Workforce Development
Apprenticeship and Training
Objectives and Outcomes

In today’s session we will discuss:

• What we know
• What apprenticeship expansion addresses
• Challenges and obstacles
• What we can and will continue to do
Current Economic Conditions

The construction industry back to peak spend, but employing ~ 1m fewer workers.
Construction Spending and Employment History and Forecast
(Excludes Self-employed Workers)

- **Construction Spending ($ Billions)**
- **Spending Forecast**
- **Spending Forecast + Infrastructure**
- **Total Private Employed (Thousands)**
- **Employment Demand Forecast**

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**Spending Forecast:**
- 4% growth in 2018 and 2019 (to $1.28 trillion and $1.33 trillion) and 3% growth in 2020 and 2021 (to $1.37 trillion and $1.42 trillion)

**Spending Forecast + Infrastructure:**
- +$50 billion infrastructure spend in 2019
- +$150 billion in 2020
- +$200 billion in 2021

- Every $1 billion in extra construction spending generates an average of at least 6,300 construction jobs

**Source:** History – U.S. Census Bureau and Bureau of Labor Statistics (BLS); Employment Demand and Forecast – Markstein Advisors

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**8.4 million workers needed in 2018 (7.8 million employed in 2017)**
Construction Employment

Apprenticeship – Market vs DOL Registered

CONSTRUCTION APPRENTICESHIP
- Registered Apprenticeship: 10%
- Market Driven Apprenticeship: 90%

REGISTERED APPRENTICESHIP
- Construction: 90%
- Other Industry Sectors: 10%

Competency (Market) Based Training
- Multi-skilled workforce
- “Just in time” skills taught and applied
- Mentoring OTJ
- On-line, classroom and lab learning
- Onboarding value based
- Tailored to individual
- Velocity to optimum ROI increases
- Direct ROI w/ Skills Mastery
- Earn while you learn

High

Low

ROI

30-90 Days

1-4 Years

Competency (Market) Based Training
Traditional Training ROI Curve
Construction Industry Fragmentation

Companies that employ 100 or fewer workers employ 71% of the workforce are key to creating and filling jobs.
In 2012, firms employing fewer than 100 employees accounted for two-thirds of the value of construction work (67%).

Markstein Advisors

Source: Census Bureau 2012 Economic Census of the United States
Construction Companies That Employ <100 Construction Professionals Account for 71% of Construction Employment

In 2015, firms employing fewer than 100 employees accounted for over two-thirds of construction employment (71%).

Percent of Construction Employment

<table>
<thead>
<tr>
<th>Construction Firm Size by Employment</th>
<th>Percent of Construction Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 4</td>
<td>11.61</td>
</tr>
<tr>
<td>5 to 9</td>
<td>11.74</td>
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<tr>
<td>10 to 19</td>
<td>14.16</td>
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<tr>
<td>20 to 49</td>
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<td>50 to 99</td>
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<td>6.51</td>
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<tr>
<td>500 to 999</td>
<td>3.89</td>
</tr>
<tr>
<td>1,000 and up</td>
<td>4.91</td>
</tr>
</tbody>
</table>

Source: Census Bureau 2015 County Business Patterns
Construction Companies that Employ <100 Construction Professionals Account for 99% of U.S. Construction Firms

In 2015, firms employing fewer than 100 employees accounted for 99% of all construction firms.

Source: Census Bureau 2015 County Business Patterns
Expanding Apprenticeships in America

Executive Order 13801
June 15, 2017
Executive Order 13801: Drivers

1. America’s education system and workforce development programs are in need of reform
2. We need to prioritize on preparing workers to fill existing and newly created jobs
3. Higher education is increasingly unaffordable
4. Colleges and universities fail to help students graduate with the skills necessary to secure high-paying jobs
5. These graduates have crushing student debt and no direct connection to jobs
Expanding Apprenticeship in America

**Task Force Mission:** identifying strategies and proposals to promote apprenticeships, especially in sectors where apprenticeship programs are insufficient.

