

GROWING THE MANUFACTURING TALENT PIPELINE

Todd Boppell

COO, National Association of Manufacturers

Board Member, Manufacturing Institute



Manufacturing Does Matter

83% of Americans believe manufacturing is **very important to economic prosperity**

Americans support manufacturing job creation.



Ranked #1
by **parents of school age children, Gen X, and those familiar** with the industry

76%

of Americans believe the US should further invest in manufacturing.

Americans have a positive perception about **future** manufacturing jobs...

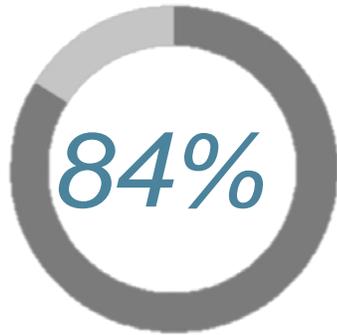
88% Require technical skills and expertise

81% cleaner and safer

77% require less manual labor

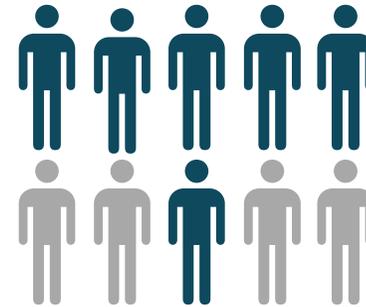
77% more innovating

Filling Jobs Is Difficult...



of executives surveyed agree there is a **talent shortage in U.S. manufacturing**

SIX out of TEN
open skilled production positions
are unfilled due to talent shortage



even when **80%** of manufacturers are **willing to pay more than the market rates**

...And It's Going to Get More Difficult

2.7M baby boomer retirements

+ 700K manufacturing jobs expected from economic expansion

3.4M manufacturing jobs are likely to be needed by 2025

– 1.4M jobs are likely to be filled

2M jobs unfilled due to the skills gap

Earn & Learn

- June 2017 Executive Order expanding apprenticeships in America
- NAM/MI creating a framework for industry-recognized apprenticeships with U.S. Chamber of Commerce & Business Roundtable
- NAM CEO serving on the Task Force on Apprenticeship
- Company/Education partnerships will be required to meet process and performance standards to earn industry recognition
- Exploring company incentives and funding realities to design a more sustainable system

Manufacturing Day



October 5, 2018

84%

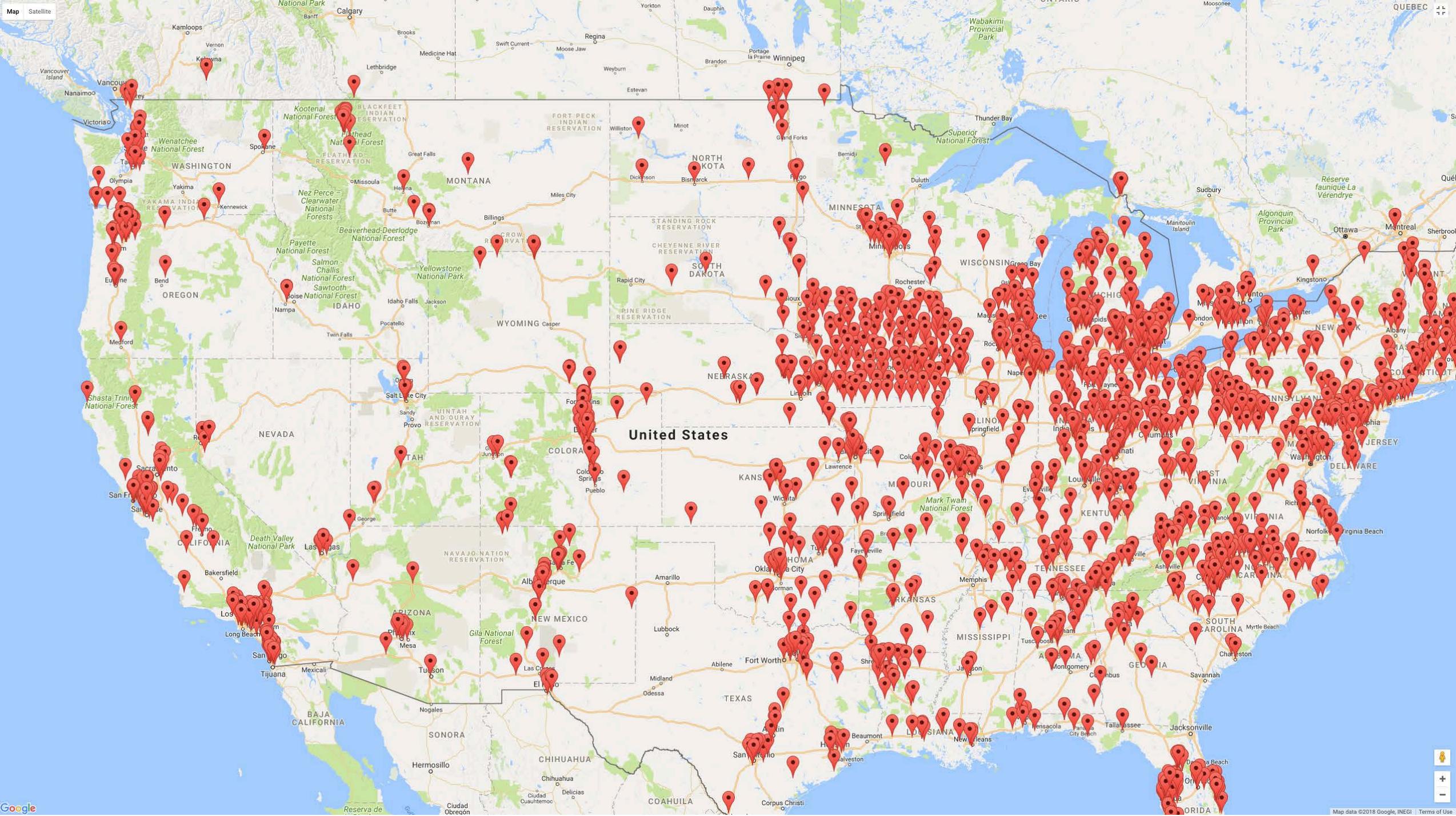
More convinced that manufacturing provides careers that are interesting & rewarding.

