



**IEDC 2017 Federal Economic
Development Forum**

A New American Manufacturing

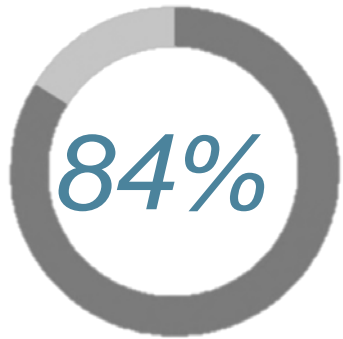
The Manufacturing Institute

The Authority on the Attraction, Qualification, and Development of World-Class Manufacturing Talent

1. Educate the public including parents, influencers, and students on manufacturing and manufacturing careers
2. Improve the quality of manufacturing education and candidates entering into manufacturing careers
3. Engage, develop, and retain key members of the workforce
4. Support regional workforce efforts and document best practices



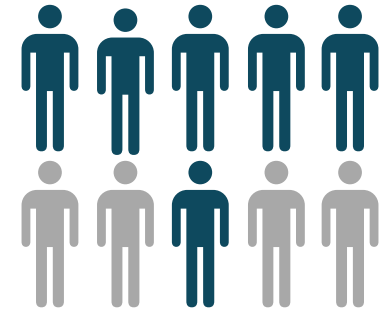
Filling Manufacturing Jobs Is Difficult...



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

Over the next decade nearly 3 ½ Million manufacturing jobs likely need filled

For every \$1 invested in manufacturing, another \$1.32 in additional value is created in other sectors¹

2.7 Million

baby boomer retirements

700K

manufacturing jobs from economic expansion

Only 1.4 Million jobs are likely to be filled

leading to 2 Million manufacturing jobs unfilled due to the skills gap

3.4 Million

manufacturing jobs needed over the next decade

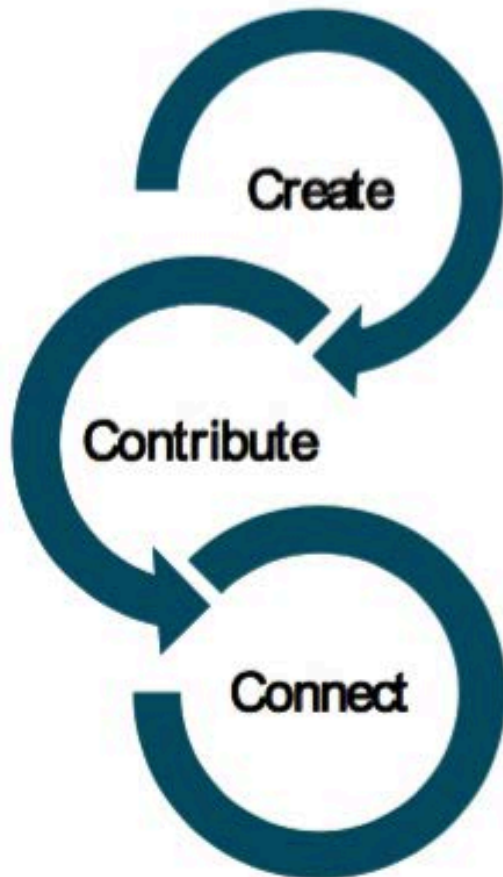
The skills gap is expected to result in **2,000,000** of those jobs being **unfilled**

In 2011, **600K** jobs were unfilled due to the skills gap



1. MAKE CONNECTIONS TO VALUED CAPABILITIES

...AND THE CAPABILITIES PARENTS AND TEACHERS SEE THEIR KIDS VALUING TOO



Hobbies and interests – gaming, electronics
"Hands on" experience of STEM
Proof points on 3-D printing robotics
Students drawn to self expression

Making an impact
Self-reliant nation
Better world

Teamwork, collaboration, networks
Speed, immediacy
Linking diverse disciplines

Silicon Valley ethos and values inform worldview

2. ILLUSTRATE ROLES AND CAREERS

AT PRESENT, PARENTS AND TEACHERS CANNOT VISUALIZE BEYOND ASSEMBLY LINE

Type

- Show the different types of roles – design, tech, management, etc.
- What goes on “behind the scenes”

Range

- Healthcare is liked as can see roles from entry level to surgeons (raised esp. by teachers)
- Show multiple options

Quality

- Salaries and benefits
- Training
- Advancement
- Anxiety about being stuck to “one plant”