1. Federal initiatives to promote apprenticeships
2. Administrative and legislative reforms that would facilitate the formation and success of apprenticeship programs
3. The most effective strategies for creating industry-recognized apprenticeships
4. The most effective strategies for amplifying and encouraging private-sector initiatives to promote apprenticeships
Task Force Subcommittees

1. Subcommittee on Education and Credentialing
2. Subcommittee on Attracting Business to Apprenticeship
3. Subcommittee on Access, Equity, and Career Awareness
4. Subcommittee on Administrative and Regulatory Strategies to Expand Apprenticeship
If there is a value proposition, it is...

• The system is being designed with the business community as the end user/customer, rather than simply a means to an end.

• The connection between workforce development and economic development has been widely recognized, and states are competing with one another to develop labor markets that are attractive to employers.
Create the Conditions

Lead the Change
What Can We Do

Lead the Change

• The business community must be a willing and active participant in these workforce conversations to ensure strategies are built in a way that delivers value to our future workforce, employers and taxpayers.

• Competition for talent stretches beyond four-year degree seekers; it includes high-skilled professions such as healthcare, manufacturing and cyber security. We need to recognize this and modify our message and tactics accordingly.
Advocate True Apprenticeship

• An arrangement that includes a paid-work component and an educational or instructional component, wherein an individual obtains relevant knowledge and skills.

• Apprenticeships stretch beyond government-registered programs. Apprenticeships are an all-encompassing idea of working and learning together.

The Task Force on Apprenticeship Expansion defined the earn-while-you-learn model as apprenticeship.
Rethinking Who and How

Career Path

Construction Professional Career Development

Future Skilled Craft Workforce Enter the Industry

Re-Entry and 2nd Chance Programs

Military Veterans

2nd Career

K-12 GED Equivalent

Community College Assoc Degrees

Higher Ed BS/Masters

Non-Degreed Rest of Population
Promote Achieving Career Dreams and Opportunities

Construction Professional Career Development

Career Path

Pre-Construction
- RIM Coordinator
- Designer
- Engineer
- BIM Manager
- VDC Director
- Estimator
- Scheduler
- Sr. Estimator
- Buyer
- Purchasing Agent
- Purchasing Manager

Prefab & Craft Professional
- Forman/Supervisor
- Line/System Supervisor
- Fab Shop Manager

Project Engineer
- Asst PM
- PM
- SPM
- Dir of Safety
- Project Exec

Construction
- Craft Professional
- Foreman/Supervisor
- Asst Super
- Safety Professional
- General Super

Business Leadership
- Business Unit Leadership
- Office Leadership
- Regional Leadership

Co-ordinator
- Marketing
- Sales
- Director of Marketing
- Director of Sales
- VP Business Development
- Recruiter
- Trainer
- Training & Development Mgr.
- Director of Learning
- Director of HR
- Director of Talent
- VP Health & Safety
- Chief Talent Officer

Pre-construction Manager
VP Pre-Construction

Operations Manager
VP Operations

COO
CEO/President
Owner

Future Skilled Craft Workforce Enter the Industry
What We Will Continue to Advocate

Federal Government Improvement Areas

1. Promoting Apprenticeships = Promote College

2. $ For Apprenticeship = $ For College

3. Simple Changes = More Apprenticeships Opportunities
Promoting Apprenticeship

Promote Apprenticeship = Promote College

To shift the paradigm of workforce development and apprenticeships in our nation, both industry and government must promote apprenticeships as passionately as four-year college degrees. Earn-and-learn programs, colleges and universities seek to prepare students to acquire and maintain a steady job, but apprenticeships teach in-demand, stackable skills that can lead to achieving the American dream.

States and school districts must measure performance outcomes by students who continue their education at four-year schools and earn-and-learn programs.
Help Wanted

• The industry isn’t promoted as a viable career choice
• Attrition is at an all-time high among craft professionals and supervisors
• The average age of the construction craft workforce is increasing three times faster than the average age of workers in all other U.S. industries
• The industry is seen as unsafe and hazardous
College is for Everyone- Fact or Fiction

Not Everyone Needs to Go to College!

