



**The Manufacturers Association**

**Testimony Submitted to:**

**Joint Legislative Budget Committee  
Workforce Development**

**Presented By**

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## MANUFACTURERS ASSOCIATION OF CENTRAL NEW YORK

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Thank you for the opportunity to appear before you today. My name is Bruce Hamm and I serve as Director of Business Engagement for the Manufacturers Association of Central New York (MACNY), an organization representing over 300 employers in 26 counties, as well as a representative of the Manufacturers Alliance of New York (the Alliance), representing six regional manufacturing associations and over 2,000 industrial companies and businesses covering all of New York State. MACNY and the Alliance are now engaged in actively creating registered apprenticeship training programs that will increase the number of mid-skill level technician workers in advanced manufacturing throughout our region and state. MACNY would like to thank you for your support of the Manufacturers Intermediary Apprenticeship Program in last year's budget and ask your continued support today.

In addition to launching our successful pilot, MACNY is involved as a subcontractor in a Federal Department of Labor Contract with Jobs for the Future and a subcontractor in the Federal America's Promise Grant with Monroe Community College. Both efforts support the expansion of registered apprenticeship training in the state and nationally. We are also a recent business partner in the statewide Trade Adjustment Assistance Community College and Career Training (TAACCCT) grant in advanced manufacturing, a business partner in two Pathways in Technology Early College High School (P-TECH) programs in Syracuse and Auburn, an advocate for alternative Career and Technical Education (CTE) pathways for high school students, and a partner in the Central New York STEM Hub, part of the Empire State STEM Learning Network. We have also affiliated with Partners for Education & Business to help with career awareness activities.

### Workforce Needs Continue

- Manufacturing is and will continue to be a vital industry for New York. The 15,441 firms in New York accounted for 450,500 jobs in 2015 and manufacturing remains one of the highest paying industries in the state, with employees making an average annual compensation of over \$64,776. Every dollar spent in manufacturing adds \$1.37 to the U.S. economy, and every 1 job in a manufacturing facility creates an additional 2.5 jobs in other sectors.
- Nationally, the Manufacturing Institute and Deloitte continued their Skills Gap studies (1) that found:
  - *Through 2025, nearly three and a half million manufacturing jobs likely need to be filled, and if we do nothing, 2 million of those jobs could go unfilled.*
  - *An estimated 2.7 million jobs are likely to be needed as a result of retirements of the existing workforce while 700,000 jobs are likely to be created due to natural business growth.*
  - *In addition to retirements and economic expansion, other factors contribute to the shortage of skilled workforce, including loss of embedded knowledge due to movement of experienced workers, a negative image of the manufacturing industry*

*among younger generations, lack of STEM (science, technology, engineering and mathematics) skills among workers, and a gradual decline of technical education programs in public high schools.*

- *The Public Perception of Manufacturing series conducted over the past seven years by The Manufacturing Institute and Deloitte consistently reveals that while Americans consider manufacturing among one of the most important domestic industries for maintaining a strong national economy, they rank it low as a career choice for their children.*
- In New York, over the last 5-10 years' workforce development has continued to increase in importance as the retirements that were put on hold during the recession are now looming large for manufacturers. The national problem with the perception of manufacturing, and the lack of interest in manufacturing as a career among young people, is also very real here in New York. Our manufacturers continue to report difficulties with finding skilled workers and they have responded enthusiastically to Central New York's pilot program in apprenticeship.

Registered Apprenticeship in the last couple of years has received considerable federal support, however only two small federal grants to expand apprenticeship were awarded in New York. For that reason, MACNY recommends the continuation and expansion of the NYS Manufacturers Intermediary Apprenticeship Program into three additional regions of the State: the Capital District, the Finger Lakes, and the Lower Hudson Region.

The average age of a highly skilled worker in manufacturing is 56, and replacing them before they retire is critical to retaining the needed skills sets in the workforce. The majority of New York's manufacturing workforce is employed by small and medium sized businesses. These manufacturers do not have the personnel or the resources to adequately train either new or incumbent workers. This program targets entry-level incumbent workers to advance them into more skilled positions within the company and allows smaller companies the ability to participate with others to achieve economies of scale.

NYSMIAP is an employer-led public-private pilot program for registered apprentices in manufacturing occupations. The NYSMIAP is a unique business-lead approach targeted at raising the skill levels of incumbent manufacturing workers and creating distinctive career pathways, while filling a crucial need within the industry. With our pilot program in CNY barely just begun, we already have over 30 companies actively participating in establishing apprenticeships and many more that will come on-board in the coming year.

