



New Workforce in Tech via Apprenticeship

January 31, 2019

ApprentiCareers.org



The Solution



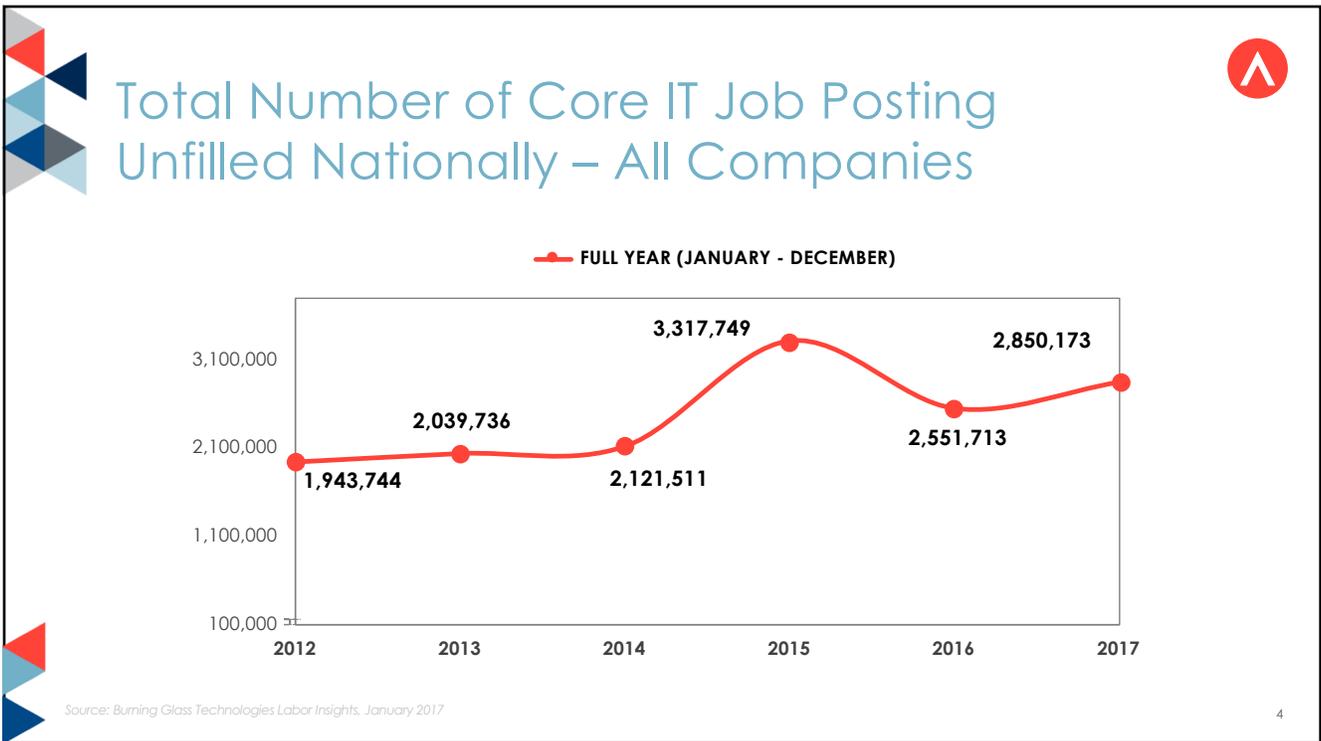
- Piloted by Washington Technology Industry Association, in partnership with the Washington State Labor and Industries Department & US DOL
- **Registered Apprenticeship** program for careers in technology
- Built by industry to fill its workforce gap and increase diversity of tech workforce (emphasis on women, minorities, veterans and disabled)
- Based in Seattle, operating nationally
- 501 c3 non-profit organization