• 65.9 percent of high school students go to college, and that number is declining

• 30 percent of college freshmen drop out after their first year

• 70 percent of Americans will study at a four-year college, but less than two-thirds will graduate with a degree

• 50 percent of college students never graduate

₁ NYTimes.com 2014, ₂ USNews.com, ₃ collegeatlas.org, ₄Thinkprogress.org
Funding Apprenticeship

$ For Apprenticeship = $ For College

Since their creation, 529 savings accounts have totaled $275 billion, yet students have never been able to use them for apprenticeships or job-training programs.

The federal government provides nearly $80 billion, excluding loans, to support students pursuing higher education each year, yet students cannot use a dime of that money to help with the cost of apprenticeships or short-term job training.

To incentivize families to encourage their loved ones to explore apprenticeships, college savings plans should cover DOL-registered and industry-recognized apprenticeship programs. To provide a high return on investment to the government and the economy, Pell grant eligibility should be expanded to include more compact, skills-focused instruction that safely educates people inside the classroom and outside on the job.
Access to Apprenticeship For All

Simple Changes = More Apprenticeship Opportunities

To continue the work of the DOL task force, government and industry should work synergistically to build new apprenticeships and make existing programs more efficient. According to the task force’s final recommendations, the U.S. Department of Labor should vet concerns about the existing registered apprenticeship system and take action to make improvements. ABC recommends the following simple steps to improve the registered apprenticeship system in the construction industry:

**REINSTATE NATIONAL DEMONSTRATION PROGRAM FOR RATIO OF APPRENTICES TO JOURNEYPEOPLE.** Under Circular 2017-1, the number of experienced journey-level craft workers required to oversee apprentices far exceeds industry best practices and thereby significantly limits the number of students that can gain on-the-job experience. By reinstating this program, DOL will put in place a safe ratio that allows for more apprentices to be trained and begin building their careers while providing certain programs with the flexibility to participate in the previously approved National Demonstration Program for Ratio of Apprentices to Journeypeople.

**STREAMLINE APPROVAL PROCESS TO GET MORE PROGRAMS UP AND RUNNING.** In many states, the process to register a government apprenticeship program can take up to two years, and in California it can take five years to reach approval. In an instance where someone is using an industry-recognized or established curriculum (e.g., NCCER, IEC Curriculum, NABTU MC3), this process should take no longer than 90 days.

**IMPROVE STATE-BY-STATE RECIPROCITY REGULATIONS.** Unnecessary and biased barriers that prevent apprentices from working over some state lines prevent the growth of apprenticeships by limiting the hours apprentices can spend on job sites and pushes companies away from participating in government apprenticeship programs.
Industry Driven Apprenticeship Education

- High ROI Curve
- 30-90 Days
- 1-4 Years

Competency-based Training
- Multi-skilled workforce
- “Just-in-time” skills taught and applied
- Mentoring OTJ
- On-line, classroom and lab learning
- Onboarding value based
- Tailored to the individual
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- Direct ROI w/skills mastery
- Earn while you learn

On-Boarding
Construction Professional Career Development
Career Path

Future Skilled Craft Workforce Enter the Industry
Summary

Lead the Change

• Promote apprenticeships and pre-apprenticeships for America’s high school students and Job Corps participants, for people who are currently or formerly incarcerated, for those not currently attending high school or an accredited post-secondary educational institution, and for members of America’s armed services.

• Support the community colleges and two-year and four-year institutions of higher education to incorporate apprenticeship programs in their courses of studies.
What We Will Continue to Advocate

Federal Government Improvement Areas

1. Promoting Apprenticeship = College Education

2. Funding Apprenticeship = College/Higher Education

3. Access To Apprenticeship For All
Thank You

Workforce Development: Apprenticeship and Training