

Making Apprenticeships Accessible to Small Manufacturers

Council of Industry Will Lead Public-Private Partnerships in the Hudson Valley



Employment trends in the Hudson Valley are positive, which is promising for our region, but challenging for manufacturers seeking skilled labor. While larger companies are successfully building a pipeline of workers through apprenticeship programs, this approach is tougher for small and mid-sized companies with limited resources.

The Council of Industry has been supporting local manufacturers for over one hundred years, and we know that many of our members are ready to invest in apprenticeship programs to grow their talent base. The problem is that they do not have the infrastructure—time and expertise—to implement such programs.

To address this, the Council of Industry will act as an intermediary to facilitate the New York State Manufacturers Alliance Apprenticeship Program (NYSMAAP) in conjunction with the Manufacturing Association of New York (MACNY).

This resource allows MACNY and The Council of Industry to handle the administration and logistics of establishing an apprenticeship program, removing a major barrier to implementation. The Council will assist in coordinating the educational providers, providing resources to support structured on-the-job training expectations and facilitate train the trainer certification for selected journey level workers.

Why Apprenticeships?

The need for a proactive workforce strategy is critical. Nationally, the Manufacturing Institute and Deloitte Skills Gap Study 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 could go unfilled.

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 in technical education programs in public high schools.

Due to misconceptions about manufacturing, many have not considered the advantages of working in the sector. Our Hudson Valley manufacturers continue to report difficulty finding skilled workers, and they have responded enthusiastically to the NYSMAAP apprenticeship program.

An estimated 2.7 million jobs are likely to be needed due to retirement of existing workforce with the average age of a highly skilled worker in manufacturing being 56. Replacing them before they retire is critical yet many manufacturers do not have the personnel or resources to adequately train either new or incumbent workers. This program targets entry-level incumbent workers to advance them into more skilled positions within companies and

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allows smaller companies the ability to participate with others to achieve economies of scale.

Employers understand that now is the time for manufacturers themselves to invest in people by articulating and driving training, providing a clear path to higher skilled and higher paying jobs and working in partnership with the public sector.

Our program, NYSMAAP is an employer-led public-private program for registered apprentices in manufacturing occupations. The unique business-lead approach is targeted at raising the skill

level of incumbent manufacturing workers and creating distinctive career pathways, while filling critical needs within the industry. The program will later expand to include new employees, with many apprentice candidates drawn from local community colleges and career-tech high schools such as Hudson Valley Pathways Academy.

To start the process, the Council will launch the first of several programs: CNC Machinist and Mechatronics Technician followed shortly by other trades including Electronics Technician, Maintenance Mechanic (Automatic Equipment), Quality Assurance Auditor, Toolmaker and Welder.

The program combines on-the-job training, customizable and implemented by each company, along with required instruction provided by local community colleges or education partners and online courses from Tooling U-SME. The NYSMAAP programs are expected to be three to four years in duration resulting in the apprentice earning a transferable certification, increased income and the advancement into the selected position.

The Council of Industry will coordinate aspects of the apprenticeship program so companies can focus on running their businesses, providing the on-the-job training needed to support this program. The Council of Industry's apprenticeship coordinator will help to identify selection criteria, process tracking and manage relationships with the Department of Labor and MACNY. With the ongoing support of the program and the Council, employers can focus their resources on additional talent management programs.



Implementation Challenges

While we prepare to launch this program early in 2018, we anticipate challenges, including ensuring apprenticeship candidates have the aptitude and awareness to succeed in the program. To address this, we are working with our community colleges to create a candidate assessment tool and pre-apprenticeship support. We want to prepare candidates with a solid foundation so they are set up for success versus frustration.



There is a common misconception that only unionized shops can implement apprenticeship programs. Not true! Based on the New York State DOL Registered Apprenticeship model, this company-sponsored training is similar for both environments. This approach provides these non-union employers a collaborative partner to set up and operate the program ensuring that an apprentice is not just informally shadowing a machinist for three months—but specific skill outcomes are articulated and measured. Workers obtain industry-recognized credentials that certify skills and tie their wage progression to skill attainment.

A substantial three to four-year commitment is required of the manufacturing companies. Each company must select several Journey level workers who will be required to attend Train the Trainer certification, mentor their apprentice, approve and monitor on-the-job task completion, and maintain diligent reporting. Employers will be expected to support the required instructional classes, typically offered after traditional hours and offsite.

Stronger Together

Alone, many smaller manufacturers are unable to fund an apprenticeship program, by banding together with fellow manufacturers through MACNY and The Council of Industry, this program has driven down the cost. MACNY has been successful in obtaining funds for the creation of a New York State Manufacturers Alliance Apprenticeship Program. Through this

program the administration, coordination, required instructional and online training are at little or no cost to the employer. This is expected to dramatically reduce the administrative burden on individual manufacturers and greatly streamline apprenticeship program registration.

The program design will allow NYS DOL to have a single point of contact for multiple employers, thus reducing some of their administrative burden as well. The design will allow small and medium sized manufacturers to offer registered apprenticeship

programs through MACNY and eliminate the need for each manufacturer to go through the often lengthy and complicated registration process on its own. This innovative approach will provide hundreds of employers the flexibility to hire small numbers of apprentices when they otherwise may not have the resources to do so. In addition, manufacturers in the Hudson Valley will benefit from a full time Council of

Industry employee dedicated to assisting with workforce needs and committed to coordinating the apprenticeship program on their behalf.

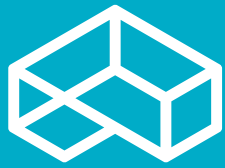
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Next Steps

Manufacturers interested in becoming involved in this program and anyone interested in a manufacturing apprenticeship can contact Johnnieanne Hansen at the Council of Industry by calling 845-565-1355 or emailing jhansen@councilofindustry.org.

Some additional information can be found at: <http://www.councilofindustry.org/apprentice-program/>

This is your opportunity to address a current and future workforce obstacle. It will be your program, customized to meet the needs of your organization with the dedicated support of our Apprenticeship Coordinator. Please consider participating and having your voice heard.



ARCONIC

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Every day,
Everywhere...**

We win when our customers win –
we innovate, deliver and operate
as world class.

We excel as high performance teams –
safely, with respect and integrity.