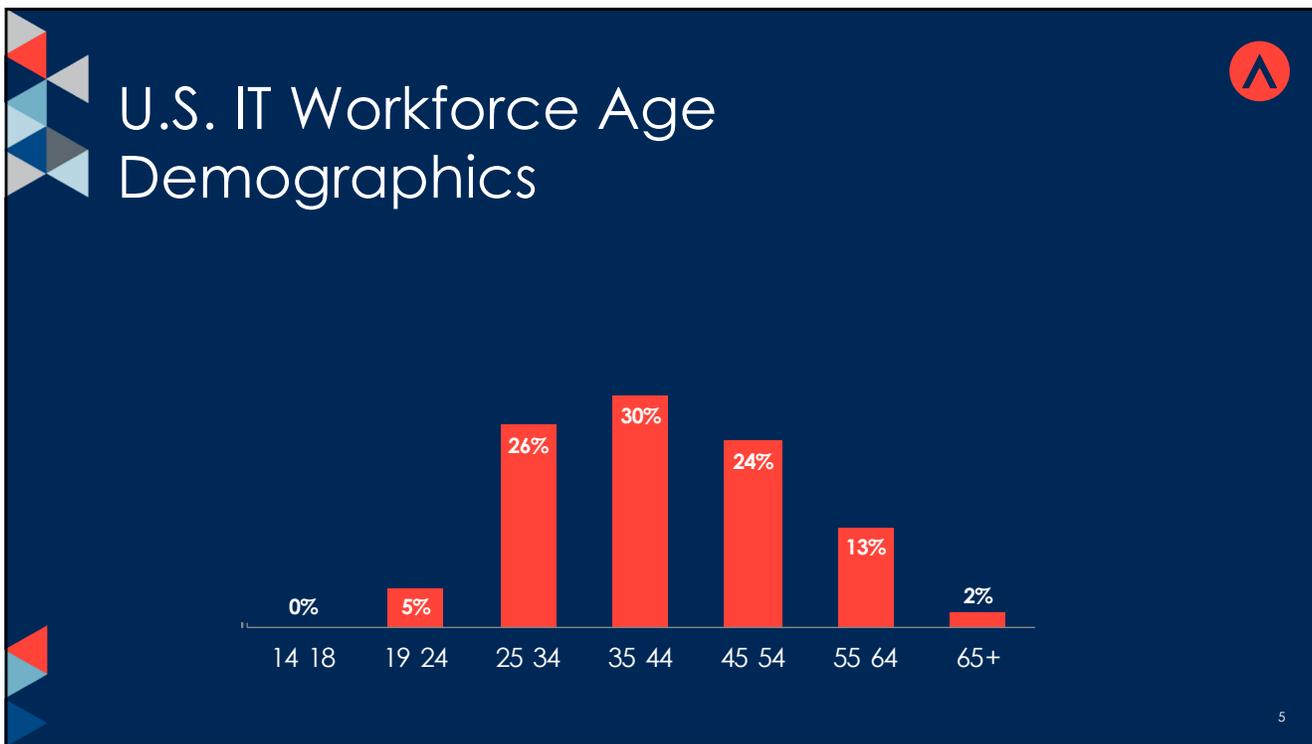
2



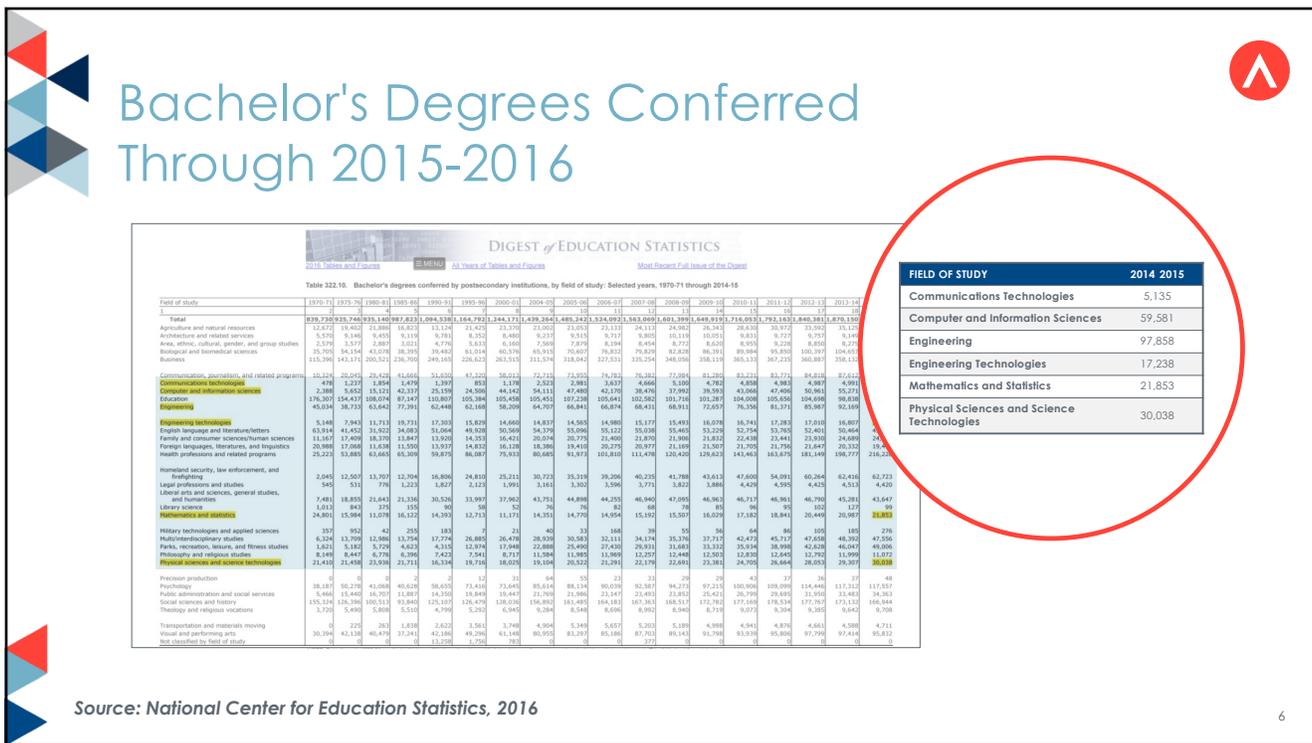
Why does the US need Apprenticeship?

3





5



Source: National Center for Education Statistics, 2016

6



How did we get here?

Funded by US Department of Labor and tech sector to develop a uniform apprenticeship program as sole IT Sector Lead

<p>Significant skills gap between accredited education and tech hiring needs</p>	<p>In the U.S., 1:20 job openings is a tech job</p> <p>1:7</p>	<p>Focus on jobs that can be filled by accelerated or work based training</p> <p>40/50/10</p>
--	--	---

7



Where do we start?

8

Current Occupations & Training

Cloud Operations Specialist 1 and 2
CompTIA Network+, Linux+, Python/SQL (and cloud service certification for level 2)

Network Security Administrator
Cisco CCNA Security

Web Developer
HTML/CSS, SQL, JavaScript, web app frameworks

Software Developer 1 and 2
HTML, JS, primary language stack (e.g., C#, Java, Python), computer science basics