Manufacturing DaySM 2016 at a glance

Developing positive perception of manufacturing with students

88%

Activities/tours
were interesting
and engaging

89%

More aware of
manufacturing jobs
in my community

84%

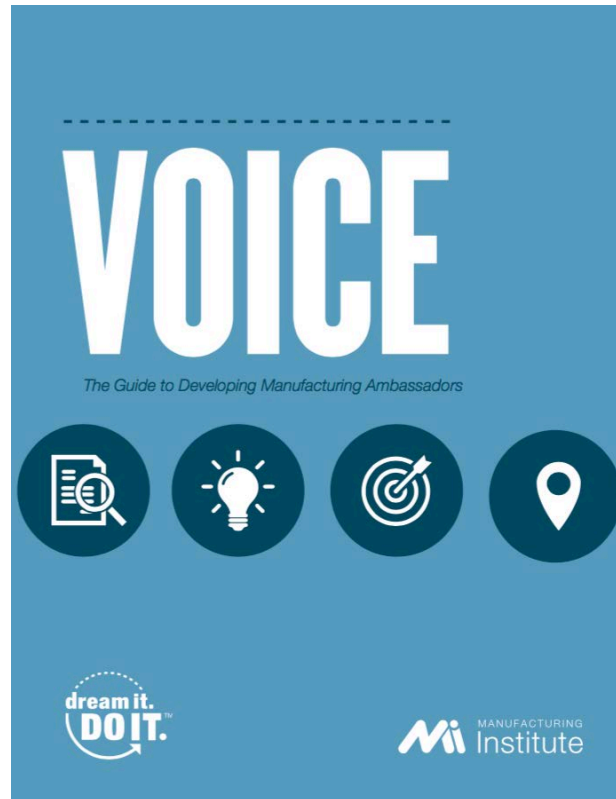
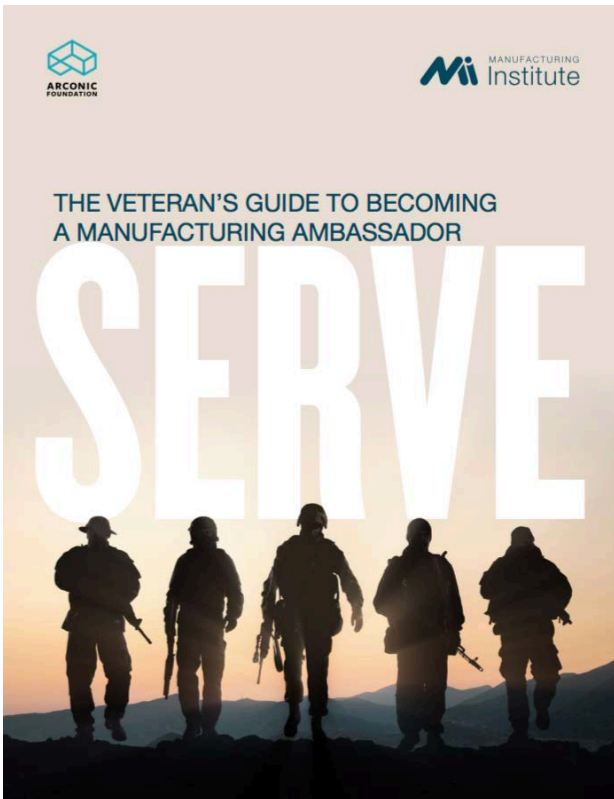
More convinced
manufacturing
provides careers
that are interesting
and rewarding

64%

More motivated
to pursue a career
in manufacturing



Inspiring the Next Generation



STEP Ahead & STEP Forward

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 more than **600 women** in manufacturing and captured more than **400 pledges** from women committing to promote manufacturing careers in their community.

STEP FORWARD

Hampton, VA - June 15

Sponsored by Arconic Foundation

Cleveland, OH - Sept. 7

Sponsored by Arconic Foundation

Bay Area, CA - Oct. 24

BWG & ALOM

Twin Cities, MN - Dec. 8

Sponsored by 3M

Google+ Hangout

April 2017: Women in Manufacturing Impact Report

Workforce Solutions Website

Are you finding it difficult to fill critical manufacturing jobs—and to retain the quality workers you recruit? Are you prepared to fill the pipeline to replace a growing number of retirees?

Manufacturers across the country are facing similar workforce issues—from recruitment and training, to retention and diversity. You are not alone! In fact, companies of all sizes have solutions that have proven to work.

This Workforce Solutions Generator is a free resource by and for manufacturers. With just 5 questions, you'll unlock how businesses similar to your own have tackled common HR challenges—and solved them in uncommon ways.

Hint: You can take the questionnaire as many times as you'd like. So if you have another challenge, come back to this page and try again.

