recommendations from Jobs for the Future

The Tennessee Department of Economic and Community Development asked Jobs For the Future (JFF) to provide feedback and suggestions for Tennessee, specifically about connectivity to the K-12 space.

Recommendations for Tennessee

- **Tennessee should consider the creation of an Office of Apprenticeship and Work Based Learning.** Several OA states (states where USDOL/OA staff administer and approve registered apprenticeship programs) have recently established (or are considering) a state Office of Apprenticeship and Work Based Learning. These offices work at a cross-agency level to align, advance and promote cohesive state policies and programs to support the expansion of apprenticeships and work-based learning.
- **Increase education, marketing and outreach efforts to grow apprenticeship, and work-based learning opportunities.** Consider expanding the number of apprenticeship navigators, or business representatives, to work with the business community to develop apprenticeships in high-growth occupations and industries, including industries that have not traditionally participated in apprenticeships. These navigators could also promote apprenticeship to employers, workers, and other key stakeholders to increase awareness of the value and benefits of apprenticeships.
- **Similar to South Carolina's innovative model, consider the creation of a \$1,000 tax credit for eligible businesses for up to four years.** This is a small, but reasonable tax credit to gain employer interest.
- **Develop a clear policy framework for high school apprenticeship programs.** This should include the roles and responsibilities of industry, education, intermediaries, and other stakeholders.
- **Support state legislation or funding to advance a system of high school youth apprenticeships.** These funds could be used to support a state grant program similar to Wisconsin or support other local and regional pilots.
- **Continue to engage industry in the work-based learning development process.**
- **Tennessee should contact the US Secretary of Labor to determine their current eligibility for state funding.** Tennessee is one of 13 states that did not receive USDOL's State Apprenticeship Expansion initial grants in 2017 and should inquire if funding opportunities like this continue to be a possibility.
- **Assess whether WIOA 15% governor's reserve funds could be used to pilot new apprenticeship grant programs.** State held funds could provide funding for state administration, employer and stakeholder outreach, state planning and oversight, and state innovation, equity, professional development/capacity building, and other statewide activities.

- **Increase apprenticeship opportunities and on-ramps for Tennesseans**, particularly populations who are underrepresented in apprenticeship including women, minorities, low-skilled populations, people with disabilities, and veterans (including transitioning service members) so they may prepare for and successfully enter careers that provide long-term employment and family-sustaining wages in high-skill, high-growth industries.
- **Engage local areas in the development of apprenticeship programs that align education, workforce development, and employer-based training systems.** To allow young people and adults to advance in apprenticeship programs, earn college credit, and portable industry-recognized credentials in high-growth careers.
- **Encourage the engagement and expansion of intermediaries that support industry in developing new apprenticeship programs—convening and connecting employers with a range of key stakeholders including the public workforce system, community and technical colleges, organized labor, community-based organizations, and others.** Examples of workforce intermediaries include industry associations, community colleges, CBOs, Workforce Boards, and community service organizations. Industry Workforce Intermediaries usually specialize in a specific sector, but some may possess expertise that cuts across more than one market.
- **Build the knowledge and capacity of a range of stakeholders through ongoing statewide convening, meetings and outreach.** Creating communications and marketing materials was the most prevalent recommendation from the participants at Tennessee’s May 2018 Apprenticeship Summit. By providing stakeholders with general and customizable information about apprenticeship for target stakeholders—such as in an apprenticeship toolkit—Tennessee can build knowledge and increase demand for it.
- **Fund innovative public-private partnerships and projects that will incorporate key elements of and adhere to the rigorous standards of registered apprenticeship** which lead to sustainable and impactful apprenticeship programs and portable credentials.
- **Parallel to TN Promise, TN Reconnect, and TN Pathways, consider creating “TN Apprenticeship,” connected to the State’s Drive to 55 goal.** By developing and marketing apprenticeship through the same structures as other related education and workforce initiatives, and counting apprenticeship towards the State’s postsecondary completion goal, apprenticeship could gain traction through existing bodies of work.