Systems Administrator
Linux LPIC 1/2 or Microsoft Windows Server MCSA

Technical Sales Specialist
Content depends on employer need

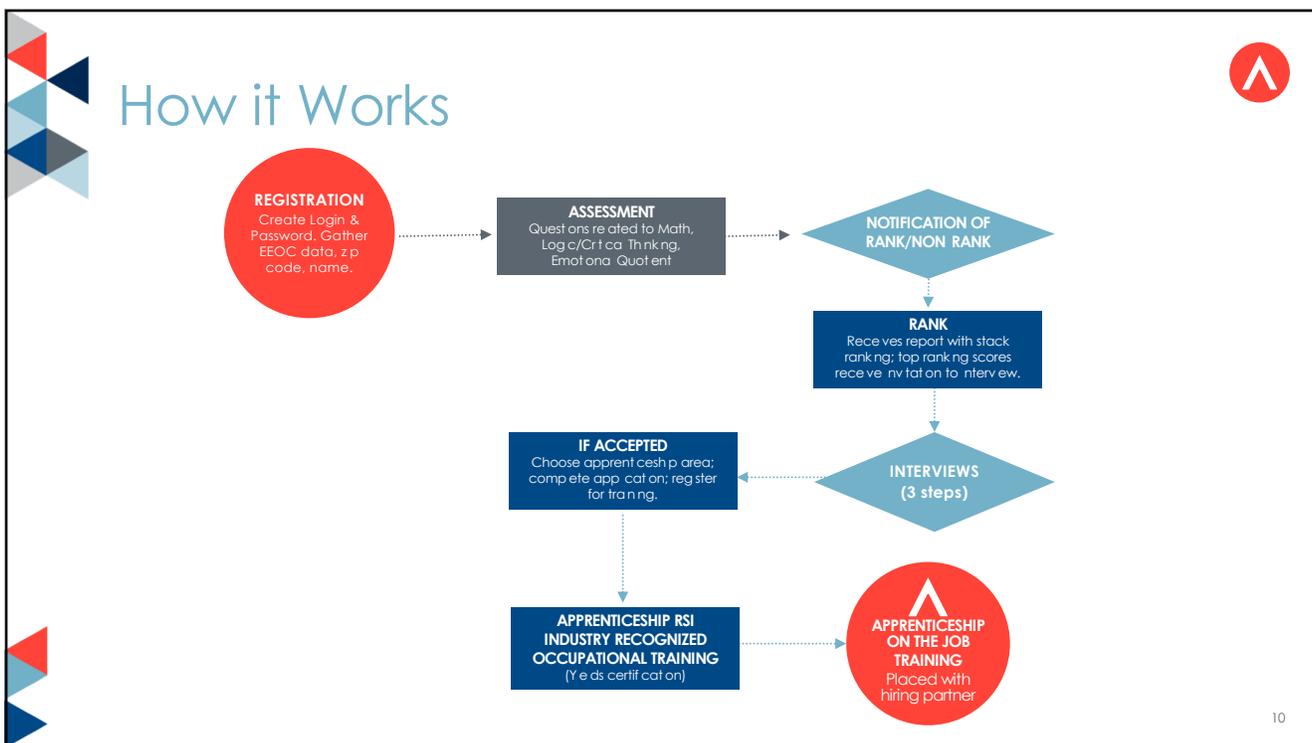
Data Center Technician
CompTIA A+, Network+, Linux+

IT Support Professional
A+, Net+ or Cisco CCENT, LPIC1 or Microsoft Windows MTA

IT Business Analyst
ITIL Foundations, SQL, Linux+, Tableau

DBA & PM Filed. Additional occupations are in development.
(Data Analyst, QA, Cyber Analyst & Dev Ops)
Apprenti can also file new occupations and build specialized programs.

9





Apprenticeship Process



- 1** **Diverse candidates recruitment, fill the pipeline with the desired population up front**
 - Top candidates eligible for screening and interviews with company
 - Assessment based on math, critical thinking, and emotional intelligence
- 2** **Company Selects Apprentice**
 - Two candidates are provided for every one apprenticeship opportunity
- 3** **Apprentice attends technical training before OJT**
 - Company helps inform curriculum content/best certification for the role
 - Training delivered immersively over 3-5 months depending on role
- 4** **Company provides one-year, paid & supervised, work-based learning opportunity (on-the-job training)**
 - Apprentice is either direct hired as employee or via contract
 - Apprentice is assigned a mentor or mentorship team by company
 - Goal is that company is training to retain post apprenticeship
- 5** **Company can convert apprentices to full-time staff as early as 6 months into OJT**

11



What is Apprenti Michigan's Role?



Simply put:
We are the intermediary, the link between Company, Talent, Training and Governance.