START QUIZ

A PROJECT BY
 MANUFACTURING
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1212 Street St. NW
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SPONSORED BY
 Lumina
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 NATIONAL ASSOCIATION OF
Manufacturers

Target Launch: April 2017
Content: 60 Best Practices

Method: Documentation through leveraging community college partnerships; NAM membership



Education & Certification Labor Market Outcomes

Project Overview

Develop a public-private national education data infrastructure to identify, analyze, and report outcomes from education programs

- Expand education student records to include non-Title IV offerings
- Report and match third-party credential data with education student records
- Match combined student records with employment and earnings data to determine labor market outcomes
- Display outcomes at the program level on a publicly available website
- Provide access to matched records for researchers, economic development agencies, and government entities to conduct research and analysis



Project Partners

- National Association of Manufacturers
- The Manufacturing Institute
- National Student Clearinghouse
- U.S. Census Bureau
- Key Manufacturing Certification Providers (MSSC, NIMS, AWS)
- USA Funds & Lumina Foundation



Project Benefits

- Students – Reliable, transparent, data on meaningful program outcomes
- Schools – Data needed for reporting requirements & informing program improvement or expansion
- Employers – Identification of high-performing institutions and sources of quality candidates to improve hiring and training decision making
- Certification Providers – Expanded access to employment data to measure the ROI of certification attainment
- Policymakers – Access to data on performance outcomes of education and job training programs to evaluate effectiveness of government spending
- Economic Developers – Data on talent sourcing for attracting new business and expansion of existing companies

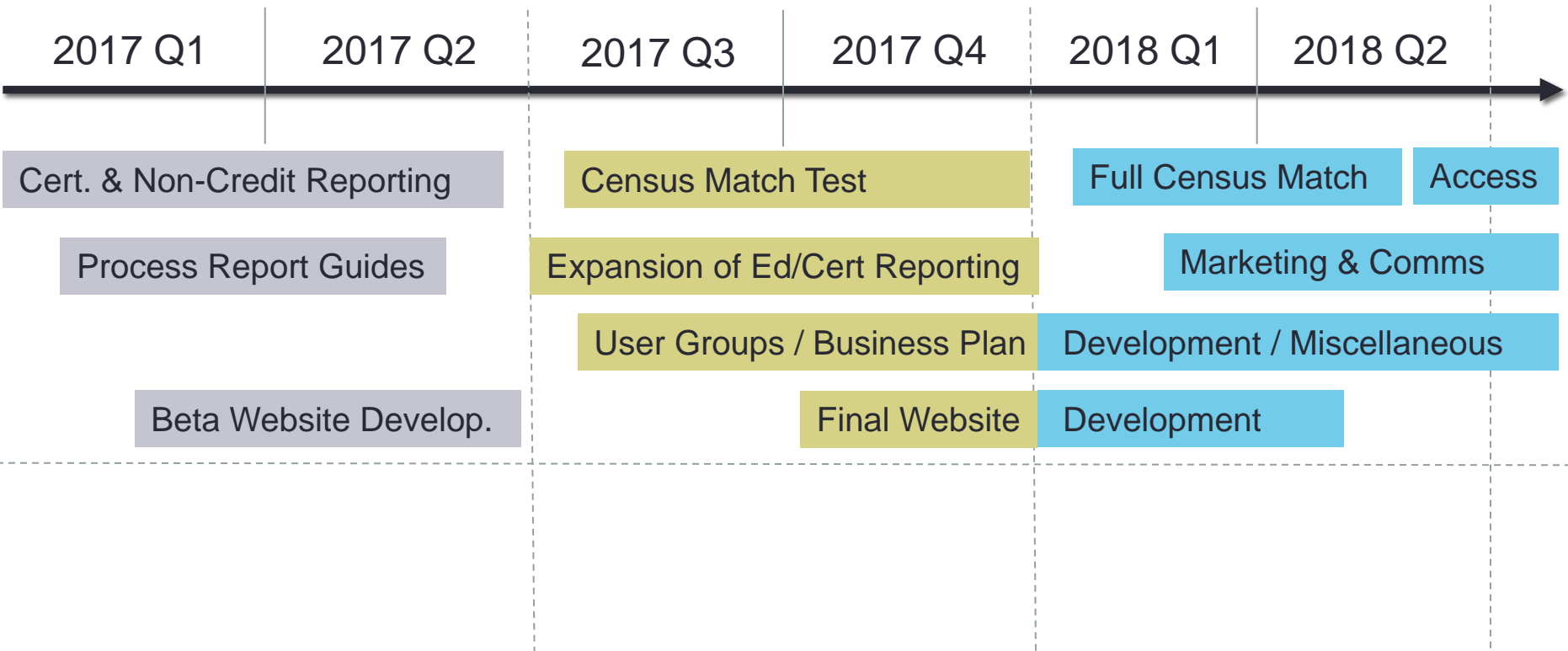


Possible Outcome Measures

- Employment rate [by industry]
- Average earnings [Starting, 3 year, 5 year]
- Job retention rate [1 year, 3 year]
- Certification attainment rate
- Impact of Certifications on employment & earnings
- Length of time to certification/completion/job



Project Timeline – Milestones



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