AMERICAN WIRE PRODUCERS ASSOCIATION

Gardner Carrick
Vice President
The Manufacturing Institute
National Association of Manufacturers
A Resurgence in U.S. Manufacturing!
Manufacturing Jobs

The graph shows the increase in manufacturing jobs from January 2010 to January 2018. The number of jobs has steadily increased from approximately 11,500 to 12,500 during this period.
CHINA AVERAGE YEARLY WAGES IN MANUFACTURING

- 2008: 24,192
- 2010: 26,599
- 2012: 36,665
- 2014: 51,369
- 2016: 59,470
World LNG Estimated Landed Prices: Nov-17

- Cove Point: $5.01
- CanaPort: $7.71
- Lake Charles: $2.96
- Belgium: $7.29
- Spain: $8.61
- India: $9.55
- Korea: $9.55
- China: $9.52
- Bahia Blanca: $9.35
Honeywell International Plans To Repatriate $7 Billion Back To U.S. Due To Tax Reform

Kansas-Based Manufacturer Lawrence Paper Company Planning $5 Million Expansion Due To Tax Reform

Lockheed Martin Announces Construction Of New $50 Million Facility In Florida

ExxonMobil CEO Announces $50 Billion Investment In U.S. Due To Tax Reform Law

Ford Investing $25 Million To Boost SUV Production By 25% At Kentucky Manufacturing Facility

BP CEO On Tax Reform Impact: ‘There Is No Doubt We Will Increase Investments In U.S.’

Pfizer Announces $5 Billion Investment In U.S. Manufacturing and Capital Projects Due To Tax Reform

UPS Is Investing $12 Billion In The United States Due To The Tax Reform Law

Amgen Plans To Build New $300 Million Biologics Manufacturing Plant Due To Tax Reform
Primary Current Business Challenges

- Attracting and retaining a quality workforce: 72.9%
- Rising health care/insurance costs: 72.3%
- Unfavorable business climate (e.g., taxes,...): 48.0%
- Rising raw material costs for our products: 42.4%
- Weaker domestic economy and sales for...: 19.8%
- Strengthened U.S. dollar relative to other...: 16.2%
- Weaker global growth and slower export...: 8.8%
- Challenges with access to capital: 4.2%
Job Openings in Manufacturing
82% of manufacturers can’t find skilled workers

2 Million are expected to go unfilled due to the skill gap

2015 - 2025
90% of Americans believe manufacturing is very important to economic prosperity.

If given an opportunity to create 1,000 new jobs in their community, manufacturing tops the list.

1. Manufacturing Facility
2. Technology development center
3. Energy production facility
4. Healthcare facility
5. Retail center
6. Communications hub
7. Financial institution

Source: 2015 Manufacturing Institute and Deloitte Public Perception of Manufacturing Study
But Not Personally

30% of American parents would encourage their children to pursue a career in manufacturing.

We are essentially saying…

“Manufacturing is important, just not for my kids.”

Source: 2015 Manufacturing Institute and Deloitte Public Perception of Manufacturing Study
## (Mis)Perceptions Cost Us Workers

<table>
<thead>
<tr>
<th>Overall Respondents</th>
<th>Generation Y (ages 19-33) Respondents</th>
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<tbody>
<tr>
<td><strong>Industry</strong></td>
<td><strong>Industry</strong></td>
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<tr>
<td>Technology</td>
<td>Technology</td>
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<tr>
<td>Healthcare</td>
<td>Healthcare</td>
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<tr>
<td>Financial services</td>
<td>Financial services</td>
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<tr>
<td>Energy</td>
<td>Retail</td>
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<tr>
<td>Manufacturing</td>
<td>Communications</td>
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<td>Energy</td>
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<tr>
<td>Retail</td>
<td>Manufacturing</td>
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</tbody>
</table>
MANUFACTURING WORKFORCE – SOLUTIONS
What Influences Careers?

Source: Attracting the Next Generation Workforce, 2015
FAMILIARITY = 2X AS LIKELY

Source: 2015 Manufacturing Institute and Deloitte Public Perception of Manufacturing Study
There are 2,763 MFG DAY events planned in the United States in 2017.
Dream It. Do It. PA Video Contests (2013)

WHAT'S SO COOL ABOUT MANUFACTURING?
## PA DIDI – IMPACT

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<tbody>
<tr>
<td>Electromechanical/Mechatronics Technology</td>
<td>41</td>
<td>30</td>
<td>30</td>
<td>31</td>
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<tr>
<td>Electronics Technology/Nanofabrication</td>
<td>47</td>
<td>44</td>
<td>38</td>
<td>21</td>
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<tr>
<td>Precision Machine Tool Technology</td>
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<td>71</td>
<td>75</td>
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<td>Welding Technology</td>
<td>69</td>
<td>60</td>
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<tr>
<td>Drafting/Computer Aided Design</td>
<td>49</td>
<td>46</td>
<td>46</td>
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<tr>
<td>Pre-Engineering and Engineering Technology</td>
<td>41</td>
<td>13</td>
<td>16</td>
<td>9</td>
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<tr>
<td>Supply Chain Management &amp; Logistics Technology</td>
<td>84</td>
<td>58</td>
<td>52</td>
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<tr>
<td>Grand Total</td>
<td>410</td>
<td>322</td>
<td>303</td>
<td>254</td>
</tr>
</tbody>
</table>
Heroes Make America

- Created new on-base transition training program
- 10-week program
- Combines technical skill & soft skills
- Partnering with companies
- Pilot in Kansas with ability to replicate
STEP Ahead

Goals:
1. Honor leadership
2. Celebrate careers
3. Develop a more diverse workforce
4. Ensure new opportunities
5. Inspire the next generation
6. Showcase impact

- The Institute has honored **672 women** in manufacturing.
- STEP Ahead Award winners have impacted more than **300,000 individuals**, from peers in the industry to school-aged children.
STEP Forward

• STEP Forward is part of the Institute’s larger STEP Ahead initiative
• Brings this national initiative to your community, offering companies a unique opportunity to strengthen their diversity and retention strategies.

2017 RECAP:
• Davenport, IA
• Hampton, VA
• Cleveland, OH
• Bay Area, CA
• Novi, MI
• Omaha, NE
• Twin Cities, MN
• Google Hangout
Education Programs

- Apprenticeships
- Internships
- School Partnerships
- Certifications
Elements of the NAM Apprenticeship Model

• Quality Assurance
• Verification / Audit
• Technical Assistance
• Enrollment

• Recognition
• Best Practices
• Incentives
• Avoid Conflict of Interest
Legislation

• Perkins – Career & Technical Education
• PROSPER – Higher Education & Apprenticeships
• Infrastructure – Job Training
Contact Information

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