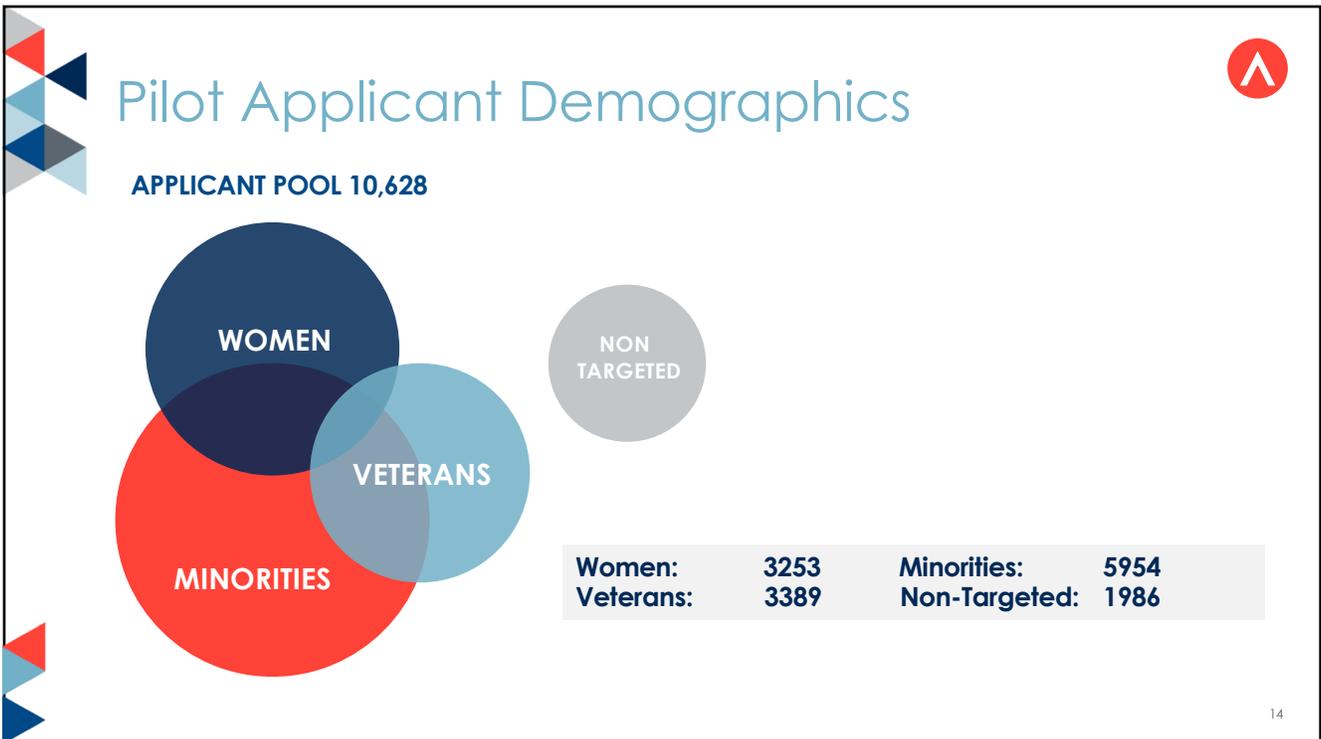
We serve as a trusted resource, consultant, bridge and buffer between the audiences engaged in creating a healthy talent development system.