Modern apprenticeship has two basic elements. The first, On-the-Job Training (OJT), consists of a "master," or "journey-level," craft person capable and willing to share their experience with a "novice," or "apprentice," in a hands-on manner. The second, Related Instruction (RI), consists of learning more theoretical or knowledge-based aspects of a craft. In our pilot program we have already identified the five occupational groups of CNC Machinist, Electronics Technician, Maintenance Mechanic, Toolmaker and Welder as high demand areas to begin training. We have, with our companies and our national partner ToolingU, constructed all of the OJT outlines for the five trades. With ToolingU and our SUNY Community College partners we are moving to identify all of the related instruction that will be needed for the apprentices. All of the apprentice programs are four years in length.

For the pilot, MACNY worked with NYSDOL and obtained approval to function as a single "program sponsor" acting on behalf of small and medium sized manufacturers. This has dramatically reduced the administrative burden on CNY manufacturers and greatly streamlined apprenticeship program registration. This program also allows NYSDOL to have a single point of contact for multiple employers, thus reducing their administrative burden as well. The program has allowed small and medium sized manufacturers to offer registered apprenticeship programs through MACNY and eliminated the need for each manufacturer to go through the registration process on its own. The employers in CNY have responded extremely positively and we want to make this available in other regions in the State as well.

The labor market data continues to show the need for a greater supply of skilled workers throughout the State; and advanced manufacturers have shown a strong interest in developing registered apprenticeship programs as a practical method of meeting this need and building a strong pipeline of future workers. Employers have responded very well to shouldering the major portion of the OJT responsibilities along with contributing at least half of the related instruction costs.

As noted in the beginning of this document, MACNY has been able to leverage federal funding and align the apprenticeship program with other apprenticeship efforts in New York State. In addition to the national contract with Jobs for the Future and the national grant with Monroe Community College we are also working with the two American Apprenticeship Initiative programs in NYS. We are also collaborating with a broad range of partners including NYSDOL, SUNY and its community colleges, Empire State Development and the New York Manufacturing Extension Partnership (NY MEP), local Workforce Investment Boards, the Workforce Development Institute (WDI), the Business Council of New York State and others to further expand registered apprentice programs in New York State.

MACNY proposes continuing and expanding the New York State Manufacturers Intermediary Apprenticeship Program in Central New York and expanding it into the Capital District, the Finger Lakes, and the Lower Hudson Region in the next budget year. Full expansion throughout the state has been projected over five years at a cost of \$7 million. Year two funding would be \$1,250,000.

NYS DOL continues to be very supportive of our approach and we have been working with them to address the implementation details. Our manufacturers know us and trust us and we have the ability through the Alliance to bring hundreds of additional small and medium sized businesses to the table and increase dramatically the number of registered apprenticeship programs statewide.

MACNY and its Alliance Partners continue believe that this effort must be industry led to succeed. Because of our unique relationship as a "business intermediary" we enjoy many advantages. We can focus exclusively on manufacturers while other groups often must respond to multiple constituencies, and we can aggregate demand with hundreds of small and medium sized manufactures. We can advocate for "demand driven curricula" aligned with industry need on a statewide basis. We can advocate for related instruction schedules that can accommodate shift work and don't require multiple trips to campuses. And lastly, we are aligned with multiple national organizations supporting "industry recognized credentials."

In conclusion, our companies are facing the retirement of the baby boomer generation and could lose between 25% and 40% of their workforce in the next 5-10 years. This shortage of skilled workers will not only cripple our existing manufacturers but will make New York unable to attract

new business unless we find ways to get more young people, job changers, women, and veterans into the manufacturing workforce through registered apprenticeship training opportunities. We must continue this effort.

We have already accomplished much with our pilot program in well under one year. We ask your support to bring this already successful pilot to more regions within New York State. What we have learned and accomplished can be replicated throughout the State to rebuild and revitalize their workforce as well.

The Alliance is committed to act now and act boldly to galvanize resources and expertise for New York to realize its full potential in the national and global economy. We extend our hand in partnership to accomplish this vitally important work.

Thank you.

Bruce Hamm

On behalf of Randal Wolken, President and CEO, MACNY and the Manufacturers Alliance

(1) The skills gap in US manufacturing website:

<http://www2.deloitte.com/us/en/pages/manufacturing/articles/boiling-point-the-skills-gap-in-us-manufacturing.html>