89%

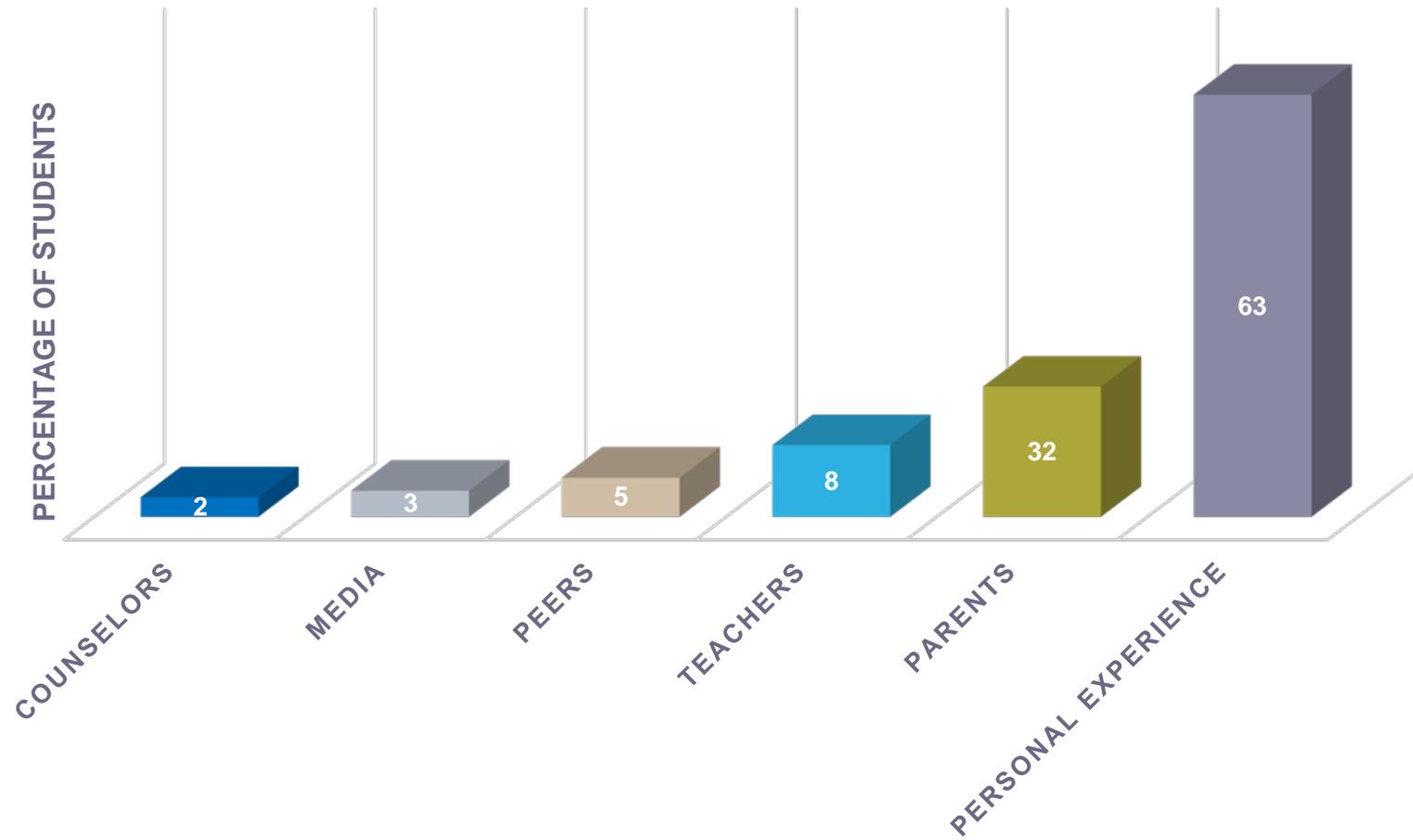
More aware of manufacturing jobs in their communities.

64%

More motivated to pursue careers in manufacturing.



What Influences Careers?



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

**STEP
FORWARD**



Advanced Manufacturing – The Numbers

- > **66%** of U.S. manufacturers are using 3D printing in some way.
- **94%** of manufacturers believe it is critical that US manufacturers adopt an Internet of Things (IoT) strategy in their operations
- Robots are not stealing manufacturing jobs. Of employers surveyed:
 - **37%** believe that the adoption of advanced manufacturing technologies will result in their hiring additional employees.
 - **45%** said it will have no impact on hiring.
- Augmented Reality (AR) could be a critical “bridge” technology
- Just **9%** of manufacturers have adopted some type of semi-autonomous or autonomous mobility within their operations, with another **10%** expecting to do so in the next three years, driven by:
 - cost advantage (86%), customer/supply expectations (47%), increased safety (38%).

Q&A

Contact: institute@nam.org