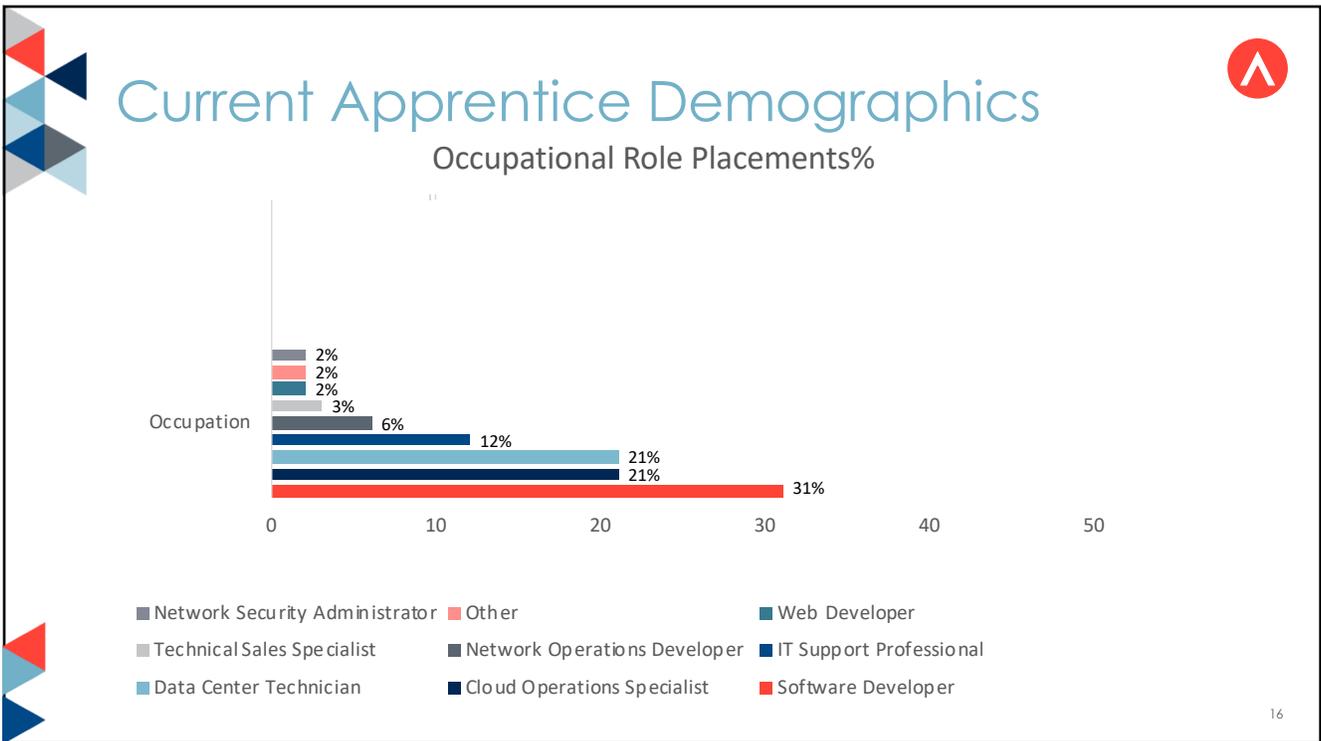
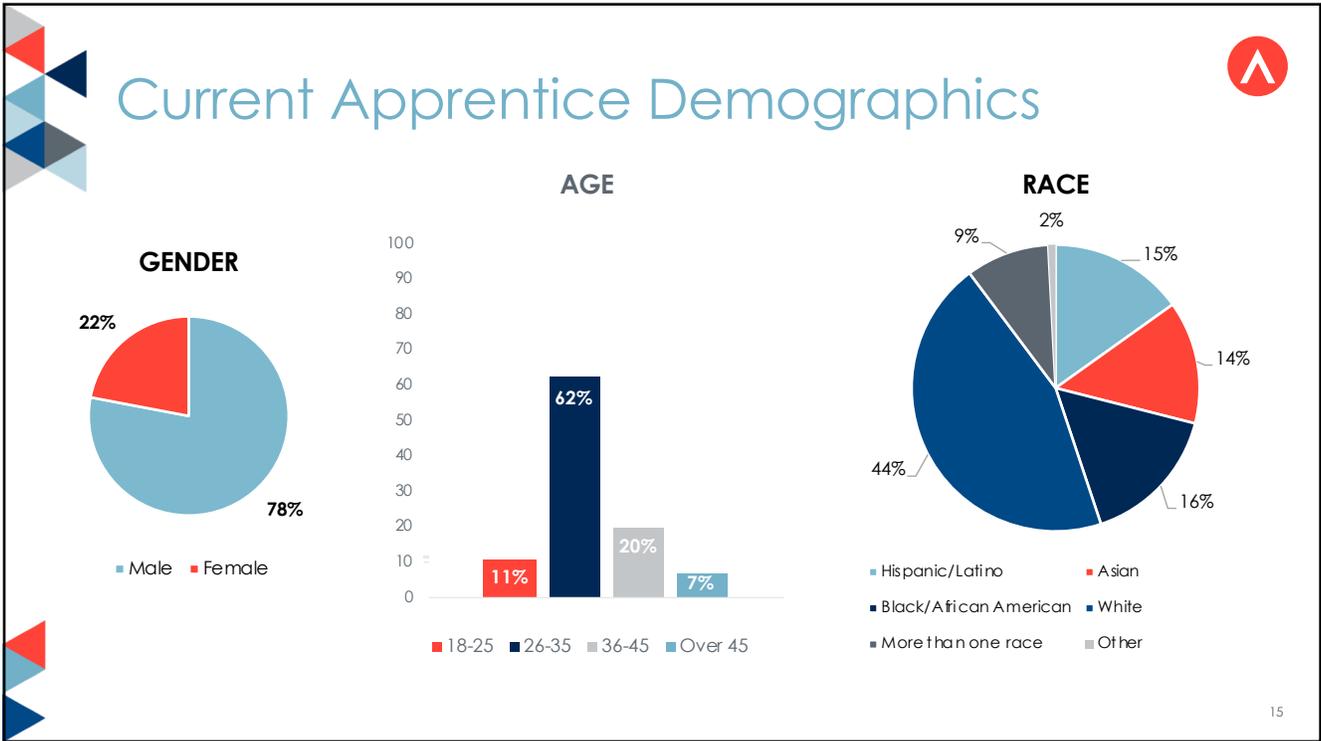
Core Focus:

- ▶ Consistency of the Standards
- ▶ Talent is defined by competency, not a degree
- ▶ Industry Driven Model, tech sector/roles and beyond

12

Apprenticeship Demographics



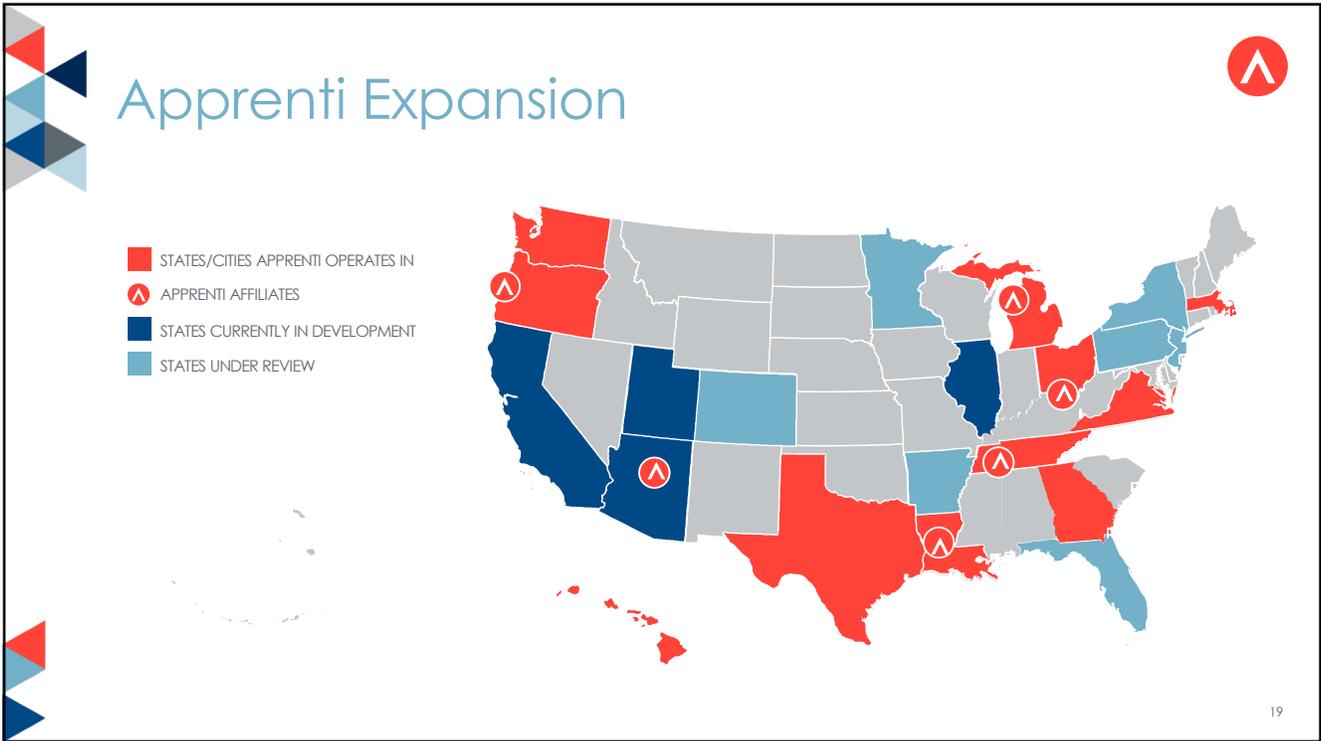


Current Apprentice Data



- ▶ Median Salary of Previously Employed: \$30,275
- ▶ Unemployed Prior to Apprenti: 22%
- ▶ Median Salary of All Prior to Apprenti: \$28,370
- ▶ Median Salary in Apprenticeship: \$51,000
- ▶ Median Retained Salary: \$77,000
- ▶ Early Retention 84%
- ▶ College Degrees 54%
- ▶ Median Apprentice Age: 32
- ▶ Youngest Placed: 18
- ▶ Eldest Placed: 63

Manage & Create Apprentices



Apprentice & Employer Commitments

FOR COMPANIES

- Commit to a 12 month apprenticeship term
- Apprentice can graduate after 6 months if company wishes
- Assign apprentice a mentor who has been in the same position at least one year. Supervision is at a 1:1 ratio.
- Apprentice work is in occupational scope
- Evaluate performance via 2, 5, and 10 month surveys
- Apprentices have a 400 hour (10 week) probationary period

FOR APPRENTICES

- 400 hour (10 week) probationary period
- Commit to 12 month apprenticeship must stay for term
- Complete 2, 5, and 10 month surveys
- Apprentices track their own hours with program to ensure completion
- Apprentices must complete competency requirements

20

What Companies Are Doing





- **Intermediary:** Apprenti
- **Labor type:** FTE – Direct Hire
- **Ramp up:** 63 apprentices in 2017, increased to 200 apprentices in 2018 in 7 roles; 300 in 2019 same roles
- **Roles:** Started with data center technician, and cloud operations specialist; added software developer, and other roles
- **Training:** 2-5 months of full-time training at Dallas Community College, Northern Virginia Community College, TLG Learning, and Code Fellows.

- **Intermediary:** Apprenti
- **Labor type:** Contractor
- **Ramp up:** 3 cohorts of 20 software developer apprentices within 14 months, scaling to more than 250 in 2019
- **Training:** 5 months of full-time training in Python, C# and HTML through Code Fellows, TLG, and Coding Dojo
- **Planning:** Evaluating paying stipend during training to assist with living expense.
- **Planning:** Process for retention and moving to staff headcount

21

Who hires tech apprentices?

WASHINGTON	ATLANTA DALLAS	CHICAGO VIRGINIA	NASHVILLE	OREGON
<ul style="list-style-type: none"> • Microsoft • Amazon • F5 • Concur • DocuSign • Silicon Mechanics • Avvo.Com • ComTech 	<ul style="list-style-type: none"> • Amazon 	SE MICHIGAN	<ul style="list-style-type: none"> • Change Healthcare • Asurion • Bank of New York Mellon • Eventbrite • Ingram Content • Lifeway • Teklink • InfoWorks • Brookdale • Kraft Technologies • UBS • 3 D Technology Group 	<ul style="list-style-type: none"> • CBT Nuggets • Palo Alto Software • GL Solutions • Concentric Sky • XS Media • City of Eugene • Five Talent
MASSACHUSETTS	OHIO		ARIZONA	
<ul style="list-style-type: none"> • Wayfair • Kronos • PTC • Cengage • Carbon Black 	<ul style="list-style-type: none"> • Huntington Bank • Kroger • Proctor & Gamble • Great American • UC Health • Cincinnati Bell • TriHealth • JPMorgan Chase 		<ul style="list-style-type: none"> • American Express • TerraVerde • Arizona Public Utilities 	
N. CALIFORNIA			LOUISIANA	
<ul style="list-style-type: none"> • Launch Q1 2019 			<ul style="list-style-type: none"> • BlueCross Blue Shield • General Informatics • Eatel & Trade Security 	

22



Benefits of Apprenticeship



FOR COMPANIES

- Protected wage differential while learning on the job
- Cost effective access to pre screened, diverse talent
- Competency assessment includes math, logic & critical thinking, emotional intelligence; lowers risk on company investment
- Technical training delivered prior to beginning 1 year of on the job training
- Apprenti manages talent pool and all state and federal compliance, reporting

FOR APPRENTICES

- Competency and time based pathway to strong IT career to accelerate career
- Living wage with benefits and subsidized training
- Company supported mentorship while on the job to ensure success
- Standardized, portable, skills & credentials



23




Thank You

For more information, please contact
jennifer@apprenticareers.org
 Or visit
www.ApprentiCareers.org



Michigan Contacts:

Workforce Intelligence Network
www.winintelligence.org

David Palmer, Senior Director
david.palmer@winintelligence.org

John Sullivan, Program Manager
John.Sullivan@winintelligence.org